

CURRICULUM VITAE

Petey W. Mumford

Lindenwood University
School of Health Sciences
209 South Kingshighway, Office # 109B
St. Charles, MO 63301
Phone: (636) 949-4779
Pmumford@lindenwood.edu

ACADEMIC QUALIFICATIONS

- Ph.D.** Exercise Science, Auburn University, Auburn, Alabama. 2019
- M.Ed.** Exercise Science, Wichita State University, Wichita, Kansas. 2015
- B.S.** General Management, Kansas State University, Manhattan, Kansas. 2012

EXPERIENCE

- 2019 - **Assistant Professor**
Exercise Science
School of Health Sciences
Lindenwood University
St. Charles, Missouri
- 2015 - 2019 **Graduate Teaching / Research Assistant, PhD Candidate**
Molecular Applied Science Laboratory
School of Kinesiology
Auburn University
Auburn, Alabama
- 2013 - 2015 **Graduate Teaching / Research Assistant**
Department of Human Performance Studies
Wichita State University
Wichita, Kansas

COURSES TAUGHT

Undergraduate

Lindenwood University

- | | |
|------------------------|----------------------------|
| EXS 31500: Fall 2019 | Physiology of Exercise |
| EXS 31600: Fall 2019 | Physiology of Exercise Lab |
| EXS 31500: Spring 2020 | Physiology of Exercise |

EXS 31600: Spring 2020

Physiology of Exercise Lab

Auburn University

KINE 3873: Fall 2016	Legal and Illegal Sports Supplements
KINE 3400: Fall 2016	Health Promotion in the Workplace
KINE 3681: Spring 2017	Physiology of Exercise Lab
PHED 1003: Spring 2017	Active Auburn
KINE 3681: Fall 2017	Physiology of Exercise Lab
KINE 3681: Spring 2018	Physiology of Exercise Lab
KINE 3680: Spring 2018	Physiology of Exercise
KINE 1103: Spring 2018	Wellness
KINE 3681: Summer 2018	Physiology of Exercise Lab
KINE 3680: Fall 2018	Physiology of Exercise
KINE 3873: Fall 2018	Legal and Illegal Sports Supplements
KINE 3681: Fall 2018	Physiology of Exercise Lab
KINE 3680: Spring 2019	Physiology of Exercise
KINE 3681: Spring 2019	Physiology of Exercise Lab

GraduateLindenwood University

HP 65000: Fall 2019	Thesis
HP 65000: Spring 2020	Thesis
HP 54200: Spring 2020	Statistical Analysis

PUBLICATIONS (newest to oldest)

Published Manuscripts

1. Roberson PA, Romero MA, Osburn SC, **Mumford PW**, Vann CG, Fox CD, McCullough D, Brown MD, Roberts MD. Skeletal muscle LINE-1 ORF1 mRNA is higher in older humans, but decreases with endurance exercise and is negatively associated with higher physical activity. Journal of Applied Physiology. 2019. PMID: 31369326

2. **Mumford PW**, Romero MA, Osburn SC, Roberson PA, Mobley CB, Vann CG, Brown MD, Kavazis AN, Young KC, Roberts MD. Skeletal muscle LINE-1 retrotransposon activity is upregulated in older versus younger rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*. 2019. PMID: 31188650
3. Parry HA, Mobley CB, **Mumford PW**, Romero MA, Haun CT, Zhang Y, Roberson PA, Zempleni J, Ferrando AA, Vechetti IJ, McCarthy JJ, Young KC, Roberts MD, Kavazis AN. Bovine Milk Extracellular Vesicles (EVs) Modification Elicits Skeletal Muscle Growth in Rats. *Frontiers in Physiology*. 2019. PMID: 31040795
4. Haun CT, Vann CG, Osburn SC, **Mumford PW**, Roberson PA, Romero MA, Fox CD, Johnson CA, Parry HA, Kavazis AN, Moon JR, Badsia VLD, Mwashote BM, Ibeanusi V, Young KC, Roberts MD. Muscle fiber hypertrophy in response to 6 weeks of high-volume resistance training in trained young men is largely attributed to sarcoplasmic hypertrophy. *PLOS ONE*. 2019. PMID: 31166954
5. Haun CT, Vann CG, Mobley CB, Osburn SC, **Mumford PW**, Roberson PA, Romero MA, Fox CD, Parry HA, Kavazis AN, Moon JR, Young KC, Roberts MD. Pre-training skeletal muscle fiber size and predominant fiber type best predict hypertrophic responses to 6 weeks of resistance training in previously trained young men. *Frontiers in Physiology* 2019. PMID: 30971942
6. Parry HA, Kephart WC, **Mumford PW**, Romero MA, Mobley CB, Zhang Y, Roberts MD, Kavazis AN. Ketogenic diet increases mitochondria volume in the liver and skeletal muscle without altering oxidative stress markers in rats. *Heliyon*. 2018. PMID: 30533548
7. Roberson PA, Romero MA, **Mumford PW**, Osburn SC, Haun CT, Vann CG, Kluess HA, Roberts MD. Protein supplementation throughout 10 weeks of progressive run training is not beneficial for time trial improvement. *Frontiers in Nutrition*. 2018. PMID: 30456213
8. McAdam JS, McGinnis KD, Beck DT, Haun CT, Romero MA, **Mumford PW**, Roberson PA, Young KC, Lohse KR, Lockwood CM, Roberts MD, Sefton JM. Effect of whey protein supplementation on physical performance and body composition in Army initial entry training soldiers. *Nutrients*. 2018. PMID: 30200582
9. **Mumford PW**, Kephart WC, Romero MA, Haun CT, Mobley CB, Osburn SC, Healy JC, Moore A, Pascoe DC, Ruffin WC, Beck DT, Martin JS, Roberts MD, Young KC. Effect of One Week Betalain-Rich Beetroot Concentrate Supplementation on Cycling Performance and Select Physiological Parameters. *Eur J Appl Physiol*. 2018. PMID: 30155761
10. Haun C, Vann C, Mobley C, Roberson P, Osburn S, Holmes H, **Mumford PW**, Romero M, Young K, Moon J, Gladden L, Arnold R, Israetel M, Newton A, Roberts M. Effects of

graded whey supplementation during extreme-volume resistance training. *Frontiers in Nutrition*. 2018. PMID: 30255024

