Gregory C. Henderson, Ph.D.

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EDUCATION:

Ph.D., Integrative Biology, University of California, Berkeley, 5/2007

B.A., Integrative Biology, University of California, Berkeley, 5/2001

POSITIONS AND EMPLOYMENT:

Assistant Professor, Department of Nutrition Science, Purdue University, West Lafayette, IN (2019 – present)

R&D Scientist – Advanced, Clinical Mass Spectrometry Division, Agilent Technologies, Santa Clara, CA (2016 – 2019)

Senior Analytical Scientist, Kiverdi Inc., Hayward, CA (2015 – 2016)

Senior Scientist, Newomics Inc., Emeryville, CA (2014 – 2015)

Assistant Professor, Department of Exercise Science and Sport Studies, Rutgers University, New Brunswick, NJ (2010 – 2014)

Postdoctoral Research Fellow, Division of Endocrinology, Mayo Clinic, Rochester, MN (2007 – 2010)

Chemist, Bay Bioanalytical Laboratory, Hercules, CA (2001 – 2002)

AWARDS AND HONORS:

Top Reviewer Award, Lipids in Health and Disease Journal, Fourth Quarter (2020)

Star Reviewer, American Physiological Society Journals (2013)

Vernon R. Young International Award for Amino Acid Research, American Society for Nutrition (April, 2011)

Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award for Meritorious Research, American Physiological Society. Experimental Biology Annual Meeting (May, 2007)

Predoctoral Recognition Award, American Physiological Society, Environmental and Exercise Physiology Section. Experimental Biology Annual Meeting (April, 2007)

Outstanding Graduate Student Instructor Award, Integrative Biology. University of California, Berkeley (May, 2004)

PEER-REVIEWED JOURNAL ARTICLES:

1. **Henderson GC**. The regulation of fatty acid mobilization is extravagant rather than frugal - a perspective indicating a limitation of the thrifty genotype hypothesis. American Journal of Clinical Nutrition S0002-9165(25): 00436-8, 2025.

2. Zhang Y, Tomoo K, Lai Y, **Henderson GC**. Ultrastructural characterization of white adipocytes in a mouse model with enhanced sequestration of fatty acids in adipose tissue. Adipocyte 14(1): 2531829, 2025.

3. Tomoo K, Zhang Y, Mohallem R, Aryal UK, Klauda JB, **Henderson GC**. Identification of plasma free fatty acid carrier proteins in mice. FASEB Journal 39(12): e70732, 2025.

4. Huang LC, **Henderson GC**, Mattes RD. Effects of Daily Almond Consumption on Glycemia in Adults with Elevated Risk for Diabetes: A Randomized Controlled Trial. British Journal of Nutrition 132(10): 1289-1299, 2024.

5. Abdollahi A, Szramowski M, Tomoo K, **Henderson GC**. Metabolic responses to albumin deficiency differ distinctly between partial and full ablation of albumin expression in mice. Lipids in Health and Disease 23(1): 242, 2024.

6. Tomoo K, Szramowski M, Pinal R, Meyer JM, Zhang Y, Murray-Kolb LE, **Henderson GC**. Albumin is an important factor in the control of serum free fatty acid flux in both male and female mice. Journal of Applied Physiology 135(5): 1065-75, 2024.

7. Zhang Y, Abdollahi A, Andolino C, Tomoo K, Foster BM, Aryal UK, **Henderson GC**. Performance evaluation of different albumin assays for the detection of analbuminemia. PLOS ONE, 19(3):e0300130, 2024.

8. Zhang Y, Szramowski M, Sun S, **Henderson GC**. Combining albumin deficiency and acute exercise reduces hepatic lipid droplet size in mice. Lipids in Health and Disease 22(1):78, 2023.

9. Abdollahi A, Narayanan SK, Frankovich A, Lai YC, Zhang Y, **Henderson GC**. Albumin deficiency reduces hepatic steatosis and improves glucose metabolism in a mouse model of diet-induced obesity. Nutrients 15(9): 260, 2023

10. Foster BM, Abdollahi A, **Henderson GC**. Alterations in the Plasma Protein Expression Pattern in Congenital Analbuminemia—A Systematic Review. Biomolecules 13 (3), 407, 2023

11. Abdollahi A, Dowden BN, Buhman KK, Zembroski AS, **Henderson GC**. Albumin knockout mice exhibit reduced plasma free fatty acid concentration and enhanced insulin sensitivity. Physiological Reports 10(5): e15161, 2022.

12. **Henderson GC**. Plasma Free Fatty Acid Concentration as a Modifiable Risk Factor for Metabolic Disease. Nutrients 13: 2590, 2021.

13. **Henderson GC**, Meyer JM. Transient elevation of triacylglycerol content in the liver: a fundamental component of the acute response to exercise. Journal of Applied Physiology 130:1293-13032, 2021.

14. McMillan DW, **Henderson GC**, Nash MS, Jacobs KA. Effect of paraplegia on the time course of exogenous fatty acid incorporation into the plasma triacylglycerol pool in the postprandial state. Frontiers in Physiology 12: 626003, 2021.

15. **Henderson GC**, Martinez Tenorio V, Tuazon MA. Acute exercise in mice transiently remodels the hepatic lipidome in an intensity-dependent manner. Lipids in Health and Disease 19:219, 2020.

16. Xu H, Gajda AM, Zhou YX, Panetta C, Sifnakis Z, Fatima A, **Henderson GC**, Storch J. Muscle metabolic reprogramming underlies the resistance of LFABP-null mice to high-fat feeding-induced decline in exercise capacity. J Biol Chem 294: 15358-15372, 2019.

17. Koh JH, Johnson ML, Dasari S, Lebrasseur NK, Vuckovic I, **Henderson GC**, Cooper S, Shulman GI, Lanza IR, Nair KS. TFAM enhances fat oxidation and attenuates high fat diet induced insulin resistance in skeletal muscle. Diabetes 68(8):1552-1564, 2019.

18. Tuazon MA, Campbell SC, Klein DJ, Shapses S, Anacker KR, Anthony TG, Uzumcu M, **Henderson GC**. Effects of ovariectomy and exercise training intensity on energy substrate and hepatic lipid metabolism, and spontaneous physical activity in mice. Metabolism: Clinical and Experimental 83:234-244, 2018.

19. Bloomer SA, Wellen KE, **Henderson GC**. Sexual dimorphism in the hepatic protein response to a moderate trans fat diet in senescence-accelerated mice. Lipids in Health and Disease 16(1):243, 2017.

20. Davitt PM, **Henderson GC**, Walker AJ, Arent SM. Postprandial hormone response after endurance or resistance exercise in obese women. Comparative Exercise Physiology 13(4): 227-235, 2017.

21. **Henderson GC**. Lipid-Based Therapeutic Strategies for Sarcopenic and Dystrophic Muscular Impairments. Cellular and Molecular Biology 61:2, 2015.

22. Irving BA, Lanza IR, **Henderson GC**, Rao RR, Spiegelman BM, Nair KS. Combined Training Enhances Skeletal Muscle Mitochondrial Oxidative Capacity Independent of Age. Journal of Clinical Endocrinology and Metabolism 100(4): 1654-63. 2015.

