## Kristi M. Crowe-White, PhD, RD

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# **EDUCATION**

B.S.	Nutrition	Samford University, 2000
M.S.	Food Science & Nutrition	University of Maine, 2002
Ph.D.	Food Science & Nutrition	University of Maine, 2006
R.D.	Dietetic Internship	University of Alabama at Birmingham, 2009
National Science Foundation Fellowship		University of Maine, 2003-2006

# OTHER SCHOLARLY TRAINING

- University of North Carolina at Chapel Hill Nutrition Research Institute Nutrigenetics, Nutrigenomics, and Precision Nutrition Training, 2021
- Certified Phlebotomy Technician by the National Health Career Association, 2017 present
- University of Alabama at Birmingham Geriatric Education Center Faculty Scholars Program, 2015-2016
- Nutrition Data System for Research (NDSR) Training University of Minnesota, March 2011

# **PROFESSIONAL WORK EXPERIENCE**

• University of Alabama

Department Chair, Human Nutrition & Hospitality Mgmt.
 Associate Professor, Human Nutrition
 Assistant Professor, Human Nutrition
 Time, Inc. The Southern Progress Corporation
 2019 – 2023
 2016 – to present
 2010 – 2016
 2007- 2009

Food Chemist

## **RESEARCH FOCUS**

- **Aim 1** Investigate the impact of bioactive compounds and functional foods on outcomes related to cardiometabolic disease in preclinical and clinical models including genetic explorations underlying interindividual responsiveness.
- **Aim 2** Examine the role of bioactive food compounds and dietary patterns on gut microbial composition and gut-derived metabolites in relation to cardiometabolic disease and aging.

# **INTELLECTUAL PROPERTIES**

• The University of Alabama, **Crowe-White KM**. U.S. Patent Number 11,304,896: Antioxidant Infused Gum for Improving Oral Health - April 19, 2022

# **EXTERNALLY FUNDED RESEARCH**

- \* denotes student-mentored research funding
- Crowe-White KM (PI). (2022-2024). Spices for Cultivating a Healthy Gut Microbiome and Cardiometabolic Profile: The Spice Study. The McCormick Science Institute.

  Award: \$200,000.00
- \* DiNatale J, Crowe-White KM (Mentor). (2023-2024). *Influence of Dietary Nitrate on Vascular Outcomes during Pregnancy*. Academy of Nutrition and Dietetics Research Dietetics Practice Group.

**Award:** \$2,000.00

• \* DiNatale J, Crowe-White KM (Mentor). (2022-2023). Dietary Nitrate as an Adjuvant Therapy for Hypertensive Pregnancies and a Nutritional Modifier of Cardiometabolic Programming in Offspring. American Heart Association Student Scholarship in Cardiovascular Disease.

Award: \$2,000.00

• \*Crowe-White KM (PI), Park H, Senkus KE, DiNatale J. (2020-2022). Epigenetic Influences of Prenatal Dietary Nitrate on Nutritional Programming of Brown Adipose Tissue Differentiation and Cardiometabolic Outcomes in Offspring of Obese Sprague-Dawley Rats. Academy of Nutrition and Dietetics – Research Dietetics Practice Group Pilot Grant and The Sugar Association.

Award: \$10,000.00

• \*Senkus KE, Crowe-White KM (Mentor). (2019-2022) Mouth Rinses Infused with Nitrates/Nitrites and Antioxidants to Support the Entero-salivary Pathway for Oral and Vascular Health: The RINSE Study. Academy of Nutrition and Dietetics Colgate Palmolive Fellowship in Nutrition and Oral Health.

**Award:** \$15,000.00

• \*Senkus KE, Crowe-White KM (Mentor). (2019-2020) Characterizing the Oral Microbiome for Optimal Blood Pressure. Academy of Nutrition and Dietetics Foundation.

**Award:** \$1,750.00

- \*Senkus KE, Crowe-White KM (Mentor). (2019-2020) Developing a Functional Mouth Rinse for Improving Oral and Vascular Health. Academy of Nutrition and Dietetics Foundation. Award: \$1,000.00
- Johnston E, Bushway R, Cheryan M, Crowe-White KM (co-I). (2019-2021) *Novel Concentration Technology to Develop Antioxidant-Rich Army Rations*. Department of Defense Army SBIR A17-069.