11. Haun CT, Mobley CB, Vann CG, Romero MA, Roberson PA, **Mumford PW**, Kephart WC, Healy JC, Patel RK, Osburn SC, Beck DT, Lockwood CM, Roberts MD. Soy protein supplementation is not androgenic or estrogenic in college-aged men when combined with resistance exercise training. *Scientific Reports*. 2018. 12221. PMID: 30097662
12. Roberts MD, Haun CT, Mobley CB, **Mumford PW**, Romero MA, Roberson PA, Vann CG, McCarthy JJ. Physiological differences between low versus high skeletal muscle hypertrophic responders to resistance exercise training: current perspectives and future research directions. *Frontiers in Physiology*. 2018. PMID: 30022953
13. Roberts MD, Romero MA, Mobley CB, **Mumford PW**, Roberson PA, Haun CT, Vann CG, Osburn SC, Holmes HH, Greer RA, Lockwood CM, Parry HA, Kavazis AN. Skeletal muscle mitochondrial volume and myozenin-1 protein differences exist between high versus low anabolic responders to resistance training. *PeerJ*. 2018. 5338. PMID: 30065891
14. Martin JS, **Mumford PW**, Martin AM, Moore AN, Pascoe DD. Unilateral application of an external pneumatic compression therapy improves skin blood flow and vascular reactivity bilaterally. *PeerJ*. 2018. 4878. PMID: 29868282
15. **Mumford PW**, Romero MA, Mao X, Mobley CB, Kephart WC, Haun CT, Roberson PA, Young KC, Martin JS, Roberts MD. Cross-talk between androgen and Wnt signaling potentially contributes to age-related skeletal muscle atrophy in rats. *Journal of Applied Physiology*. 2018. 486-494. PMID: 29722624
16. Roberson PA, Haun CT, Mobley CB, Romero MA, **Mumford PW**, Young KC, Martin JS, Roberts MD. Skeletal Muscle Amino Acid Transporter and BCAT2 Expression Prior to and Following Interval Running or Resistance Exercise in Mode-Specific Trained Males. *Amino Acids*. 2018. 961-965. PMID: 29725856
17. Mobley CB, Haun CT, Roberson PA, **Mumford PW**, Kephart WC, Romero MA, Osburn SC, Vann CG, Lockwood CM, Robert MD. Biomarkers associated with low, moderate, and high skeletal muscle hypertrophy following 12 weeks of resistance training. *PLOS ONE*. 2018. 195203. PMID: 29621305
18. Kephart WC, Pledge CD, Roberson PA, **Mumford PW**, Romero MA, Mobley CB, Martin JS, Young KC, Lowery RP, Wilson JM, Huggins KW, Roberts MD. The Three-Month Effects of a Ketogenic Diet on Body Composition, Blood Parameters, and Performance Metrics in CrossFit Trainees: A Pilot Study. *Sports*. 2018. E1. PMID: 29910305

19. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, **Mumford PW**, Healy JC, Beck DT, Young KC, Lockwood C, Martin JS, Roberts MD. Resistance exercise-mediated reductions in LINE-1 retrotransposon activity may drive increases in satellite cell activity in human skeletal muscle. *American Journal of Physiology – Cell Physiology*. 2018. 379-388. PMID: 29351416. ***APS Select Award**
20. Martin JS, **Mumford PW**, Haun CT, Colquhoun RJ, Feeney MP, Luera, MJ, Mackey CS, Muddle TW, Riffe JJ, Roberson PA, Young KC, Pascoe DD, DeFreitas JM, Jenkins ND, Roberts MD. Effects of a pre-workout supplement on hyperemia following leg extension resistance exercise to failure with different resistance loads. *J Int Soc Sports Nutr*. 2017. 14-38. PMID: 28959158
21. Haun CT, Roberts MD, Osburn SC, Healy JC, Moore AN, Mobley CB, Roberson PA, Kephart WC, **Mumford PW**, Goodlett MD, Pascoe DD, Martin JS. Concomitant external pneumatic compression treatment with consecutive days of high intensity interval training reduces markers of oxidative stress and proteolysis. *Eur J Appl Physiol*. 2017. 2587-2600. PMID: 29075862
22. Kephart WC, **Mumford PW**, Mao X, Romero MA, Hyatt H, Zhang Y, Mobley CB, Quindry J, Young KC, Beck D, Martin J, McCullough D, D'Agostino, D, Lowery R, Wilson J, Kavazis A, Roberts MD. The 1 week and 8 month effects of ketogenic dieting or ketone salt supplementation on multi-organ markers of oxidative stress and mitochondrial function in rats. *Nutrients*. 2017. 1019. PMID: 28914762
23. Haun CT, **Mumford PW**, Roberson PA, Romero MA, Mobley BC, Kephart WC, Anderson RG, Colquhoun RJ, Muddle TW, Luera MJ, Mackey CS, Riffe JJ, Pascoe DD, Young KC, Martin JS, DeFreitas JM, Jenkins ND, Roberts MD. Molecular, neuromuscular, and recovery responses to light vs heavy resistance exercise young men. *Physiol Rep*. 2017. 13457. PMID: 28963127
24. Mobley CB, Haun CT, Roberson PA, **Mumford PW**, Romero MA, Kephart WC, Anderson RG, Vann CG, Osburn SC, Pledge C, Martin JS, Young KC, Goodlett MD, Pascoe DD, Lockwood CM, Roberts MD. Effects of whey, soy or leucine supplementation with 12 weeks of resistance training on strength, body composition, and skeletal muscle and adipose tissue histological attributes in college-aged males. *Nutrients*. 2017. 972. PMID: 28869573
25. Mobley CB, **Mumford PW**, Kephart WC, Haun CT, Holland AM, Beck DT, Martin JS, Young KC, Anderson RG, Patel RK, Langston GL, Lowery RP, Wilson JM, Roberts MD. Aging in Rats Differentially Affects Markers of Transcriptional and Translational Capacity in Soleus and Plantaris Muscle. *Front Physiol*. 2017. 518. PMID: 28775694
26. Kendall KL, Hyde PN, Fairman CM, Hollaway KM, **Mumford PW**, Haun CT, Mobley B, Kephart WC, Tribby AC, Kimber D, Moon JR, Beck DT, Roberts MD, Young KC. A Randomized, Double-Blind, Placebo-Controlled Trial to Determine the Effectiveness and