23. Johnson ML, Irving BA, Lanza IR, Vendelbo MH, Konopka AR, Robinson MM, **Henderson GC**, Klaus KA, Morse DM, Heppelmann C, Bergen HR, Dasari S, Schimke JM, Jakaitis DR, Nair KS. Differential Effect of Endurance Training on Mitochondrial Protein Damage, Degradation, and Acetylation in the Context of Aging. Journal of Gerontology A: Biological Sciences and Medical Sciences 70(11):1386-93, 2015.

24. Wilson GJ, Lennox BA, She P, Mirek ET, Al Baghdadi RJ, Fusakio ME, Dixon J, **Henderson GC**, Wek RC, Anthony TG. GCN2 is required to increase fibroblast growth factor 21 and maintain hepatic triglyceride homeostasis during asparaginase treatment. American Journal of Physiology: Endocrinology and Metabolism 308(4): E283-93, 2015.

25. **Henderson GC**. Sexual dimorphism in the effects of exercise on metabolism of lipids to support resting metabolism. Frontiers in Endocrinology 2014 Oct 7;5:162.

26. Tuazon MA, McConnell TR, Wilson GJ, Anthony TG, **Henderson GC**. Intensity-dependent and sex-specific alterations in hepatic triglyceride metabolism in mice following acute exercise. Journal of Applied Physiology 118: 61-70, 2015.

27. **Henderson GC**, Evans NP, Grange RW, Tuazon MA. Compared with monounsaturated fatty acids, a high dietary intake of n-3 polyunsaturated fatty acids does not reduce the degree of pathology in mdx mice. British Journal of Nutrition 111:1791-800, 2014

28. **Henderson GC**, Alderman BL. Determinants of resting lipid oxidation in response to a prior bout of endurance exercise. Journal of Applied Physiology 116: 95-103, 2014.

29. Liou J, Tuazon MA, Burdzy A, **Henderson GC**. Moderate compared to low dietary intake of trans-fatty acids impairs strength of old and aerobic capacity of young SAMP8 mice in both sexes. Lipids 48: 1135-1143, 2013.

30. Tuazon MA, **Henderson GC**. Fatty acid profile of cardiac muscle phospholipid and triacylglycerol in mdx mice and C57BL/10ScSnJ controls. Lipids 48: 849-51, 2013.

31. Davitt PM, Arent SM, Tuazon MA, Golem DL, **Henderson GC**. Postprandial triglyceride and free fatty acid metabolism in obese women after either endurance or resistance exercise. Journal of Applied Physiology 114: 1743-1754, 2013.

32. **Henderson GC**. Kinetic measurement techniques in the evaluation of lipid metabolism. Current Drug Discovery Technologies 10: 209-23, 2013.

33. Sinner DI, Kim JY, **Henderson GC**, Igal RA. StearoylCoA desaturase-5: a novel regulator of neuronal cell proliferation and differentiation. PLoS ONE 7: e39787, 2012.

34. Soop M, Nehra V, **Henderson GC**, Boirie Y, Ford GC, Nair KS. Co-ingestion of whey protein and casein in a mixed meal - demonstration of a more sustained anabolic effect of casein. American Journal of Physiology: Endocrinology and Metabolism 303: E152-62, 2012.

35. Tuazon MA, **Henderson GC**. Fatty acid profile of skeletal muscle phospholipid is altered in mdx mice and is predictive of disease markers. Metabolism: clinical and experimental 61: 801-811, 2012.

36. **Henderson GC**, Tuazon MA. Separation of positional and geometrical fatty acid isomers as 2-nitrophenylhydrazide derivatives by high performance liquid chromatography. Analytical Biochemistry 413: 66-68, 2011.

37. Jaleel A, **Henderson GC**, Madden BJ, Klaus KA, Morse DM, Gopala S, Nair KS. Identification of *de novo* synthesized and relatively older proteins – Accelerated oxidative damage to *de novo* synthesized ApoA-1 in type 1 diabetes. Diabetes 59: 2366-2374, 2010.

38. **Henderson GC**, Fattor JA**,** Krauss RM, Faghihnia N, Luke-Zeitoun M, Brooks GA. Plasma triglyceride concentrations are rapidly reduced following individual bouts of endurance exercise in women. European Journal of Applied Physiology 109: 721-730, 2010.

39. **Henderson GC**, Nadeau D, Horton ES, Nair KS. Effects of adiposity and 30 days of caloric restriction upon protein metabolism in moderately and severely obese women. Obesity 18: 1135-1142, 2010.

40. **Henderson GC**, Dhatariya K, Ford GC, Klaus KA, Basu R, Rizza RA, Jensen MD, Khosla S, O'Brien P, Nair KS. Higher muscle protein synthesis in women than men across the lifespan, and failure of androgen administration to amend age-related decrements. FASEB Journal 23: 631-641, 2009.

41. **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Johnson ML, Luke-Zeitoun M, Brooks GA. Glucoregulation is more precise in women than men during postexercise recovery. American Journal of Clinical Nutrition 87: 1686-1694, 2008.

42. **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Johnson ML, Mau TL, Luke-Zeitoun M, Brooks GA. Lipolysis and fatty acid metabolism in men and women during the postexercise recovery period. Journal of Physiology 584: 963-981, 2007.

43. **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Luke-Zeitoun M, Brooks GA. Retention of intravenously infused [^{13}C]bicarbonate is transiently increased during recovery from hard exercise. Journal of Applied Physiology 103: 1604-1612, 2007.

44. Friedlander AL, Braun B, Pollack M, MacDonald JR, Fulco CS, Muza SR, Rock PB, **Henderson GC**, Horning MA, Brooks GA, Hoffman AR, Cymerman A. Three weeks of caloric restriction alters protein metabolism in normal-weight, young men. American Journal of Physiology: Endocrinology and Metabolism 289: E446-455, 2005.

45. Kuo CC, Fattor JA, **Henderson GC**, and Brooks GA. Lipid oxidation in fit young adults during postexercise recovery. Journal of Applied Physiology 99: 349-356, 2005.

46. **Henderson GC**, Horning MA, Lehman SL, Wolfel EE, Bergman BC, and Brooks GA. Pyruvate shuttling during rest and exercise before and after endurance training in men. Journal of Applied Physiology 97: 317-325, 2004.

OTHER PUBLICATIONS:

1. **Henderson GC**, Hashimoto T, Irving BA, and Halliday TM. Editorial: Mechanisms Linking Transport and Utilization of Metabolic Fuels to the Impact of Nutrition and Exercise Upon Health. Front. Nutr., 26 November 2021 | https://doi.org/10.3389/fnut.2021.803369

2. **Henderson GC**. Editorial: Lettuce romaine calm and manage our glycemia: adding leafy greens to a meal may improve postprandial metabolism. Lipids in Health and Disease 20(1): 67, 2021.

3. **Henderson GC**. Commentary: The diabetic brain during hypoglycemia; in the midst of plenty of lactate. Diabetes 62: 3024-3026, 2013.

4. **Henderson GC**, Irving BA, Nair KS. Editorial: Potential application of essential amino acid supplementation to treat sarcopenia in elderly people. Journal of Clinical Endocrinology and Metabolism 94: 1524-1526, 2009.

5. **Henderson GC**, Brooks GA. Women utilize lipid as fuel more than men during exercise - is there a paradox? Physiology News 71: 22-24, 2008.