Award: \$1,000,000.00

**UA Sub-award**: \$24,318.00

• Knol L, Crowe-White KM (co-PI). (2018-2019). REDOX ME: An investigation of the relationship between oxidative stress biomarkers and mindful eating practices. Academy of Nutrition and Dietetics Dietitians in Integrative and Functional Medicine Grant.

**Award:** \$5,000.00

• Crowe-White KM (PI), Jung S. (2017-2018). *Modulating Oxidative Stress through Antioxidant-Infused Spice Chews: the MOSAIC Study*. Academy of Nutrition and Dietetics McCormick Science Institute Research Award Grant.

**Award:** \$5,000.00

• Crowe-White KM (co-PI), Ellis A. (2016-2018). Bioactive Compounds in Watermelon Juice Modulating Oxidative Stress and Inflammation in Elders: the MOXIE Study. American Heart Association Mentored Clinical and Population Research Award 16MCPRP27260233.

**Award:** \$154,000.00

• Allison D, **Crowe KM** (**co-I**). (2013-2014). Functional Foods: Issues in Evaluating Bioactive Food Components in Obesity and Cancer Prevention. NIH R13 National Cancer Institute, Office of Dietary Supplements – PA-10-071.

**Award:** \$44,288.00

• Crowe KM (co-PI), Lawrence J, Meyer MK. (2012-2013). Improving Dietary Protein Intake among Residents of Long-Term Care Facilities through the Development and Sensory Testing of Protein-Enhanced Soups. Nestlé USA.

**Award:** \$5,000.00

• Bullard A, Crowe KM (co-I), Johnson C. (2011). Biomarker Prospecting: DHOS hydrocarbon and dispersant discharge in the Gulf of Mexico using Gulf killifish as an aquatic model sentinel for aquatic and human physiological response to toxicants. British Petroleum Co. Gulf of Mexico Research Initiative.

**Award:** \$153,976.00

**UA Sub-award:** \$65,146.00

# INTERNALLY FUNDED RESEARCH

- Knol L, Appell S, Crowe-White KM (Co-I). (2018-2020) Feasibility of Conducting a Mindful Eating Weight Loss Program for Adults entitled "Project MEE: Feeding the Mind, Body, and Soul". Research Grants Committee, University of Alabama.

  Award: \$6,000.00
- Ellis A, Crowe-White KM (Co-I), Locher J. (2014-2015). Bioactive Compounds in Watermelon Modulating Oxidative Stress and Inflammation in Elders: The MOXIE Study. University of Alabama System Collaborative Research Initiative Grant. Award: \$2,500.00
- Crowe KM (PI). (2012-2014). Mitigating Obesity-Related Sequelae: Does Dietary Antioxidant Intake Matter? Research Grants Committee, University of Alabama. Award: \$6,000.00
- Crowe KM (PI). (2012). Phenolic Content and Antioxidant Density of Solid Fruit versus 100% Juice Servings. Crenshaw Endowed Research Grant, University of Alabama. Award: \$2,000.00
- Crowe KM (PI). (2011). Impact Assessment of Flavonoids on Oxygen Radical Absorbance Capacity (ORAC) as a Biomarker of Oxidant Status. Crenshaw Endowed Research Grant, University of Alabama.

Award: \$2,000.00

### PEER-REVIEWED PUBLICATIONS

Anchor author denotes PI or Co-PI responsible for funding, thus senior author (last author) and first author should be viewed equally. Publications are accessible in MyBibliography at <a href="https://www.ncbi.nlm.nih.gov/myncbi/1v1JHv96rke5l/bibliography/public/">https://www.ncbi.nlm.nih.gov/myncbi/1v1JHv96rke5l/bibliography/public/</a>