Safety of a Thermogenic Supplement in Addition to an Energy-Restricted Diet in Apparently Healthy Females. *J Diet Suppl.* 2017. 653-666. PMID: 28388294

27. Mobley CB, Holland AM, Kephart WC, **Mumford PW**, Lowery RP, Kavazis AN, Wilson JM, Roberts MD. Progressive resistance-loaded voluntary wheel running increases hypertrophy and differentially affects muscle protein synthesis, ribosome biogenesis, and proteolytic markers in rat muscle. *J Anim Physiol Anim Nutr (Berl).* 2017. 317-329. PMID: 28294417
28. Mobley CB, **Mumford PW**, McCarthy JJ, Miller ME, Young KC, Martin JS, Beck DT, Lockwood CM, Roberts MD. Whey protein-derived exosomes increase protein synthesis and hypertrophy in C2-C12 myotubes. *J Dairy Sci.* 2017. 48-64. PMID: 28341051
29. Wilborn CD, Outlaw JJ, **Mumford PW**, SL Urbina, S Hayward, MD Roberts, LW Taylor, CA Foster. A Pilot Study Examining the Effects of 8-Week Whey Protein versus Whey Protein Plus Creatine Supplementation on Body Composition and Performance Variables in Resistance-Trained Women. *Ann Nutr Metab.* 2016. 190-199. PMID: 27866187
30. Hyatt H, Kephart W, Holland AM, **Mumford PW**, Mobley CB, Lowery R, Roberts M*, Wilson J, Kavazis A. A ketogenic diet in rodents elicits improved mitochondrial adaptations in response to resistance exercise training compared to an isocaloric Western diet. *Frontiers in Physiology, section Exercise Physiology.* 2016. 533. PMID: 27877138
31. Mobley CB, **Mumford PW**, Kephart W, Conover C, Beggs L, Balaez A, Yarrow J, Borst S, Beck D, Roberts M. Effects of testosterone treatment on markers of skeletal muscle ribosome biogenesis. *Andrologia.* 2016. 967-977. PMID: 26781353
32. Holland AM, Roberts MD, **Mumford PW**, Mobley CB, Kephart WC, Conover CF, Beggs LA, Balaez A, Otzel DM, Yarrow JF, Borst SE, Beck DT. Testosterone inhibits expression of lipogenic genes in visceral fat by an estrogen-dependent mechanism. *American Physiological Society.* 2016. 792-805. PMID: 27539493
33. Holland AM, Kephart W, **Mumford PW**, Mobley CB, Lowery R, Shake J, Patel R, McCullough D, Kluess H, Huggins K, Kavazis A, Wilson J, Roberts M. Effects of a ketogenic diet on adipose tissue, liver, and serum biomarkers in sedentary rats and rats that exercised via resisted voluntary wheel running. *Am J Physiol Regul Integr Comp Physiol.* 2016. 337-351. PMID: 27357802
34. Kephart W, **Mumford PW**, McCloskey AE, Holland AM, Shake JJ, Mobley CB, Jagodinsky AE, Weimar WH, Oliver GD, Young KC, Moon JR, Roberts MD. Post-exercise branched chain amino acid supplementation does not affect recovery markers following three consecutive high intensity resistance training bouts compared to carbohydrate supplementation. *J Int Soc Sports Nutr.* 2016. 13-30. PMID: 27468258
35. Roberts M, Holland AM, Kephart W, **Mumford PW**, Mobley CB, Lowery RP, Fox CD, McCloskey AE, Shake JJ, Mesquita P, Patel RK, Martin JS, Young KC, Kavazis AN, Wilson JM. A putative low-carbohydrate ketogenic diet elicits mild nutritional ketosis but

does not impair the acute or chronic hypertrophic responses to resistance exercise in rodents. *J Appl Physiol.* 2016. 1173-1185. PMID: 26718785

36. Taylor L, **Mumford PW**, Roberts M, Hayward S, Mullins J, Urbina S, Wilborn C. Safety of TeaCrine®, a non-habituating, naturally-occurring purine alkaloid over eight weeks of continuous use. *Journal of the International Society of Sports Nutrition.* 2016. 13-22. PMID: 26766930
37. **Mumford PW**, Tribby AC, Poole CN, Dalbo VJ, Scanlan AT, Moon JR, Roberts MD and Young KC. Effect of caffeine on golf performance and fatigue during a competitive tournament. *Med Sci in Sport and Exerc.* 2015. 132-138. PMID: 26285020

PRESENTATIONS AT NATIONAL / INTERNATIONAL CONFERENCES

1. **Mumford PW**, Romero MA, Osburn SC, Roberson PA, Haun CT, Mobley CB, Young KC, Roberts MD. Aging increases LINE-1 expression and integration in rodent skeletal muscle tissue. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
2. Parry HA, Mobley CB, **Mumford PW**, Romero MA, Zhang Y, Zempleni J, Young KC, Roberts MD, Kavazis AN. Dietary Exosomes Affect Growth and Skeletal Muscle Physiology in Young Male and Female Rats. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
3. Vann CG, Haun CT, Osburn SC, Romero MA, **Mumford PW**, Roberson PA, Mobley CB, Roberts MD. Effects of Deloading on Fiber Cross-Sectional Area After High Volume Resistance Training. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
4. Roberson PA, Romero MA, **Mumford PW**, Osburn SC, Haun CT, Vann CG, Kluess HA, Roberts MD. Protein Supplementation Throughout 10 Weeks of Progressive Run Training Does Not Improve Performance. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
5. Romero MA, **Mumford PW**, Osburn SC, Roberson PA, Toedebusch RG, Booth FW, Roberts MD. Wheel Running Decreases LINE-1 Gene Expression in Rodent Skeletal Muscle. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
6. Osburn SC, Haun CT, Vann CG, Mobley CB, Roberson PA, Holmes HH, **Mumford PW**, Romero MA, Young KC, Moon JS, Israetel M, Kirby AN, Roberts MD. Effects of extremely voluminous resistance training on blood markers of immune status. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.