6. **Henderson GC**, Horning MA, Wallis GA, Brooks GA. Letter to the editor: Pyruvate Metabolism in Working Human Skeletal Muscle. American Journal of Physiology: Endocrinology and Metabolism 292: E366, 2007.

7. Brooks GA, **Henderson GC**, Hashimoto T, Mau T, Fattor JA, Horning MA, Hussien R, Cho HS, Faghihnia N, Zarins Z. Point-Counterpoint Comments: Lactic acid accumulation is an advantage/disadvantage during muscle activity. Journal of Applied Physiology 100: 2100, 2006.

INVITED PRESENTATIONS:

1. Physiological roles of plasma free fatty acid carrier proteins in various metabolic conditions. Genomics Biology Physical Activity Consortium (GenBioPac); An international scientific consortium dedicated to understanding the genetic and biological factors regulating physical activity. March 14, 2025.

2. Contributions of plasma free fatty acid transport to the development of metabolic disease. University of Georgia department of Nutrition Science, departmental seminar. September 18, 2024.

3. Modulation of lipid metabolism by serum albumin in health and disease. Purdue University department of Nutrition Science, departmental seminar. August 30, 2024.

4. The science of dietary fat. Lincoln Memorial University, DeBusk College of Osteopathic Medicine. April 4, 2024

5. Plasma free fatty acid flux as a friend or foe. Purdue University department of Health and Kinesiology, departmental seminar. January 24, 2024.

6. Serum albumin and its role in the integration of lipid and glucose metabolism. 4th Big Ten Academic Alliance Lipids Symposium, University of Illinois, February 11, 2022.

7. Developing new approaches to manipulate plasma free fatty acid abundance to improve metabolic health. Purdue Center for Cancer Research Seminar. March 10, 2021.

8. Fatty acid transport from adipose tissue to liver: Role in the exercise response and regulation of metabolic health. Indiana University, Center for Diabetes and Metabolic Disease Seminar. November 30, 2020.

9. Exercise participation and gender as potent modulators of inter-organ lipid shuttling and fuel selection. Mayo Clinic, Scottsdale, AZ. Center for Metabolic and Vascular Biology Seminar, April, 2014.

10. Plasma triglyceride and fatty acid kinetics following exercise. Symposium: Lipid Metabolism-Molecular Regulation and Integrated Responses to Exercise. American College of Sports Medicine Annual Meeting, 2013.

11. The influence of sex in metabolism during exercise recovery. Symposium: Sex-based differences in exercise metabolism (American Physiological Society), Experimental Biology Annual Meeting, 2013.

12. Fatty acid composition of muscle phospholipid in the mouse model of duchenne muscular dystrophy. Rutgers Center for Lipid Research, Meeting. May, 2011.

13. Metabolism of triglyceride and fatty acids during the post-exercise recovery period. Symposium: Energy substrate partitioning during exercise and recovery. American College of Sports Medicine Conference on Integrative Physiology of Exercise. September, 2010.

14. Impacts of physical activity and energy balance upon metabolite kinetics. Rutgers University, Department of Nutritional Sciences, Departmental Seminar. March, 2010.

15. Overexpression of transcription factor A of mitochondria (TFAM) in skeletal muscle of mice. Mayo Clinic, Rochester, MN. Endocrine Research Unit Seminar. January, 2010.

16. Skeletal muscle protein synthesis: age, gender, and androgen supplementation. Mayo Clinic, Rochester, MN. Endocrine Research Unit Seminar. March, 2008.

17. Lipid Metabolism during Exercise and Post-exercise Recovery in Men and Women. California State University, Chico. Biological Sciences Departmental Seminar. October, 2006.

18. Lipid Metabolism in Exercise and Recovery. American College of Sports Medicine Conference on Integrative Physiology of Exercise, 2006.

19. Effects of Endurance Exercise upon Fat Utilization. National Strength and Conditioning Association, California State Annual Meeting, 2005.

MEETING ABSTRACTS:

1. Lai Y, Zhang Y, Tomoo K, **Henderson GC**. Ultrastructural characterization of white adipose tissue in albumin knockout mice. Spring Undergraduate Research Expo, Purdue University, 2025. *(oral presentation by Y. Lai)*

2. Zhang Y, Tomoo K, Lai YH, **Henderson GC**. Ultrastructural characterization of white adipocyte remodeling in response to enhanced sequestration of fatty acids in murine adipose tissue. 15th Annual Meeting of the Indiana Physiological Society, 2025. *(oral presentation by Y. Zhang)*

3. Lai YH, Zhang Y, Tomoo K, **Henderson GC**. Characterization of Mitochondria in Murine White Adipose Tissue When Free Fatty Acids Are Sequestered. 15th Annual Meeting of the Indiana Physiological Society, 2025.

4. Tomoo K, Zhang Y, Mohallem R, Aryal UK, Klauda JB, **Henderson GC**. Elucidation of plasma free fatty acid carrier proteins in albumin-deficient mice. 15th Annual Meeting of the Indiana Physiological Society, 2025.

5. Tomoo K, Zhang Y, Mohallem R, Aryal UK, **Henderson GC**. Identification of plasma free fatty acid carrier proteins in mice. 6th Big Ten Academic Alliance Lipids Symposium, The Ohio State University, 2025.

6. Zhang Y, Tomoo K, Lai Y, **Henderson GC**. Ultrastructural characterization of white adipocytes in a mouse model with enhanced sequestration of fatty acids in the adipose tissue. 6th Big Ten Academic Alliance Lipids Symposium, The Ohio State University, 2025.

7. Lai Y, Zhang Y, **Henderson GC**. Adipose Tissue Morphology in Albumin Knockout Mice. Fall Undergraduate Research Expo, Purdue University, 2024. *(oral presentation by Y. Lai)*

8. Tomoo K, Zhang Y, **Henderson GC**. Exploring alternative mechanisms for plasma fatty acid transport in the absence of albumin in mice. HHS Fall Research Day, Purdue University, 2024.

9. Tomoo K, Szramowski M, Pinal R, Meyer JM, Zhang Y, Murray-Kolb LE, **Henderson GC**. Development of an Albumin-Free Formulation for Administering Isotopically Labeled Palmitate for Measuring Free Fatty Acid Kinetics in Mice. Annual Conference of the American Society for Nutrition; Nutrition 2024.

10. Tomoo K, Szramowski M, Pinal R, Meyer JM, Zhang Y, **Henderson GC**. Albumin knockout mice exhibit blunted turnover of serum free fatty acids. 5th Big Ten Academic Alliance Lipids Symposium, University of Iowa, 2023.

11. Tomoo K, Szramowski M, Pinal R, Meyer JM, Zhang Y, **Henderson GC**. Albumin is an important factor in the control of serum FFA flux in male and female mice. Women's Health Research Symposium, Purdue University, 2023.

12. Abdollahi A, Narayanan S, Frankovich A, Lai Y-C, Zhang Y, **Henderson GC**. Albumin Knockout Mice with Diet-Induced Obesity Exhibit Reduced Hepatic Steatosis and Improved Glucose Metabolism. Annual Conference of the American Society for Nutrition; Nutrition 2023.