# **Publication Summary (as of December 2023)**

- Number of Citations 1609
- h-Index − 19
- First Author or Senior Author Publications 39 of 60 total publications (65%)
- \* denotes student-mentored research
- $^\alpha$  denotes senior author publication (first or anchor) responsible for funding or project conceptualization/lead investigator.
- 1. Park H, **Crowe-White KM**. Oxidative Stress, Antioxidant Defense, and Neurodegeneration. *Brain Disorders*. Accepted July 18, 2023. https://doi.org/10.1016/j.dscb.2023.100084
- 2. Douglas JW, **Crowe-White KM**, Ellis AC, et al. Association between Late-Life Weight Status and Cognition is Moderated by Race among Black and White Older Adults in the Health, Aging, and Body Composition Study. *Connections: Dietetics in Health Care Communities*. Accepted November 2023.
- 3. \*α DiNatale JC, Azarmanesh D, Hébert JR, Wirth MD, Pearlman J, **Crowe-White KM**. Relationship Between Non-Energy Adjusted and Energy-Adjusted Dietary Inflammatory Index and the Healthy Eating Index-2015: Analysis of the National Health and Nutrition Examination Survey (NHANES) 2015-2018. *Ann Med*. 2023;55(2).
- 4. \*Hung C-C, **Crowe-White KM**, McDonough IM. A Seed and Soil Model of Gut Dysbiosis in Alzheimer's Disease. *Aging*. 2023;15(12):5235-5237.
- 5. \*α Crowe-White KM, Jung SE, Bragg A, Senkus KE. Functional Sugar-Free Chewing Gum Infused with Spices Bolsters Antioxidant Capacity and Phenolic Content of Saliva. *Scientific Reports*. 2023;13:4802.
- \*α DiNatale JC, Crowe-White KM. Effects of Resveratrol Supplementation on Nitric Oxidemediated Vascular Outcomes in Hypertension: a Systematic Review. *Nitric Oxide*. 2022;129(1): 74-81.
- 7. Crowe-White KM, Evans LW, Kuhnle GGC, Milenkovic D, Stote K, Wallace T, Handu D, Senkus KE. Flavan-3-ols and Cardiometabolic Health: First Ever Dietary Bioactive Guideline. *Adv Nutr.* 2022;13(6):2070-2083.
- 8. <sup>a</sup> Crowe-White KM, Stote KM. Recommendation for Dietary Flavan-3-ols Intake for Cardiometabolic Health. *Cardiovasc Health Well-Being: Pathways*. 2023;1:4-7.
- 9. Crowe-White KM, Baumler M, Gradwell E, Juturu V, White D, Handu D. Application of Umami Tastants on Sodium Reduction in Food: an Evidence Analysis Center Scoping Review. *J Acad Nutr Diet.* 2023;123(11):1606-1620.
- 10. \*\* Senkus KE, **Crowe-White KM**. Dietary Nitrates to Optimize Cardiovascular Health. *Cardiovasc Health Well-Being: Pathways*. 2022;1(5):4-6.
- 11. \*Senkus KE, Crowe-White KM, Locher JL, Ard J. Relative Fat Mass Assessment to Estimate Changes in Adiposity among Female Older Adults with Obesity after a 12-month Exercise and Diet Intervention. *Ann Med.* 2022;54;1:1160-1166.
- 12. \*Senkus KE, Crowe-White KM, Bolland A, Locher JL, Ard J. Changes in Adiponectin:Leptin Ratio among Older Adults with Obesity following a 12-month Exercise and Diet Intervention. *Nutr. Diabetes*. 2022:12:article number 30.
- 13. Knol L, **Crowe-White KM**, Appel SJ, Daquin JC. Direct yet Opposite Effects of Stress-related and Mindful Eating on Diet Quality. *J Nutr Educ Behav*. 2022;54:872-877.