7. Haun C, Vann C, Mobley C, Roberson P, Osburn S, Holmes H, **Mumford PW**, Romero M, Young K, Moon J, Gladden L, Arnold R, Israetel M, Newton A, Roberts M. Effects of graded whey supplementation during extreme-volume resistance training. 2018 Integrative Physiology of Exercise Meeting. San Diego, CA.
8. Pascoe D.D, McDaniel J.H, Roberts R.F., **Mumford PW.**, Taylor C.N. Case Studies: Abnormal hand temperature response resulting from exposure to varying environmental temperatures. 14th European Association of Thermology Congress “Thermology in Medicine: Clinical Thermometry and Thermal Imaging”. July 2018
9. Parry HA, Kephart WC, **Mumford PW**, Romero MA, Haun CT, Mobley CB, Zhang Y, Roberts MD, Kavazis AN. Lifelong Ketogenic Diet Feeding Increases Longevity, But Does Not Alter Oxidative Stress Markers in Rats. 2018 ACSM Annual Meeting. Minneapolis, MN.
10. Haun CT, Mobley CB, Vann CG, Romero MA, Roberson PA, **Mumford PW**, Kephart WC, Healy JC, Patel RK, Osburn SC, Beck DT, Roberts MD. Soy Protein Supplementation is not Adipogenic or Estrogenic in Young Men When Combined with Resistance Training. 2018 ACSM Annual Meeting. Minneapolis, MN.
11. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, **Mumford PW**, Healy JC, Beck DT, Young KC, Martin JS, Lockwood CM, Roberts MD. Resistance exercise-mediated reductions in LINE-1 retrotransposon activity may drive increases in satellite cell activity in human skeletal muscle. 2018 ACSM Annual Meeting. Minneapolis, MN.
12. Roberson PA, Mobley CB, Haun CT, **Mumford PW**, Romero MA, Kephart WC, Osburn SC, Vann CG, Lockwood CM, Roberts MD. Changes in Amino Acid Transporters and Metabolic Proteins after 12 Weeks of Resistance Training with Varying Supplementation. 2018 ACSM Annual Meeting. Minneapolis, MN.
13. Vann CG, Haun CT, Mobley CB, Romero MA, Roberson PA, **Mumford PW**, Kephart WC, Osburn SC, Roberts MD. Hypertrophic Responses o not Completely Explain Increases in Strength After 12 Weeks of Resistance Training in Previously Untrained Young Men. 2018 ACSM Annual Meeting. Minneapolis, MN.
14. Parry HA, Mobley CB, **Mumford PW**, Romero MA, Zhang Y, Zempleni J, Young KC, Roberts MD, Kavazis AN. Dairy exosomes effects on mitochondria function and antioxidant enzymes in growing male and female rats. 102nd Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016. San Diego, CA. April 21-25, 2018.
15. Hargrove MW, Pickich MB, Phillips CN, Moore AN, Healy JC, Kephart WC, Roberson PA, **Mumford PW**, Roberts MD, Martin JS. Therapeutic benefit of a turmeric extract in nutritionally and oxidatively induced rat model of non-alcoholic steatohepatitis. Alabama Osteopathic Medical Association (ALOMA) Annual Emerald Coast Conference. July 2017.

16. **Mumford PW**, Mobley CB, Kephart WC, Haun CT, Romero M, Mao X, Osburn SC, Young KC, Beck DT, Martin JS, Lowery RP, Wilson JM, Roberts MD. The Relationship Between Serum Testosterone and Skeletal Muscle Wnt Signaling Markers In 3-24-month Old Rats. ACSM's 64th Annual Meeting, 8th World Congress on Exercise is Medicine and World Congress on the Basic Science of Exercise and the Brain. Denver, CO. May 30-June 4, 2017.
17. Colquhoun RJ, Haun CT, **Mumford PW**, Roberson PA, Pascoe DD, Feeny MP, Young KC, Martin JS, Roberts MD, Muddle TWD, Riffe JJ, Luera MJ, Magrini MA, Mackey CS, Stock MS, Jenkins NDM, DeFreitas JM. The Effects of a Muscle Biopsy on Motor Unit Firing Properties. 2017 ACSM Annual Meeting. Denver, CO.
18. Kephart WC, **Mumford PW**, Solorzano D, Osburn SC, Patel RK, Anderson RG, Healy J, Moore A, Martin JS, Young KC, Lowery RP, Wilson JM, Roberts MD. Effects of Short-term Ketogenic Dieting or Ketone Salt Supplementation Lipogenic Gene Expression Adipose Tissue. 2017 ACSM Annual Meeting. Denver, CO.
19. Martin JS, **Mumford PW**, Haun CT, Roberson PA, Colquhoun RJ, Feeney MP, Luera MJ, Mackey CS, Muddle TW, Riffe JJ, Young KC, Pascoe DD, Defreitas JM, Jenkins NDM, Roberts MD. Effects of a Pre-Workout Supplement on Hyperemia Following Leg Extension Resistance Exercise at Different Intensities. 2017 ACSM Annual Meeting. Denver, CO.
20. Roberson PA, Kephart WC, Pledge C, **Mumford PW**, Huggins KW, Martin JS, Young KC, Lowery RP, Wilson JM, Roberts MD. The Physiological Effects of 12-weeks of Ketogenic Dieting While Cross-training. 2017 ACSM Annual Meeting. Denver CO.
21. Romero MA, Hyatt HW, Kephart WC, **Mumford PW**, Lowery RP, Wilson JM, Roberts MD, Kavazis A. The Effects of a Long-Term Ketogenic Diet on Molecular Markers of Cardiac Hypertrophy. 2017 Experimental Biology Annual Meeting. Chicago, IL.
22. Luera M, Muddle T, Haun CT, Colquhoun R, **Mumford PW**, Roberson P, Feeny M, DeFreitas J, Young K, Martin J, Roberts M, Jenkins N. Oxygenation of the vastus lateralis during high- versus low-load fatiguing leg extension exercise. 2017 NSCA National Conference. Las Vegas, NV.
23. Haun CT, **Mumford PW**, Hyde P, Fairman C, Kephart W, Beck DT, Moon J, Roberts M, Kendall K, Young K. Effects of a popular women's thermogenic supplement during an energy-restricted high protein diet on changes in body composition and clinical safety markers. 2016 13th Annual International Society of Sports Nutrition (ISSN) Conference. Tampa, FL.
24. Holland AM, Kephart W, **Mumford PW**, Mobley CB, Lowery R, Wilson J, Roberts M. Associations in body fat and liver triglyceride content with serum health markers in sedentary and exercised rats fed a ketogenic diet, Western diet or standard chow over a 6-week period. 2016 13th Annual International Society of Sports Nutrition (ISSN) Conference. Tampa, FL.