13. Zhang Y, Szramowski M, Sun S, **Henderson GC**. Combined Effect of Albumin Deficiency and Acute Exercise in Reducing Hepatic Lipid Accumulation in Mice. Annual Conference of the American Society for Nutrition; Nutrition 2023.

14. Zhang Y, Szramowski M, Sun S, **Henderson GC**. Albumin Deficiency Improves Insulin Sensitivity in Mouse Skeletal Muscle Potentially via the NF-κB Pathway. 13th Annual Meeting of the Indiana Physiological Society, 2023.

15. Tomoo K, Szramowski M, Zhang Y, **Henderson GC**. Exercise-induced plasma free fatty acid elevation correlates with hepatic triacylglycerol accumulation during recovery in mice: A pilot study. 13th Annual Meeting of the Indiana Physiological Society, 2023.

16. Abdollahi A, Dowden B, Buhman KK, Zembroski AS, **Henderson GC**. Lack of serum albumin improves insulin sensitivity in both male and female mice. Experimental Biology Annual Meeting, 2022.

17. Abdollahi A, Dowden B, Buhman KK, Zembroski AS, **Henderson GC**. Lack of serum albumin improves insulin sensitivity in both male and female mice. HHS Fall Research Day, Purdue University, 2021.

18. Abdollahi A, Dowden B, **Henderson GC**. Albumin Knockout Mice Exhibit Reduced Plasma Free Fatty Acids but No Impairment in Whole Body Fat Oxidation. Annual Conference of the American Society for Nutrition; Nutrition 2021. *(oral presentation by A. Abdollahi)*

19. **Henderson GC**, Tuazon MA. Rapid Accumulation of Triacylglycerol in the Liver is a Component of the Acute Exercise Response and May Serve a Protective Role Against Lipotoxicity. Experimental Biology Annual Meeting, 2020. *Conference canceled, but abstracts were published.*

20. Doering JA, DeRusso A, Sarathy A, Zibamanzarmofrad M, Donnelly S, Creekmore A, Burkin DJ, **Henderson G**, Cheng Z, LeBlanc P, Chin E, Schmelz EM, Grange RW. Dietary sphingolipids modulate muscle power and inflammation in mdx mice. New Directions in Biology and Disease of Skeletal Muscle Conference, 2014.

21. **Henderson GC**, Campbell SC, Tuazon MA. Hepatic acetyl-CoA carboxylase expression and triglyceride content are increased in mice after ovariectomy. American Diabetes Association Annual Meeting, 2014

22. Tuazon MA, McConnell TR, Liou J, **Henderson GC**. Intensity-dependent and sex-specific alterations in hepatic triglyceride and perilipin-2 abundance following exercise. American College of Sports Medicine Annual Meeting, 2014.

23. Davitt PM, **Henderson GC**, Arent SM. Acute post-exercise endocrine response during the postprandial period in obese women. American College of Sports Medicine Annual Meeting, 2013.

24. Davitt PM, Arent SM, **Henderson GC**. Postprandial fatty acid trafficking in obese women after either endurance or resistance exercise. Experimental Biology Annual Meeting, 2013.

25. Tuazon MA, Liou J, **Henderson GC**. Sex differences in VLDL-triglyceride kinetics in the basal state and in response to high-intensity interval exercise. Experimental Biology Annual Meeting, 2013.

26. Tuazon MA, McConnell TR, Liou J, **Henderson GC**. Sex differences in hepatic triglyceride concentration in response to a single bout of high-intensity interval exercise. Nutrition, Endocrinology & Animal Biosciences, 6th Annual Conference. Rutgers University, 2013.

27. Irving BA, Lanza IR, **Henderson GC**, Weymiller A, Sun Y, Nair KS. Endurance, resistance, and combined training increase mixed muscle protein synthesis independently of age. Experimental Biology Annual Meeting, 2012.

28. Esposito D, Tuazon M, **Henderson GC**, Komarnytsky S, Raskin I. Brassinosteroid enhances C57BL/6J mice treadmill endurance. Experimental Biology Annual Meeting, 2012.

29. Davitt PM, **Henderson GC,** Arent SM. Acute Effects of Resistance Exercise vs. Endurance Exercise on Postprandial Fuel Partitioning. American College of Sports Medicine Annual Meeting, 2012.

30. Arent SM, Davitt PM, **Henderson GC**. Acute Effects of Resistance Exercise vs. Endurance Exercise on Exogenous Fat Oxidation in Obese Women. American College of Sports Medicine Annual Meeting, 2012.

31. **Henderson GC**, Tuazon MA. Effect of Lifelong trans-Fatty Acid Intake on Exercise Capacity In Senescence-accelerated Mice. American College of Sports Medicine Annual Meeting, 2012.

32. Irving B, Lanza IR, Dalla Man C, **Henderson GC**, Nelson R, Miles J, Cobelli C, Nair K; Effect of age, sex, mitochondrial function, and exercise training on insulin sensitivity, beta-cell responsivity, and fatty acid concentrations in response to a mixed-meal. European Association for the Study of Diabetes Annual Meeting, 2011.

33. Irving BA, Lanza IR, **Henderson GC**, Weymiller A, Schimke J, Morse D, Johnson L, Nair KS. Effect of Exercise Training Modality on Skeletal Muscle mRNA Abundance in Young and Older Adults. American College of Sports Medicine Annual Meeting, 2011.

34. Tuazon M, **Henderson GC**. Altered fatty acid composition of skeletal muscle phospholipid in *mdx* mice. Experimental Biology Annual Meeting, 2011.

35. Irving BA, Lanza I, **Henderson G**, A. Weymiller A, Schimke J, Morse D, Nair KS. Effect of exercise training modality on skeletal muscle mitochondrial biogenesis in young and older adults. Experimental Biology Annual Meeting, 2011.

36. Lanza IR, Irving BA, **Henderson GC**, Nair KS. Mitochondrial oxidative capacity and coupling: effects of aging and exercise training. Experimental Biology Annual Meeting, 2011.

37. Tuazon MA, **Henderson GC**. Content of omega-3 and omega-6 fatty acids in skeletal muscle phospholipid is altered in mdx mice and is predictive of disease severity. Nutrition, Endocrinology & Animal Biosciences, 4th Annual Conference. Rutgers University, 2011.

38. Jaleel A, **Henderson GC**, Madden BJ, Klaus KA, Morse DM, Gopala S, Nair KS. Increased oxidative damage to de novo synthesized ApoA-1 in untreated type 1 diabetic patients - a novel method to identify the relative age of proteins. European Association for the Study of Diabetes Annual Meeting, 2010.

39. **Henderson GC**, Nadeau D, Horton ES, Nair KS. Response of protein metabolism to 30 days of caloric restriction in moderately and severely obese women. American Diabetes Association Annual Meeting, 2009.

40. **Henderson GC**, Dhatariya K, Ford GC, Klaus KA, O'Brien P, Nair KS. Effects of age and gender upon skeletal muscle and whole body protein synthesis. Amino Acid/Protein Metabolism in Health and Disease, 7th International Symposium, 2008.

41. **Henderson GC**, Dhatariya K, Ford GC, Klaus KA, Mujeeb M, Nair KS. Skeletal muscle protein synthesis in the elderly: age, gender, and androgen supplementation. Experimental Biology Annual Meeting, 2008. *(oral presentation)*

42. Brooks GA, **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Johnson ML, Luke-Zeitoun M. Glucose flux is elevated in men, but not women, during the postexercise recovery period. Experimental Biology Annual Meeting, 2008.