- 14. Park H, **Crowe-White KM**, Ciesla L, et al. Alpha-Tocotrienol Enhances Arborization of Primary Hippocampal Neurons via Upregulation of Bcl-xL. *Nutr Res.* 2022;101:31-42.
- 15. \*DiNatale JC, **Crowe-White KM**, Ellis AC, Yang X, Thaitrong P. Implications of Face Mask Use on Body Composition Assessment by Air-Displacement Plethysmography. *Clin Nutr ESPEN*. 2022;48:356-360.
- 16. \*α Senkus KE, Zhang Y, Wang H, Tan L, **Crowe-White KM**. Lycopene Supplementation of Maternal and Weanling High Fat Diets influences Adipose tissue Development and Metabolic Outcomes of Sprague-Dawley Offspring. *J Nutr Sci*. 2021; 10: e96.
- 17. **Crowe-White KM**, Nagabooshanam VA, Dudenbostel T, Locher JL, Chavers TP, Ellis AC. 100% Watermelon Juice as a Food-First Intervention to Improve Cognitive Function: Ancillary Findings from a Randomized Controlled Trial. *J Nutr Gerontol Geriat*. 2021;40:304-312.
- 18. \*Bragg AE, **Crowe-White KM**, Ellis AC, Studer M, Phillips F, Samsel S, Parton J, Locher JL, Ard J. Changes in Cardiometabolic Risk among Older Adults with Obesity: an Ancillary Analysis of a Randomized Controlled Trial investigating Exercise Plus Weight Maintenance and Exercise Plus Intentional Weight Loss by Caloric Restriction. *J Acad Nutr Diet*. 2022;122(2):354-362.
- 19. <sup>a</sup> Ellis AC, Mehta T, Nagabooshanam VA, Dudenbostel T, Locher JL, **Crowe-White KM**. Daily 100% Watermelon Juice Consumption and Vascular Function: A Randomized Controlled Trial. *Nutr Metab Cardiovasc Dis.* 2021;31(10):2959-2968.
- 20. \*α Park H, Stumpf A, Broman K, Jansen J, Dunn T, Scott M, **Crowe-White KM.** Role of Lycopene in Mitochondrial Protection during Differential Levels of Oxidative Stress in Primary Cortical Neurons. *Brain Disorders*. 2021;3:100016.
- 21. \*Knol LL, Appel SJ, Crowe-White KM, Brantley C, Adewumi OE, Senkus KE. Development, feasibility, and initial results of a mindful eating intervention: Project Mindful Eating and Exercise (MEE): Feeding the Mind, Body, and Soul. *Am J Health Ed.* 2021;52(4):171-184.
- 22. \*Park H, Hayden MM, Bannerman S, Jansen J, **Crowe-White KM**. Anti-Apoptotic Effects of Carotenoids in Neurodegeneration. *Molecules*. 2020;25(15):3453.
- 23. \*Tan L, Zhang Y, **Crowe-White KM**, Senkus KE, Erwin M, Wang H. Vitamin A Supplementation during Suckling and Post-Weaning Periods Attenuates Adverse Metabolic Effects of Maternal High Fat Diet Consumption in Sprague-Dawley Rats. *Curr Dev Nutr.* 2020;4(8):nzaa111.
- 24. \*\* KE Senkus, Tan L, Crowe-White KM. Systemic and Adipose Tissue Redox Status in Sprague-Dawley Rats fed Normal and High Fat Diets Supplemented with Lycopene. *J Med Food*. 2021;24(4):370-376.
- 25. <sup>α</sup> **Crowe-White KM**, Voruganti VS, Talevi V, Dudenbostel T, Nagabooshanam VA, Locher JL, Ellis AC. Variation of Serum Lycopene in Response to 100% Watermelon Juice: an Exploratory Analysis of Genetic Variants in a Randomized Controlled Crossover Study. *Curr Dev Nutr*. 2020;4(7):nzaa102.
- 26. \*Zhang Y, Crowe-White KM, Kong L, Tan L. Vitamin A Status and Deposition in Neonatal and Weanling Rats Reared by Mothers Consuming Normal and High Fat Diets with Adequate or Supplemented Vitamin A. *Nutrients* 2020, *12*(5),1460.
- 27. Jung SE, Noh H, **Crowe-White KM**, Ellis AC. Dietetic Students' Perceived Facilitators, Barriers and Perceptions of Working with Older Adults: Implications for Curriculum Development. *J Nutr Gerontol Geriat.* 2020;39(2):143-153.