25. Kephart W, **Mumford PW**, Lowery R, Roberts M, Wilson J. The ketogenic diet improves rotarod performance in young and older rats. 2016 13th Annual International Society of Sports Nutrition (ISSN) Conference. Tampa, FL.
26. **Mumford PW**, Holland AM, Kephart W, Lowery R, Mobley CB, Patel R, Newton A, Beck D, Roberts M, Wilson J, Young K. Effects of a ketogenic diet with exercise on serum markers of bone metabolism, IGF-1 and femoral bone mass in rats. 2016 13th Annual International Society of Sports Nutrition (ISSN) Conference. Tampa, FL.
27. **Mumford PW**, Mobley CB, Kephart W, Haun C, Holland AM, Osburn S, Beck D, Martin J, Young K, Kavazis A, Lowery R, Wilson J, Roberts M. Markers of Muscle Protein Synthesis and Breakdown in Fast-twitch Skeletal Muscle of Rodents Aged 3 to 24 months. 100th Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016.
28. Mobley CB, **Mumford PW**, Kephart W, Haun C, Holland AM, Osburn S, Beck D, Martin J, Young K, Kavazis A, Lowery R, Wilson J, Roberts M. Effects of Aging on Markers of Ribosome Biogenesis in Fast- and Slow-Twitch Skeletal Muscle in Rodents Aged 3 to 24 Months. 100th Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016.
29. Kephart W, Holland AM, **Mumford PW**, Mobley CB, Lowery R, Roberts M, Wilson J. The Effects of Intermittent Ketogenic Dieting as well as Ketone Salt supplementation on Body Composition and Circulating Health Biomarkers in Exercising Rodents. 100th Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016.
30. Haun C, **Mumford PW**, Mobley CB, Kephart W, Holland AM, Osburn S, Beck D, Martin J, Young K, Kavazis A, Lowery R, Wilson J, Roberts M. Markers of Muscle Protein Synthesis and Breakdown in Slow-twitch Skeletal Muscle of Rodents Aged 3 to 24 months. 100th Annual Experimental Biology Meeting. San Diego, CA. San Diego, CA, April 2-6, 2016.
31. Hyatt H, Mobley CB, Kephart W, Holland AM, **Mumford PW**, Lowery R, Roberts M, Wilson J, Kavazis A. Differences in Gastrocnemius mRNA expression in Sedentary and Chronically Resistance Trained Rats Fed a Standard Chow Diet, a Low-Carbohydrate Diet, or a Western Diet. 100th Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016.
32. Holland AM, Kephart W, **Mumford PW**, Lowery R, Mobley CB, Healy J, Shake J, Patel R, Roberts M, Wilson J. The Effects of a Ketogenic Diet and Physical Activity on Adipose Tissue Characteristics. 100th Annual Experimental Biology Meeting. San Diego, CA, April 2-6, 2016.
33. Holland AM, Kephart W, Lowery R, **Mumford PW**, Mobley CB, McCloskey A, Shake J, Mesquita P, Martin J, Kavazis A, McCullough D, Roberts M, Wilson J. Ketogenic versus Western and standard chow diets favorably alters fat deposition and serum biomarkers in rats. 12th Annual ISSN Conference. Austin, TX. June 11-13, 2015.
34. Mobley CB, Holland AM, Kephart W, Lowery R, **Mumford PW**, McCloskey A, Shake J, Mesquita P, Wilson J, Roberts M. The anabolic skeletal muscle response to acute resistance exercise is not impaired in rats fed a ketogenic diet. 12th Annual ISSN Conference. Austin, TX. June 11-13, 2015.

35. **Mumford PW**, Kephart W, McCloskey A, Holland AM, Shake J, Mobley CB, Young K, Moon J, Roberts M. Ten weeks of branched chain amino acid supplementation improves select performance and immunological variables in trained cyclists. 12th Annual ISSN Conference. Austin, TX. June 11-13, 2015.
36. **Mumford PW**, Tribby A, Geddam D, Mobley CB, Roberts M, Poole C, Moon J, Young K. Effects of Acute Caffeine and B-vitamin Consumption on Golf Performance during a 36-hole Competitive Tournament. 62nd Annual American College of Sports Medicine Meeting. San Diego, CA. May 26-31, 2015.
37. Tribby A, **Mumford PW**, Geddam D, Poole C, Scanlan A, Dalbo V, Palmer E, Young K. Characterizing Psychophysiological Fatigue Responses from a Competitive Round of Golf. 62nd Annual American College of Sports Medicine Meeting. San Diego, CA. May 26-31, 2015.