43. **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Johnson ML, Luke-Zeitoun M, Brooks GA. Prior Exercise Increases Resting Lipolysis in Men but not Women. Experimental Biology Annual Meeting, 2007.

44. **Henderson GC**, Fattor JA, Faghihnia N, Mau TL, Luke-Zeitoun M, Brooks GA. Elevated Lipid Oxidation in Men Following Endurance Exercise. American College of Sports Medicine Annual Meeting, 2006.

45. **Henderson GC**, Fattor JA, Horning MA, Faghihnia N, Mau TL, Luke-Zeitoun M, Brooks GA. Palmitate oxidation during rest, exercise, and post-exercise recovery. Experimental Biology Annual Meeting, 2006.

46. **Henderson GC**, Horning MA, Lehman SL, Wolfel EE, Bergman BC, and Brooks GA. Pyruvate Shuttling in Men during Rest and Exercise. American Physiological Society Intersociety Meeting, 2004.

47. Brooks GA, **Henderson GC**, Horning MA, Lehman SL, Bergman BC, and Wolfel EE. Pyruvate-lactate shuttling in vivo. European College of Sport Science Annual Meeting, 2004.

48. Friedlander AL, **Henderson GC**, Horning MA, MacDonald JR, Pollack M, Braun B, Rock PB, Fulco CS, Muza SR, Hoffman AR, Brooks GA, Cyberman.A. High Altitude Exposure with and without Caloric Restriction Alters Leucine Kinetics in Young Men. American College of Sports Medicine Annual Meeting, 2004.

49. Jacobs KA, Friedlander AL, Horning MA, **Henderson G**, Pollack M, MacDonald JR, Braun B, Brooks GA, Hoffman AR, Cymerman A. Influence of Altitude and Caloric Restriction on Plasma Alanine and Glutamine During Exercise. American College of Sports Medicine Annual Meeting, 2001.

RESEARCH GRANTS:

Riley Children's Hospital, Heartland Children's Nutrition Initiative, $200,000 1/2025 –12/2026
Role: **MPI** (other MPI: M Schwarz)
Replenish preterm infant nutrient deficits to rescue adult pathologic diseases

McKinley Educational Initiative, $60,000 1/2025 –12/2025
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes (renewal)

Diabetes Action Research and Education Foundation, $50,000 1/2025 –12/2025
Role: **Principal Investigator**
Free fatty acid carrier proteins in insulin resistance

Indiana Clinical and Translational Sciences Institute, $40,000 5/2024 –4/2025
Clinical and Translational Science Award - Funded by NIH National Center for Advancing Translational Sciences (UL1TR002529) to the Indiana CTSI
Role: **Principal Investigator**
Development of a method to enable pre-clinical studies of acute hypoalbuminemia

McKinley Educational Initiative, $10,000 1/2024 –12/2024
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes (renewal)

Indiana Clinical and Translational Sciences Institute, $5,988 1/2023 –12/2024
Funded by NIH, National Center for Advancing Translational Sciences (UL1TR002529)
Role: Principal Investigator
Electron microscopy to assess cellular responses to altered fatty acid trafficking

McKinley Educational Initiative, $75,000 1/2023 –12/2023
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes (renewal)

McKinley Educational Initiative, $75,000 1/2022 –12/2022
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes (renewal)

NIH (NIDDK), 1R56DK128008-01A1, $125,000 9/2021 – 9/2023 (NCE)
Role: **Principal Investigator**
Plasma free fatty acids and albumin in metabolic disease

Almond Board of California, $583,615 09/2021 - 11/2023
PI: Richard Mattes
Role: **Co-Investigator**
Effects of Almonds on Glycemia in Adults with Elevated Hemoglobin A1c Concentrations

Ralph W. and Grace M. Showalter Research Trust, $75,000 7/2021 – 7/2023 (NCE)
Role: **Principal Investigator**
Altering lipid metabolism to improve insulin sensitivity: impaired exercise capacity as a potential side effect

Center for Diabetes and Metabolic Disease at Indiana University
Pilot and Feasibility Award within NIH Grant P30 DK097512, $50,000 7/2021 – 6/2022
Role: **Principal Investigator**
Targeting plasma free fatty acids through a novel approach as a potential intervention for insulin resistance

USDA National Institute of Food and Agriculture Hatch Award 2020 – 2025
Role: **Principal Investigator**
Fatty acid metabolism in obesity and metabolic dysfunction

McKinley Educational Initiative, $50,000 1/2021 –12/2021
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes (renewal)

McKinley Educational Initiative, $30,000 1/2020 –12/2020
Role: **Principal Investigator**
Targeting fatty liver disease to prevent type 2 diabetes

Indiana Clinical and Translational Sciences Institute, $9,860 1/2020 –12/2021

Funded by NIH, National Center for Advancing Translational Sciences (UL1TR002529)
Role: Principal Investigator
Proteomic and lipidomic characterization of an albumin-deficient mouse model for translational studies of fatty acid metabolism

American Diabetes Association (7-13-JF-27-BR), $70,000 11/2013 – 9/2014
Role: **Principal Investigator**
Preclinical testing of exercise approaches in ovarian hormone deficiency

NIH, National Institute on Aging (1 R21 AG042403-01), $232,125 4/2012 – 3/2014
PI: Monica Driscoll
Role: **Collaborator**
Development of a C. elegans exercise model for evaluating healthy aging mechanism

Faculty Research Grant Program, Rutgers University, $15,617 1/2012 – 12/2012
Role: **Principal Investigator**
Sexual dimorphism in blood triglyceride metabolism

Busch Memorial Fund, Biomedical Award, $50,000 7/2010 – 5/2012
Principal Investigators: Gregory C. Henderson, Shawn M. Arent
Role: **Principal Investigator**
Resistance vs endurance exercise: Metabolic and hormonal responses in obese women.

PROFESSIONAL MEMBERSHIPS:

American Physiological Society, Member

American Society for Nutrition, Member

Purdue University Center for Cancer Research, Associate Member

Purdue Institute of Inflammation, Immunology and Infectious Disease, Member

PROFESSIONAL SERVICE:

Counselor, Indiana Physiological Society (2025 – present)

Faculty advisor to The Diabetes Link, Purdue University Chapter; an organization to support students with diabetes. (2025 – present)

Presenter at ‘Introducing Purdue’ event, aimed at recruiting prospective undergraduate students to Nutrition majors at Purdue (2025)

Poster Judge, 15th Annual Meeting of the Indiana Physiological Society (2025)

Poster Judge, Spring Undergraduate Research Conference, Purdue University (2025)

Abstract Reviewer, Nutrition 2025 Conference, American Society for Nutrition (2025)

Grant reviewer for the NIH. Ad hoc member of Nutrition and Metabolism in Health and Disease (NMHD) Study Section (Oct. 2024).