- 28. \*Park H, Mnatsakanyan N, Broman K, Davis AU, May J, Licsnerski P, Crowe-White KM, Lackey KH, Jonas EA. Alpha-tocotrienol Prevents Oxidative Stress-Mediated Post-Translational Cleavage of Bcl-xL in Primary Hippocampal Neurons. *Int J Mol Sci.* 2020:21:220.
- 29. <sup>α</sup> Jung SE, Shin YH, Severt K, **Crowe-White KM**. Determinants of Consumer's Intention to Consume Antioxidant-Infused Sugar-free Chewing Gum: Measuring Taste, Attitude, and Health Consciousness. *J Food Prod Mark*. 2020;26(1):38-54.
- 30. \*α Senkus KE, **Crowe-White KM**. Influence of Mouth Rinse Use on the Enterosalivary Pathway and Blood Pressure: A Systematic Review. *Crit Rev Food Sci Nutr.* 2020;60(17):2874-2886.
- 31. \*Fang X, Azain M, **Crowe-White KM**, et al. Effect of Acute Ingestion of Green Tea Extract and Lemon Juice on Oxidative Stress and Lipid Profile in Pigs Fed a High-fat Diet. *Antioxidants*. 2019;8(6):195.
- 32. \*Davis SA, Knol L, Crowe-White KM, Turner LW, McKinley EM. Homemade Infant Formula Recipes may contain Harmful Ingredients: a Quantitative Content Analysis of Blogs. *Public Health Nutr.* 2020;23:1334-1339.
- 33. Jung SE, Shin YH, Im JY, Hermann J, Ellis A, **Crowe-White KM**. Understanding Low-Income Older Adults' Intention to Consume Fruits and Vegetables. *J Hunger Environ Nutr*. 2021;16(2):255-270.
- 34. Wallace TC, Bailey RL, Blumberg JB, Burton-Freeman B, Chen O, **Crowe-White KM**, et al. Fruits, Vegetables, and Health: a Comprehensive Narrative, Scoping Review of the Science and Recommendations for Enhanced Public Policy to Improve Intake. *Crit Rev Food Sci Nutr*. 2020;60(13):2174-2211. doi:10.1080/10408398.2019.1632258
- 35. \*α **Crowe-White KM**, Phillips TA, Ellis AC. Lycopene and Cognitive Function. *J Nutr Sci*. 2019;8(e20):1-8.
- 36. <sup>α</sup> **Crowe-White KM**, Ellis AC, Mehta T, Locher JL, Ard JD. Diet Quality Assessed by the HEI-2010 and Biomarkers of Cardiometabolic Disease: an Exploratory Analysis. *J Am Coll Nutr*. 2019;38(7):640-647.
- 37. <sup>α</sup> Ellis AC, Dudenbostel T, **Crowe-White KM**. Watermelon Juice: a Novel Functional Food to Increase Circulating Lycopene in Older Adult Women. *Plant Foods Hum Nutr.* 2019; 74(2):200-203.
- 38. \*α Senkus KE, Tan L, **Crowe-White KM**. Lycopene and Metabolic Syndrome: A Systematic Review of the Literature. *Adv Nutr*. 2019;10:19-29.
- 39. \*\*a Crowe-White KM, Cardel MI, Burkhalter HH, Huo T, Fernández JR. Higher Intake of n-6:n-3 Fatty Acids is Associated with Decreased Cardiometabolic Risk Factors in a Racially Diverse Sample of Children. *Curr Dev Nutr.* 2018;May;2(5):nzy014.
- 40. <sup>α</sup> Jung SE, Ellis AC, **Crowe-White KM**. Intention of Older Women to Consume 100% Watermelon Juice for Vascular Health: an Application of the Theory of Planned Behavior. *J Nutr Gerontol Geriat*. 2018;37(2):130-143.
- 41. <sup>α</sup> **Crowe-White KM**, et al. Metabolic Impact of 100% Fruit Juice Consumption on Lipid Profiles and Antioxidant/Oxidant Status of Adults: an Evidence-based Review. *Crit Rev Food Sci Nutr*. 2017;57:152-162.
- 42. <sup>α</sup> Ellis A, Dudenbostel T, Locher J, **Crowe-White KM**. Modulating Oxidative Stress and Inflammation in Elders: The MOXIE Study. *J Nutr Gerontol Geriat*. 2016;35:219-242.
- 43. <sup>α</sup> **Crowe-White KM**, et al. Impact of 100% Fruit Juice Consumption on Diet and Weight Status of Children: an Evidence-based Review. *Crit Rev Food Sci Nutr*. 2016;56:871-884.