PRESENTATIONS AT LOCAL AND REGIONAL CONFERENCES

1. **Mumford PW**, Romero MA, Osburn SC, Roberson PA, Haun CT, Mobley CB, Young KC, Roberts MD. Aging increases LINE-1 expression and integration in rodent skeletal muscle tissue. UAB Center for Exercise Medicine Sixth Annual Symposium. Birmingham, AL. Sep., 2018.
2. Romero MA, **Mumford PW**, Osburn SC, Roberson PA, Toedebusch RG, Booth FW, Roberts MD. Wheel Running Decreases LINE-1 Gene Expression in Rodent Skeletal Muscle. UAB Center for Exercise Medicine Sixth Annual Symposium. Birmingham, AL. Sep., 2018.
3. Vann CG, Haun CT, Osburn SC, Romero MA, **Mumford PW**, Roberson PA, Mobley CB, Roberts MD. Effects of Deloading on Fiber Cross-Sectional Area After High Volume Resistance Training. UAB Center for Exercise Medicine Sixth Annual Symposium. Birmingham, AL. Sep., 2018.
4. Roberson PA, Romero MA, **Mumford PW**, Osburn SC, Haun CT, Vann CG, Kluess HA, Roberts MD. Protein Supplementation Throughout 10 Weeks of Progressive Run Training Does Not Improve Performance. UAB Center for Exercise Medicine Sixth Annual Symposium. Birmingham, AL. Sep., 2018.
5. Osburn SC, Haun CT, Vann CG, Mobley CB, Roberson PA, Holmes HH, **Mumford PW**, Romero MA, Young KC, Moon JS, Israel M, Kirby AN, Roberts MD. Effects of extremely voluminous resistance training on blood markers of immune status. UAB Center for Exercise Medicine Sixth Annual Symposium. Birmingham, AL. Sep., 2018.

6. **Mumford PW**, Mobley CB, Haun CT, Romero MA, Roberson PA, Kephart WC, Young KC, Roberts MD. Wnt Protein Response to Acute and Chronic Resistance Exercise. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
7. Osburn SC, **Mumford PW**, Mobley CB, Haun CT, Romero MA, Roberson PA, Kephart WC, Ruffin WC, Martin JS, Young KC, Roberts MD. Sub-Chronic Physiological Effects of Betalain Supplementation on Cycling Performance. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
8. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, **Mumford PW**, Healy JC, Beck DT, Young KC, Martin JS, Lockwood CM, Roberts MD. Resistance exercise-mediated reductions in LINE-1 retrotransposon activity may drive increases in satellite cell activity in human skeletal muscle. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
9. Haun CT, Mobley CB, Vann CG, Romero MA, Roberson PA, **Mumford PW**, Kephart WC, Healy JC, Patel RK, Osburn SC, Beck DT, Roberts MD. Soy Protein Supplementation is not Adipogenic or Estrogenic in Young Men When Combined with Resistance Training. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
10. Roberson PA, Mobley CB, Haun CT, **Mumford PW**, Romero MA, Kephart WC, Osburn SC, Vann CG, Lockwood CM, Roberts MD. Changes in Amino Acid Transporters and Metabolic Proteins after 12 Weeks of Resistance Training with Varying Supplementation. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
11. Parry H, Kephart WC, **Mumford PW**, Romero MA, Haun CT, Mobley CB, D'Agostino DP, Lowery RP, Wilson JM, Roberts MD, Kavazis AN. Lifelong Ketogenic Diet or Ketone Salt Supplementation in Rats Increases Longevity without Altering Oxidative Stress Markers. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
12. Vann CG, Haun CT, Mobley CB, Romero MA, Roberson PA, **Mumford PW**, Kephart WC, Osburn SC, Roberts MD. Hypertrophic Responses do not Completely Explain Increases in Strength After 12 Weeks of Resistance Training in Previously Untrained Young Men. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
13. Mobley CB, Haun CT, Roberson PA, **Mumford PW**, Kephart WC, Romero MA, Osburn SC, Vann CG, Lockwood CM, Roberts MD. Biomarkers Associate with Type II Muscle Fiber Hypertrophy Following 12 Weeks of Resistance Training in Young, Untrained Males. Southeastern Chapter of the American College of Sports Medicine Meeting. Chattanooga, TN. February 2018.
14. **Mumford PW**, Romero MA, Xuansong Mao, Mobley CB, Kephart WC, Haun CT, Roberson PA, Young KC, Martin JS, Beck DT, Roberts MD. Cross-talk between androgen and Wnt signaling potentially contributes to age-related skeletal muscle