Poster Judge, 14th Annual Meeting of the Indiana Physiological Society (2024)

Poster Judge, HHS Spring Research Event. College of Health and Human Science Research Poster Competition, Purdue University (2024)

Grant Reviewer for the USDA, NP 107 Panel 9: Biological Mechanisms (Jan. 2024)

Review Editor, *Lipids in Health and Disease* (2024 – present)

Associate Editor, *Lipids in Health and Disease* (2023)

Mentor, Horizons' Faculty Mentorship Program – Program objective was to provide mentorship to first generation college students (2023)

Poster Judge, Women's Health Research Symposium, Purdue University (2023)

Abstract Reviewer, Nutrition 2023 Conference, American Society for Nutrition (2023)

Moderator, Obesity and Chronic Disease breakout session, Winter Retreat for the Indiana CTSI and Women's Global Health Institute, Purdue University (2023)

Grant reviewer for the NIH, Early Career Reviewer (ECR) program. Ad hoc member of Nutrition and Metabolism in Health and Disease (NMHD) Study Section (Oct. 2022).

Associate Editor, Lipid and Fatty Acid Research Specialty Section; *Frontiers in Physiology, Frontiers in Cell and Developmental Biology, and Frontiers in Nutrition* (2022 – present)

Editorial Board Member, *Biomolecules*, Biomacromolecules: Lipids' Section (2022 – present)

Presenter at 'Purdue's for Me' events, aimed at recruiting admitted students to Nutrition majors at Purdue (2022)

Judge, Neuroscience Oral Presentations Session. 7th Annual Symposium, Center for Diabetes and Metabolic Diseases, Indiana University School of Medicine. Oct 5-6, 2021.

Editorial Board Member, *Nutrients*, Nutrition and Metabolism Section (2021 – 2024)

Director of the Nutrition Science Undergraduate Major, Department of Nutrition Science, Purdue University (2021 – present)

Member, Advisory Committee to the Department Head. Department of Nutrition Science, Purdue University (2021 – present)

Reviewer, Bilsland Dissertation Fellowship Applications, Department-Level Review, Department of Nutrition Science, Purdue University (2021)

Presenter for Department of Nutrition Science, Health and Human Sciences Virtual Admitted Students Days, Purdue University (2021)

Review Editor on the Editorial Board of Lipid and Fatty Acid Research Specialty Section; *Frontiers in Physiology*, Frontiers in Cell and Developmental Biology, and Frontiers in Nutrition (2021 – 2022)

CRC Director Search Committee Member, Department of Nutrition Science, Purdue University (2020-2024)

Abstract Reviewer, Nutrition 2021 Conference, American Society for Nutrition (2021)

Award Jury Member, Vernon Young International Award for Amino Acid Research, American Society for Nutrition (2020, 2021)

Member, Admissions Committee, Interdepartmental Nutrition Program, Purdue University (2020, 2021)

Guest Associate Editor, *Frontiers in Nutrition* (2020 – present)

Member, Undergraduate Education Policy and Curriculum Committee, Department of Nutrition Science, Purdue University (2020 – present)

Reviewer, Compton Travel Award Competition, Purdue University (2020)

Judge, 'Health and Disease: Science, Technology, Culture and Policy Research' poster session. Purdue University (2020)

Grant Reviewer, Agricultural Science and Extension for Economic Development (AgSEED) Program, Purdue University (2019, 2022)

Undergraduate Student Internship Program Director, Kiverdi Inc. (2015 – 2016)

Member, Rutgers Biomedical & Health Sciences Strategic Planning Workgroup: Obesity, Endocrinology and Diabetes Working Group (2014)

Admissions Committee Chair, Graduate Program in Kinesiology and Applied Physiology, Rutgers University (2014)

Strategic Planning Committee Member, Department of Exercise Science, Rutgers University (2014)

Exam Question Contributor and Grader, Nutritional Aspects of Disease (16:709:506), Department of Nutritional Sciences, Rutgers University (2013)

Grant Reviewer, Maryland Industrial Partnerships Program (2013)

Qualifying Exam Question Contributor and Grader, Nutritional Sciences Graduate Program, Rutgers University (2012)

Qualifying Exam Grader for Research Proposals, Nutritional Sciences Graduate Program, Rutgers University (2011-2012)

Admissions Committee Member, Professional Science Master's Program in Kinesiology and Applied Physiology, Rutgers University (2011 – 2014)

Biomedical Research Advisory Committee, Member, Reviewer for Busch Biomedical Grant Competition, Rutgers University (2011 – 2012)

Exercise Science Curriculum Committee, Rutgers University (2011 – 2012)

Graduate Faculty Member, Endocrinology and Animal Biosciences, Rutgers University (2010 – 2014)

Graduate Faculty Member, Department of Nutritional Sciences, Rutgers University (2010 – 2014)

Faculty Search Committee Member, Department of Exercise Science and Sport Studies, Rutgers University (2010)

Mayo Clinic Young Investigator Research Symposium, Steering Committee Member (2008-2009)

Mayo Research Fellows Association, Vice President (2008 - 2009)

Annual Hansen Lecture on Environmental Physiology, Coordinator and host. University of California, Berkeley (2006 – 2007)

Faculty Search Committee, Member, Department of Integrative Biology, University of California, Berkeley (2004)

COURSE INSTRUCTION:

Evaluation of Nutrition Science Research (NUTR 496). Purdue University, Department of Nutrition Science. Role: Course Instructor.
Spring 2022, Spring 2023, Spring 2024, Spring 2025

Nutrition in the 21st Century (NUTR 105). Purdue University, Department of Nutrition Science. Role: Course Instructor.
Fall 2020, Fall 2021, Fall 2022, Fall 2023, Fall 2024

Nutrition Assessment (NUTR 436). Purdue University, Department of Nutrition Science. Role: Course Instructor.
Spring 2020, Spring 2021

Nutritional Biochemistry and Physiology II (NUTR 606). Purdue University, Department of Nutrition Science. Role: Course Instructor for 50% of course.

Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024, Spring 2025

Biochemistry of Exercise (01:377:381 and 16:137:516). Rutgers University, Department of Exercise Science. Role: Course instructor.
Fall 2010; Fall 2011; Summer 2012; Fall 2012; Fall 2013

Advanced Exercise Physiology (01:377:454 and 16:137:515). Rutgers University, Department of Exercise Science. Role: Course instructor.
Spring 2011; Spring 2012; Spring 2013; Spring 2014

Mammalian Physiology Laboratory (IB132L). University of California, Berkeley, Department of Integrative Biology. Role: Graduate Student Instructor for laboratory section of IB132.
Spring 2003; Spring 2004

Exercise Physiology Laboratory (IB123L). University of California, Berkeley, Department of Integrative Biology. Role: Graduate Student Instructor for laboratory section of IB123.
Fall 2003

Human Anatomy Laboratory (IB131L). University of California, Berkeley, Department of Integrative Biology. Role: Graduate Student Instructor for laboratory section of IB131.
Fall 2002

COURSE GUEST LECTURES:

Principles of Public Health Science (HSCI 201). Purdue University, School of Health Sciences. Lecture title**: Obesity**. March 29, 2022.

Lipids and Cell Function (NUTR 590). Purdue University, Department of Nutrition Science. Lecture title**: Fatty acid transport and distribution between body compartments: An aqueous journey**. March 28, 2022.

Introduction to Nutrition Science (NUTR 107). Purdue University, Department of Nutrition Science. Lecture title**: Macronutrient Metabolism**. November 21, 2019.