- 44. \*Donahue E, **Crowe KM**, Lawrence J. Sensory Evaluation of Protein-Enhanced Soups among Residents of Long-Term Care Facilities. *Int J Food Sci Nutr.* 2015;66(1):104-107.
- 45. <sup>α</sup> **Crowe KM**, Allison DB. Evaluating Bioactive Food Components in Obesity and Cancer Prevention. *Crit Rev Food Sci Nutr*. 2015;55:732-734.
- 46. \*α **Crowe KM**, Murray E. Evaluating the Phenolic Content of Solid versus Beverage Forms of Select Fruit. *J Nutr Ecol Food Res.* 2014;2:49-53.
- 47. **Crowe KM**. Optimizing Protein Precipitation Efficiency for Assessing the Contribution of Low Molecular Weight Compounds to Serum Antioxidant Capacity. *Clin Biochem*. 2014;47:116-118.
- 48. <sup>a</sup> Crowe KM, Newton J, Kaltenboeck B, Johnson C. Oxidative Stress Responses of Gulf Killifish Exposed to Hydrocarbons from the Deepwater Horizon Oil Spill: Considering Potential Implications on Aquatic Food Resources. *Environ Toxicol Chem.* 2014;33:370-374.
- 49. **Crowe KM**. Designing Functional Foods with Bioactive Polyphenols: Highlighting Lessons Learned from Original Plant Matrices. *J Human Nutr Food Sci.* 2013;1:1018-1019.
- 50. <sup>α</sup> **Crowe KM**, Francis C. The Academy of Nutrition and Dietetics Position Paper on Functional Foods. *J Acad Nutr Diet*. 2013;113:1096-1103.
- 51. \*α **Crowe KM**, Murray E. Deconstructing a Fruit Serving: Comparing the Antioxidant Density of Whole Fruit versus 100% Fruit Juice. *J Acad Nutr Diet*. 2013;113(10):1354-1358.
- 52. Ellis A, **Crowe KM**, Lawrence J. Obesity-related Inflammation: Implications for Older Adults. *J Nutr Gerontol Geriat.* 2013;32:263-290.
- 53. \*α Breshears K, **Crowe KM**. Sensory and Textural Evaluation of Gluten-Free Bread Substituted with Amaranth and Montina<sup>TM</sup> Flour. *J Food Res*. 2013;2(4):1-10.
- 54. α Neggers YN, **Crowe KM**. Prenatal Care and other Risk Factors Associated with Low Birth Weight: A Comparative Assessment between Cuba and Alabama. *J Am Board Family Med*. 2013;26(2):187-195.
- 55. <sup>α</sup> **Crowe KM**, Skonberg D, Bushway A, Bushway R. Application of ozone sprays as a strategy to improve the microbial safety and quality of salmon fillets. *Food Control*. 2012;25:464-468.
- 56. <sup>α</sup> **Crowe KM**, Bushway A, Davis-Dentici K. Impact of Postharvest Treatments, Chlorine And Ozone, Coupled With Low-Temperature Frozen Storage On The Antimicrobial Quality Of Lowbush Blueberries (*Vaccinium angustifolium*). *LWT Food Sci Technol*. 2012;47:213-215.
- 57. <sup>α</sup> **Crowe KM**, Bushway A, Bushway R, Hazen R. Evaluation of Chemical and Photochemical Oxidation Processes for Degradation of Phosmet on Lowbush Blueberries (*Vaccinium angustifolium*). *J Agric Food Chem.* 2006;54:9608-9613.
- 58. <sup>α</sup> **Crowe KM**, Bushway A, Bushway R, Davis-Dentici K. Microbial Degradation of Phosmet on Blueberry Fruit and in Aqueous Systems by Indigenous Bacterial Flora on Lowbush\_Blueberries (*Vaccinium angustifolium*). *J Food Sci.* 2007;72:293-299.
- 59. <sup>α</sup> **Crowe KM**, Bushway A, Bushway R, Davis-Dentici K. Comparison of Single Oxidants versus Advanced Oxidation Processes as Chlorine-Alternatives for Wild Blueberry Processing. *Int J Food Microbiol.* 2007;116:25-31.
- 60. <sup>α</sup> **Crowe KM**, Bushway A, Bushway R. Effects of Alternative Postharvest Treatments on the Microbiological Quality of Lowbush Blueberries. *Int J Fruit Sci.* 2005; 4:29-39.

# **INVITED PEER-REVIEWED BOOK CHAPTERS AND POSITION PAPERS**

• Crowe-White KM, Francis C. Functional Foods. In: Mullin G, Marian M. *Integrating Nutrition into Practice*. New York, NY: CRC Press; 2017.

- **Crowe KM,** Francis C. The Academy of Nutrition and Dietetics Position Paper on Functional Foods. *J Acad Nutr Diet*. 2013;113:1096-1103.
- **Crowe KM.** White Paper on Umami in Foods. 2013. *Academy of Nutrition and Dietetics Evidence Analysis Library*. <a href="https://www.andeal.org/files/files/Umami/Umami">https://www.andeal.org/files/files/Umami/Umami</a> in Foods White Paper.pdf

# WEB PEER-REVIEWED PUBLICATIONS

• Crowe-White KM, Hold J, Washington L. 2016. "Exercising Autonomy in Geriatric Palliative Care." The Deep South CME Network, UAB Division of CME, Geriatric-Focused CME Courses. <a href="http://www.alabamacme.uab.edu/geriatrics.aspx">http://www.alabamacme.uab.edu/geriatrics.aspx</a>