- atrophy in rats. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
15. Mobley CB, Haun CT, Roberson PA, **Mumford PW**, Kephart WC, Romero MA, Osburn SC, Vann CG, Pledge C, Young KC, Beck DT, Lockwood CM, Roberts MD. Biomarkers associated with type II muscle fiber hypertrophy in response to resistance training in young, untrained males. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
 16. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, **Mumford PW**, Healy JC, Beck DT, Young KC, Martin JS, Lockwood CM, Roberts MD. Resistance exercise-mediated reductions in LINE-1 retrotransposon activity may drive increases in satellite cell activity in human skeletal muscle. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
 17. Haun CT, **Mumford PW**, Roberson PA, Romero MA, Mobley BC, Kephart WC, Anderson RG, Colquhoun RJ, Muddle TW, Luera MJ, Mackey CS, Riffe JJ, Pascoe DD, Young KC, Martin JS, DeFreitas JM, Jenkins ND, Roberts MD. Molecular, neuromuscular, and recovery responses to light versus heavy resistance exercise in young men. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
 18. **Mumford PW**, Kephart WC, Solorzano D, Mao X, Osburn SC, Patel RK, Anderson RG, Healy, Moore AN, Martin JS, Young KC, Lower RP, Kavazis AN, Wilson JM, Roberts MD. Effects of short-term ketogenic dieting or ketone salt supplementation on tissue ketone levels and tissue mRNA expression patterns related to oxidative stress defense. Southeastern Chapter of the American College of Sports Medicine Meeting. Greenville, SC. February 2017.
 19. **Mumford PW**, Kephart WC, Xuansong Mao, Martin JS, Young KC, Lowery RP, Kavazis AN, Wilson JM, Roberts MD. Effects of short-term ketogenic dieting or ketone salt supplementation on tissue ketone levels and tissue mRNA expression patterns related to oxidative stress defense. 10th Annual Boshell Research Day. Auburn, AL. February 2017
 20. Roberson PA, Kephart WC, Pledge C, **Mumford PW**, Huggins KW, Martin JS, Young KC, Lowery RP, Wilson JM, Roberts MD. Effects of 12-week ketogenic dieting on body composition and performance variables in humans that cross-train. 10th Annual Boshell Research Day. Auburn, AL. February 2017
 21. Kephart WC, **Mumford PW**, Solorzano D, Osburn SC, Patel RK, Anderson RG, Healy J, Moore A, Martin JS, Young KC, Lowery RP, Wilson JP, Roberts MD. Effects of short-term ketogenic dieting or ketone salt supplementation lipogenic gene expression adipose tissue. 10th Annual Boshell Research Day. Auburn, AL. February 2017
 22. Romero MA, Hyatt HW, Kephart WC, **Mumford PW**, Lowery RP, Wilson JM, Roberts MD, Kavazis AN. The Effects of a Long-Term Ketogenic Diet on Molecular Markers of Cardiac Hypertrophy. 10th Annual Boshell Research Day. Auburn, AL. February 2017
 23. **Mumford PW**, Kephart WC, Solorzano D, Xuansong Mao, Osburn SC, Patel RK, Anderson RG, Healy J, Moore A, Martin JS, Young KC, Lowery RP, Kavazis AN,

Wilson JM, Roberts MD. Effects of short-term ketogenic dieting or ketone salt supplementation on tissue ketone levels and tissue mRNA expression patterns related to oxidative stress defense. September 2016. Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL.

24. **Mumford PW**, Kephart W, Holland AM, Haun C, Mobley CB, Lowery R, Roberts M, Wilson J. Body composition responses to a six-week low-carbohydrate diet with resistance exercise and supplemental ketones in rodents. Southeastern Chapter of the American College of Sports Medicine Meeting. Greenville, SC. February 18-20, 2016.
25. Haun C, Kephart W, Holland AM, **Mumford PW**, Mobley CB, Fox C, McCloskey A, Shake J, Mesquita P, Kavazis A, Young K, Newton A, Lowery R, Wilson J, Roberts M. A low-carbohydrate diet with adequate protein does not impair the hypertrophic response to acute and chronic resistance exercise in rodents. Southeastern Chapter of the American College of Sports Medicine Meeting. Greenville, SC. February 18-20, 2016.
26. Kephart W, Holland AM, Lowery R, **Mumford PW**, Mobley CB, McCloskey A, Shake J, Mesquita P, Young K, Martin J, Beck D, McCullough D, Kavazis A, Roberts M, Wilson J. Six weeks of a low carbohydrate diet with or without exercise favorably alters hepatic NF- κ B signaling and serum markers related to overall health in rats. Southeastern Chapter of the American College of Sports Medicine Meeting. Greenville, SC. February 18-20, 2016.
27. Holland AM, Kephart W, Lowery R, **Mumford PW**, Mobley CB, McCloskey A, Shake J, Mesquita P, Kavazis A, Wilson J, Roberts M. The influence of a ketogenic diet and exercise on adipogenic and lipogenic markers in omental and subcutaneous fat pads of rats. Southeastern Chapter of the American College of Sports Medicine Meeting. Greenville, SC. February 18-20, 2016.
28. Haun C, Kephart W, Holland AM, **Mumford PW**, Mobley CB, Fox C, McCloskey A, Shake J, Mesquita P, Kavazis A, Young K, Newton A, Lowery R, Wilson J*, Roberts M* (*denotes co-PIs). Six weeks of a low carbohydrate diet with or without exercise favorably alters hepatic NF- κ B signaling and serum markers related to overall health in rats. 3rd Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL. Sept 25, 2015.
29. **Mumford PW**, Mobley CB, Martin J, Lockwood C, Roberts M. The anabolic response in C2C12 myotubes treated with whey protein is not attenuated with leucine transporter knockdown. 3rd Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL. Sept 25, 2015.
30. Hyatt H, Kephart W, Holland AM, **Mumford PW**, Mobley CB, Lowery R, Roberts M, Wilson J*, Kavazis A* (*denotes co-PIs). Skeletal muscle mitochondrial coupling in chronic resistance exercise rats fed three different diets. 3rd Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL. Sept 25, 2015.
31. Kephart W, Holland AM, Lowery R, **Mumford PW**, Mobley CB, McCloskey A, Shake J, Mesquita P, Young K, Martin J, Beck D, McCullough D, Kavazis A, Roberts M*, Wilson J* (*denotes co-PIs). Six weeks of a low carbohydrate diet with or without exercise favorably alters hepatic NF- κ B signaling and serum markers related to overall health in

rats. 3rd Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL. Sept 25, 2015.

32. Holland AM, Kephart W, Lowery R, **Mumford PW**, Mobley CB, McCloskey A, Shake J, Mesquita P, Kavazis A, Wilson J*, Roberts M* (*denotes co-PIs). The influence of a low carbohydrate diet and exercise on adipogenic, lipogenic, and nutrient partitioning markers in omental and subcutaneous fat pads of rats. 3rd Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL. Sept 25, 2015.