Nutrition Science in the 21st Century (NUTR 105). Purdue University, Department of Nutrition Science. Lecture title**: Energy metabolism and metabolic fuel selection**. September 19, 2019.

Applied Topics in Physiology – Science from the Lab to the Real World (Human Biology 135s). Stanford University, Department of Human Biology. Lecture title**: The physiology and biochemistry of obesity – Applying biochemistry to public health**. May 23, 2017.

Obesity - Biology, Behavior, and Management (11:709:427:01). Rutgers University, Department of Nutritional Science. Lecture title: **Exercise and obesity**. February 27, 2013; February 18, 2014.

Colloquium in Kinesiology and Applied Physiology (16:137:505). Rutgers University, Professional Science Master's Program. Lecture title: **Considering specific populations in exercise and other lifestyle interventions.** March 8, 2012.

Nutritional Aspects of Disease (16:709:506). Rutgers University, Department of Nutritional Science. Lecture title: **Sarcopenia of Aging**. Nov 2, 2011; Oct 1, 2013.

Honors Research in Exercise Science (01:377:481). Rutgers University, Department of Exercise Science. Lecture title: **Completing the Research Process and Disseminating Research Findings**. April 22, 2010.

Honors Research in Exercise Science (01:377:481). Rutgers University, Department of Exercise Science. Lecture title: **Measuring Research Variables**. April 6, 2010.

Honors Research In Exercise Science (01:377:481). Rutgers University, Department of Exercise Science. Lecture title: **Writing an Introduction for a Journal Article or Thesis**. February 2, 2010.

UNDERGRADUATE STUDENT ADVISING AND MENTORING (RESEARCH INTERNS):

1. Ahmad Abdelaziz – Department of Exercise Science, Rutgers University (Spring 2011)

2. Alex Burdzy – Department of Exercise Science, Rutgers University (Spring 2011, Summer 2011, Fall 2011, Spring 2012)

3. Sebastian Roque – Department of Exercise Science, Rutgers University (Spring 2011, Summer 2011, Spring 2012)

4. Jesse Liou – Department of Nutritional Sciences, Rutgers University (Spring 2012, Summer 2012, Fall 2012, Spring 2013)

5. David Weinstock – Department of Cell Biology and Neuroscience, Rutgers University (Summer 2012, Fall 2012, Spring 2013)

6. Stephen Danischewski – Department of Exercise Science, Rutgers University (Summer 2012)

7. Taylor Rae McConnell – Department of Animal Sciences, Rutgers University (Summer 2012, Fall 2012, Spring 2013, Summer 2013, Fall 2013, Spring 2014)

8. Daphne Bienkiewicz – Department of Exercise Science, Rutgers University (Fall 2013, Spring 2014)

9. Kristen Rizkalla – Department of Exercise Science, Rutgers University (Fall 2013, Spring 2014, Summer 2014)

10. Zunaira Khan – Department of Exercise Science, Rutgers University (Fall 2013, Spring 2014, Summer 2014)

11. Haider Ali Bhatti – Department of Exercise Science, Rutgers University (Fall 2013, Spring 2014, Summer 2014)

12. Jeffrey Lo – Department of Exercise Science, Rutgers University (Fall 2013, Spring 2014, Summer 2014)

13. Sukhpreet Kaur – UC Berkeley Bio-Manufacturing to Market Program, Kiverdi Internship (Summer 2015)

14. Ken Lim – UC Berkeley Bio-Manufacturing to Market Program, Kiverdi Internship (Fall 2015)

15. Michael Jagadpramana – UC Berkeley Bio-Manufacturing to Market Program, Kiverdi Internship (Spring 2016)

16. Valeria Martinez-Tenorio – Department of Nutrition Science, Purdue University (Fall 2019, Spring 2020; Fall 2020, Spring 2021)

17. Bailey Foster – Department of Nutrition Science, Purdue University (Spring 2020; Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023)

18. Juliauna Meyer – Department of Biological Sciences, Purdue University (Spring 2020; Fall 2020, Spring 2021, Summer, 2021, Fall 2021)

19. Shuhan Sun – Department of Nutrition Science, Purdue University (Summer 2022; Fall 2022, Spring 2023)

20. Ariana Zoe Diaz Portalatin –Department of Nutrition Science, Purdue University (Spring 2024; Fall 2024, Spring 2025)

21. Yen-Hsi Lai – Department of Nutrition Science, Purdue University (Spring 2024; Summer 2024; Fall 2024, Spring 2025)

22. Jadyn Marie Befort – Biomedical Health Sciences, Purdue University (Spring 2024; Fall 2024, Spring 2025)

UNDERGRADUATE HONORS THESIS COMMITTEES:

1. Daniel Burke – Date completed: 2011. Department of Molecular Biology and Biochemistry, Rutgers University.
Thesis title: Addressing the Role of Healthspan and Exercise in C. Elegans Aging.
Primary advisor: Monica Driscoll
Role: **Committee member**.

2. Jesse Liou – Date completed: 2013. Department of Nutritional Sciences, Rutgers University.
Thesis title: Effect of *trans*-fatty acids on sarcopenia in SAMP8 mice.
Primary advisor: Gregory Henderson
Role: **Primary advisor**.

3. David Weinstock – Date completed: 2013. Department of Cell Biology and Neuroscience, Rutgers University.
Thesis title: Effects of α-linolenic acid supplementation on disease severity in mdx mice.
Primary advisor: Gregory Henderson
Role: **Primary advisor**.

4. Kayla Pinzone – Date completed: 2013. Department of Nutritional Sciences, Rutgers University.
Thesis title: Nutritional Supplement Consumption Among College and High School Athletes and the Reasons Behind Use.
Primary advisor: Shawn Arent
Role: **Reader**

5. Brianna Costabile – Date completed: 2014. Department of Food Science, Rutgers University.
Thesis title: Role of Low-Density Lipoprotein Receptor in the Uptake and Metabolism of B-Carotene in the Maternal Liver
Primary advisor: Loredana Quadro
Role: **Reader**

6. Brian Chang – Date completed: 2014. Department of Molecular Biology and Biochemistry, Rutgers University.
Thesis title: Vitamin D receptor and estrogen receptor gene polymorphisms influence bone health
Primary advisor: Sue Shapses
Role: **Committee member**

7. Keith Anacker – Date completed: 2015. Department of Exercise Science, Rutgers University.
Thesis title: Exercise as a countermeasure against bone loss in ovarian hormone deficiency.
Primary advisor: Brandon Alderman
Role: **Research advisor**

8. Albert Chang – Date completed: 2015. Department of Exercise Science, Rutgers University.
Thesis title: Energy substrate selection during sitting, standing, and walking.
Primary advisor: Brandon Alderman
Role: **Research advisor**

9. Chloe M. Garrett – Date completed: 2023. Department of Nutrition Science, Purdue University.
Thesis title: Effects of dietary protein quantity and food source on cardiometabolic disease risk factors in postmenopausal women performing resistance training.
Primary advisor: Wayne Campbell
Role: **Reader**

10. Morgan L. Conrad – Date completed: 2024. Department of Nutrition Science, Purdue University.
Thesis title: Increased palmitate synthesis in metastatic breast cancer cells that target the lungs.