### PEER-REVIEWED ORAL PRESENTATIONS

### \* denotes student-mentored research

- \*Senkus KE, Blood AB, Azrad M, Bolland A, Park H-A, Tice JR, Crowe-White KM. *Bioactive Mouth Rinse Containing Inorganic Nitrate and Antioxidants Bolsters the Enterosalivary Pathway and Lowers Blood Pressure in Wistar Rats*. American Society for Nutrition Conference, July 2023.
- Crowe-White KM, Wallace T, Stote K, Handu D, Senkus KE. *Flavan-3-ols and Cardiometabolic Health: First Ever Dietary Bioactive Guideline*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2022.
- \*Senkus KE, Crowe-White KM, Locher J, Ard J. Changes in the Visceral Adiposity Index among Obese Older Adults after a 12-Month Exercise and Diet Intervention. American Society for Nutrition Conference, June 2021.
- \*Senkus KE, Zhang Y, Tan L, **Crowe-White KM**. Differential Effects of Lycopene Supplementation on Adipose Tissue Development and Redox Status in Weanling Offspring of Rats Consuming a High-fat Diet. American Society for Nutrition Conference, June 2020.
- \*Zhang Y, Senkus KE, Crowe-White KM, Tan L. Vitamin A Supplementation during Suckling and Post-Weaning Periods Improves Systemic and Adipose Tissue Redox Status in Offspring of Rats consuming a High-fat Diet. American Society for Nutrition Conference, June 2020.
- \*Zhang Y, Crowe-White KM, Kong L, Tan L. Vitamin A Status in Neonatal and Weanling Rats reared by Mothers Consuming Normal and High-fat Diets with or without Vitamin A Supplementation. American Society for Nutrition Conference, June 2020.
- \*Barnes GA, Crowe-White KM, Ellis AC. Watermelon Juice Supplementation Yields Varying Responses in Serum Lycopene Levels. American Society for Nutrition 2019 Conference Curr Dev Nutr. June 2019;3(6). doi:10.1093/cdn/nzz031.OR29-08-19
- \*KE Senkus, Tan L, **Crowe-White KM**. Systemic and Adipose Tissue Redox Balance in Sprague-Dawley Rats fed Standard and High Fat Diets Supplemented with Lycopene. American Society for Nutrition 2019 Conference. Curr Dev Nutr. June 2019;3(6). doi: 10.1093/cdn/nzz031.OR24-04-19
- \*Crowe KM, Murray E. *Provision of Phenolic Phytochemicals by 100% Fruit Juice*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2014.

- \*Donahue E, **Crowe KM**, Lawrence J. *Increasing Dietary Protein Provision among Older Adults using Protein-Enhanced Soups*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2014.
- Crowe KM, Johnson C, Newton J, Bullard A. *Hydrocarbon-induced Biomarker Responses in Gulf Killifish, Fundulus grandis, as an Aquatic Gulf of Mexico Sentinel.* Gulf of Mexico Oil Spill and Ecosystem Science Conference, January 2013.
- \*Glagola-Dunn C, Knol L, Robb CA, **Crowe KM.** The Monetary Impact of Grocery Tax in Alabama on Fruit and Vegetable Purchases in a Variety of Demographics. American Council on Consumer Interests National Conference, April 2012.
- Crowe KM, Knol L. *Influence of Meal Location and Family Meals on Carotenoid Intake among U.S. Children.* Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, September 2011.
- Crowe KM, Bushway A, Bushway R. Evaluation of Ozone as a Single and Synergistic Oxidant for Improvement of Chemical and Microbial Safety of Lowbush Blueberries (Vaccinium angustifolium). International Ozone Association Sustainable Agriculture Conference, October 2007.
- Crowe KM, Bushway A, Bushway R, Dentici K. Degradation of Phosmet and Improvement of Microbial Quality through Postharvest Application of Ozone, Hydrogen Peroxide, and UV. Institute of Food Technologists Annual Meeting, June 2006.