STATISTICAL CONSULTING

Published Manuscripts

1. Martin JS, **Mumford PW**, Martin AM, Moore AN, Pascoe DD. Unilateral application of an external pneumatic compression therapy improves skin blood flow and vascular reactivity bilaterally. PeerJ. 2018 May. PMID: 29868282
2. Taylor L, **Mumford PW**, Roberts M, Hayward S, Mullins J, Urbina S, Wilborn C. Safety of TeaCrine®, a non-habituating, naturally-occurring purine alkaloid over eight weeks of continuous use. Journal of the International Society of Sports Nutrition. 2016 13:2 DOI: 10.1186/s12970-016-0113-3. PMID: 26766930
3. Wilborn CD, Outlaw JJ, **Mumford PW**, SL Urbina, S Hayward, MD Roberts, LW Taylor, CA Foster. A Pilot Study Examining the Effects of 8-Week Whey Protein versus Whey Protein Plus Creatine Supplementation on Body Composition and Performance Variables in Resistance-Trained Women. Ann Nutr Metab. 2016;69(3-4):190-199. PMID: 27866187

GRANT INVOLVEMENT

Extramural Funding

Grant Title: Effects of a Sham-Controlled Compression Garment on Peripheral Circulation and Markers of Sports Performance and Recovery. (2019-2020)

Funding Agency: MAS Holdings

Total Costs: \$44,196-**Funded**

Role: Principal Investigator

Site: Lindenwood University. (2019-2020)

Grant Title: Examining the effects of skeletal muscle LINE-1 overexpression on muscle function and aging. (2018-2019)

Funding Agency: Florida A&M University

Total Costs: \$135,000-**Funded**

Role: Co-Coordinator

Site: Auburn University

Grant Title: Effects of a novel plant extract on cycling performance, oxygen consumption, hemodynamics and markers of red blood cell physiology (2016-2017)

Funding Agency: FutureCeuticals

Total Costs: \$137,845-**Funded**

Role: Coordinator

Site: Auburn University/VCOM-Auburn

Grant Title: The effects of a thermogenic aid on human acute and chronic metabolism markers (2015-2016)

Funding Agency: Maximum Human Performance

Total Costs: \$73,575-**Funded**

Role: Coordinator

Site: Auburn University

Grant Title: Acute effects of OxySport on lipolysis and basal metabolic rate, as well as chronic effects of OxySPORT on body composition in overweight, college-aged males. (2015-2016)

Funding Agency: MusclePharm Inc

Total Costs: \$82,250-**Funded**

Role: Coordinator

Site: Auburn University

Grant Title: Effects of aging and nutrition on various physiological systems. (2015-2016)

Funding Agency: University of Tampa and Human Longevity, Inc.

Total Costs: \$231,000-**Funded**

Role: Coordinator

Site: Auburn University

Grant Title: [no title], contract to assist in the dissemination of research. (2015)

Funding Agency: University of Mary Hardin-Baylor

Total Costs: \$1,600-**Funded**

Role: Coordinator

Site: Auburn University

Grant Title: [no title], contract to assist in the dissemination of research. (2015)

Funding Agency: University of Mary Hardin-Baylor

Total Costs: \$2,400-**Funded**

Role: Coordinator

Site: Auburn University

Grant Title: The effects of a nutraceutical on golf performance and biophysical measures during a 36-hole golf tournament in competitive male golfers aged 20-55 years. (2014-2015)

Funding Agency: MusclePharm Corp.

Total Costs: \$36,900-**Funded**

Role: Coordinator

Site: Wichita State University

Intramural Funding

Grant Title: Skeletal muscle and the endogenous effects of Line-1 retrotransposition with aging (2018-2019)

Funding Agency: VCOM-Auburn

Total Costs: \$60,000-**Funded**

Role: Co-Coordinator

Site: Auburn University/VCOM-Auburn

PROFESSIONAL MEMBERSHIPS

- 2018- American Physiological Society
- 2014- American College of Sports Medicine
- 2015 – American College of Sports Medicine: Southeast Chapter

AWARDS

- 2019- Outstanding Graduate Assistant Award Finalist
- 2018- Auburn University College of Education Travel Award
- 2018- Auburn University Graduate Travel Fellowship
- 2018- G. Dennis Annual Scholarship Award for Outstanding Research and Teaching
- 2018- Auburn University Kinesiology Travel Award
- 2017- Auburn University College of Education Graduate Student Travel Award
- 2017- Auburn University Kinesiology Travel Award
- 2016- Auburn University Kinesiology Travel Award
- 2015- Auburn University Kinesiology Travel Award
- 2014- Wichita State University Travel Award

PROFFESIONAL / UNIVERSITY SERVICE

Reviewer:

2019- Medicine & Science in Sports & Exercise

2018- Applied Physiology, Nutrition, and Metabolism

Service:

2018- Kids in Science, Auburn, Alabama
2017- Kids in Science, Auburn, Alabama
2016- Neon Vibe 5K, Auburn, Alabama
2015- Kids in Science, Auburn, Alabama

PROFESSIONAL REFERENCES

Dr. Michael Roberts

Associate Professor, School of Kinesiology
Director, Molecular and Applied Sciences Laboratory
Affiliate Research Professor, Edward Via College of Osteopathic Medicine – Auburn
Campus
Auburn University
mdr0024@auburn.edu
(334)-844-1925

Dr. Kaelin Young

Associate Professor
Department of Cell Bio and Physiology
Edward Via College of Osteopathic Medicine- Auburn Campus
Associate Director, Molecular and Applied Sciences Laboratory,
Auburn University
Kyoung@auburn.vcom.edu
(253)-255-5617

Dr. Michael Rogers

Professor, Department of Human Performance Studies
Graduate Coordinator, Exercise Science Program
Director, Center for Physical Activity and Aging
Chair, WSU Institutional Review Board
Wichita State University
Michael.Rogers@wichita.edu
(316) 978-5959

Dr. Dave Pascoe

Emeritus Professor
Former Assistant Director, School of Kinesiology
Former Director, Thermal and Infrared Laboratory
Former Director, Gastrointestinal Research Center
Auburn University
pascodd@auburn.edu
(334) 844-1619