Primary advisor: Dorothy Teegarden
Role: **Reader**

11. Yixin (Cindy) Chen – Date completed: 2025. Department of Nutrition Science, Purdue University. Thesis title: TBD.

12. Yasmin Pirbhai – Date completed: TBD. Department of Nutrition Science, Purdue University. Thesis title: Development of Methods to Characterize Neurite Degeneration Process in SH-SY5Y Cells in Application to Diabetic Peripheral Neuropathy
Primary advisor: Jay Burgess
Role: **Reader**

13. Yen Lai – Date completed: 2025. Department of Nutrition Science, Purdue University. Thesis title: Morphological Characterization of Murine Adipose Tissue When Free Fatty Acids Are Sequestered.
Primary advisor: Greg Henderson
Role: **Primary advisor**

14. Ariana Zoe Diaz Portalatin – Date completed: TBD. Department of Nutrition Science, Purdue University. Thesis title: TBD.
Primary advisor: Greg Henderson
Role: **Primary advisor**

MASTERS THESIS COMMITTEES:

1. Claudia Pop – Date completed: 2013. Department of Nutritional Sciences, Rutgers University. Thesis title: Bone Mineral Density and Hormonal Response to Moderate Weight Loss in Older Men
Primary advisor: Sue Shapse
Role: **Committee member**.

2. Samantha Dori – Date completed: 2013. Department of Nutritional Sciences, Rutgers University. Thesis title: The Role of Glutamine in the Function and Cytokine Secretion of 3T3-L1 Adipocytes and RAW264.7 Macrophages
Primary advisor: Malcolm Watford
Role: **Committee member**.

3. James Foster – Date completed: 2021. Department of Nutrition Science, Purdue University. Thesis title: Impact of Consumption of a Mediterranean-Style Eating Pattern Including Modified Protein Sources on Plasma Lipid Profiles and Health Status Markers in Moderately Obese Middle-Aged Adults.
Primary advisor: Jay Burgess
Role: **Committee member**.

4. Emily Hicks – Date completed: 2022. Department of Nutrition Science, Purdue University. Thesis title: The role of glycogen accumulation and utilization in metastatic breast cancer progression
Primary advisor: Dorothy Teegarden
Role: **Committee member**.

5. Yazhen Song – Date completed: 2024. Department of Nutrition Science, Purdue University. Thesis title: Impact of vitamin D and pyruvate carboxylase on lipid droplet proteome in metastatic breast cancer cells.
Primary advisor: Dorothy Teegarden
Role: **Committee member**.

DOCTORAL THESIS COMMITTEES:

1. Devon L. Golem – Date completed: May, 2012. Department of Nutritional Sciences, Rutgers University.
Thesis title: Improving Physical Performance: the role of jaw repositioning.
Primary advisor: Shawn Arent
Role: **Committee member**

2. Patrick M. Davitt – Date completed: January, 2013. Department of Nutritional Sciences, Rutgers University.
Thesis title: Endurance and Resistance Exercise, Acute Postprandial Effects and Chronic Training Adaptations.
Primary advisor: Shawn Arent
Role: **Committee member**

3. Varsha Shete – Date completed: September, 2013. Department of Food Science, Rutgers University.
Thesis title: The role of lipoprotein receptors in the uptake of maternally circulating β-carotene by the developing tissues
Primary advisor: Loredana Quadro
Role: **Committee member**

4. John Douglas – Date completed: December, 2013. Department of Nutritional Sciences, Rutgers University.
Thesis title: Accumulation and metabolism of neutral lipids in obesity.
Primary advisor: Judith Storch
Role: **Committee member**

5. Marc A. Tuazon – Date completed: April, 2015. Department of Nutritional Sciences, Rutgers University.
Thesis title: Hepatic triglyceride secretion and metabolism in response to exercise
Primary advisor: Sarah Campbell
Role: **Research advisor**

6. Heli Xu – Date completed: February, 2019. Department of Nutritional Sciences, Rutgers University.
Thesis title: Metabolic changes in skeletal muscle underlie improved exercise capacity in liver fatty acid-binding protein null mice.
Primary advisor: Judith Storch
Role: **External committee member**

7. Jiamin Qui – Date completed: November, 29. 2023. Department of Animal Sciences, Purdue University.
Thesis title: Functional Identification of Family with Sequence Similarity 210 Member-A in Adipocytes
Primary advisor: Shihuan Kang
Role: **Committee member**

8. Gavin Connolly – Date completed: November 29. 2023. Department of Nutrition Science, Purdue University.
Thesis title: The Effects of Dietary Protein on Postprandial Essential Amino Acids Bioavailability as a Substrate for Protein Anabolism in Young and Older Adults and on Cardiometabolic Health-Related Outcomes
Primary advisor: Wayne Campbell
Role: **Committee member**

9. Alyssa Zembroski – Date completed: April 2, 2021. Department of Nutrition Science, Purdue University.
Thesis title: Cytoplasmic lipid droplets in metabolic disease.

Primary advisor: Kim Buhman
Role: **Committee member**

10. Afsoun Abdollahi – Date completed: April 5, 2024. Department of Nutrition Science, Purdue University.
Thesis title: Characterization of glucose tolerance and metabolism in a mouse model with suppressed albumin expression
Primary advisor: Gregory Henderson
Role: **Primary advisor**

11. Yi Zhang – Date completed: April 14, 2025. Department of Nutrition Science, Purdue University.
Thesis title: Morphological and metabolic responses to physiological stress in a mouse model with albumin deficiency
Primary advisor: Gregory Henderson
Role: **Primary advisor**

12. Li-Chu (Jasmine) Huang – Date completed: June 21, 2024. Department of Nutrition Science, Purdue University.
Thesis title: Effects of daily almond consumption on glycemia in adults with elevated risk for diabetes
Primary advisor: Richard Mattes
Role: **Committee member**

13. Kyung Ho (Kevin) Park – Date completed: NA. Department of Nutrition Science, Purdue University.
Thesis title: NA
Primary advisor: Kim Buhman
Role: **Committee member**

14. Marjorie Layosa – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Dorothy Teegarden
Role: **Committee member**

15. Keigo Tomoo – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD.
Primary advisor: Gregory Henderson
Role: **Primary advisor**

16. Sindusha Mysore Saiprasad – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Dennis Savaiano
Role: **Committee member**

17. Carrie Terwilliger – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Jay Burgess
Role: **Committee member**

18. Elina Dawoodani – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Laura Murray-Kolb
Role: **Committee member**

19. Xinyue Lu – Date completed: TBD. Department of Nutrition Science, Purdue University.

Thesis title: TBD
Primary advisor: James Markworth
Role: **Committee member**

20. Mojisola Adisa – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Kim Buhman
Role: **Committee member**

21. Harrison Cottingham – Date completed: TBD. Department of Health and Kinesiology, Purdue University.
Thesis title: TBD
Primary advisor: Chad Carrol
Role: **Committee member**

22. Jieun Woo – Date completed: TBD. Department of Nutrition Science, Purdue University.
Thesis title: TBD
Primary advisor: Weicang Wang
Role: **Committee member**

23. Kiley Robison – Date completed: TBD. School of Health Sciences, Purdue University.
Thesis title: TBD
Primary advisor: Jonathan Shannahan
Role: **Committee member**