# PEER-REVIEWED POSTER PRESENTATIONS

# \* denotes student-mentored research

- \*Senkus KE, DiNatale JC, Park H-A, **Crowe-White KM**. Prenatal Nitrate Supplementation of Maternal High-Fat Diet Influences Adipose Tissue Development in Offspring from an Obese Pregnancy. American Society for Nutrition Conference, July 2023.
- \*Senkus KE, Morrow CD, Azrad M, Bolland A, Park H-A, Tice JR, Crowe-White KM. Bioactive Mouth Rinse Containing Inorganic Nitrates and Antioxidants Modulates the Oral Microbiome in Support of the Enterosalivary Pathway. American Society for Nutrition Conference, July 2023.
- \*DiNatale JC, **Crowe-White KM**, Azarmanesh D, Hébert JR, Wirth MD, Pearlman J. Relationship Between Non-Energy Adjusted and Energy-Adjusted Dietary Inflammatory Index and the Healthy Eating Index-2015: Analysis of the National Health and Nutrition Examination Survey (NHANES) 2015-2018. American Society for Nutrition Conference, July 2023.
- \*DiNatale JC, **Crowe-White KM**, Ellis AC, Douglas J, McDonough I, Yaffe K. *The Drug Burden Index Is Associated with Measures of Cognitive Function Among Older Adults in the Health, Aging, and Body Composition Study*. American Society for Nutrition Conference, July 2023.
- Park H-A, Crowe-White KM, Ciesla L, et al. *Alpha-Tocotrienol: A Nutritional Regulator of Bcl-xL in Neurons*. American Society for Nutrition Conference, July 2023.
- \*DiNatale JC, Knol LL, **Crowe-White KM**, Azarmanesh D. *Diet Quality Assessed by the Dietary Inflammatory Index and the Healthy Eating Index: An Analysis of the National Health and Nutrition Examination Survey (2015-2018)*. American Society for Nutrition Conference, June 2022.

- Park H-A, Crowe-White KM, Ciesla LM, Bannerman S, Scott M, Davis A, et al. Role of Alpha-Tocotrienol during Development of Primary Hippocampal Neurons. American Society for Nutrition Conference, June 2022.
- Ellis AC, Crowe-White KM, Hunter G. Effects of Different 16-Week Exercise Interventions on Bone Mineral Density of Sedentary Older Women. Gerontological Society of America 2021 Annual Scientific Meeting, November 2021.
- Gosa MM, Bryan MH, Cook C, Crowe-White KM, Bolland AC. *Usefulness of the Adapted Pre-feeding Skills Checklist for Identification of Oral Phase Dysphagia in Children*. Annual American Speech-Language and Hearing Association Conference, November 2021.
- Knol LL, **Crowe-White KM**, Appel SJ. *Mindful eating is associated with higher Healthy Eating Index scores among women who are overweight or obese*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2021.
- \*Knol LL, **Crowe-White KM**, Brantley C, Senkus KE, Adewumi OE, Appel SJ. *Emotion and stress-related eating is related to Visceral Adiposity Index among women who are overweight or obese*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2021.
- \*Thaitrong P, Douglas JW, Crowe-White KM. *Mealtime Support by Long-term Care Staff and Impact on Meal Intake and Behaviors among Adults with Dementia: a Systematic Review.*Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2021.
- \*Senkus KE, Crowe-White KM, Locher J, Ard J. Relative Fat Mass as an Estimate of Total Adiposity in Older Adults. American Society for Nutrition Conference, June 2021.
- \*DiNatale J, Crowe-White KM, Ellis AC, Douglas J, McDonough IM, Yaffe K. Association of Drug Burden Index with Measures of Cognitive Function Among Older Adults. American Society for Nutrition Conference, June 2021.
- \*Park H, Crowe-White KM, et al. Vitamin E Improves Neurite Complexity by Enhancing Mitochondrial Function. American Society for Nutrition Conference, June 2021.
- Douglas J, Crowe-White KM, Ellis AC, Bui C, Voruganti S, Yaffe K. Changes in Body Mass Index is Associated with Change in Cognition in Older Adults. Gerontological Society of America 2020 Annual Scientific Meeting, November 2020.
- \*Senkus KE, Crowe-White KM, Locher J, Ard J. Changes in Adiponectin: Leptin Ratio among Obese Older Adults after a 12-month Exercise and Diet Intervention. American Society for Nutrition Conference, June 2020.
- Knol LL, Appel JS, Adewumi OE, Brantley C, **Crowe-White KM**, Senkus KE. *Development, Feasibility, and Initial Pilot Study Results of a Worksite Mindful Eating Intervention: Project Mindful Eating for Feeding the Mind, Body, and Soul.* Academy of Nutrition and Dietetics Food and Nutrition Conference, October 2020.
- \*Senkus KE, Crowe-White KM, Knol LL. Lower Framingham Risk Score among Self-Perceived Vegetarians: Data from the National Health and Nutrition Examination Survey 2007-2010. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2020.
- Brantley C, Knol LL, **Crowe-White KM**, Appel SJ, Adewumi OE. *Mindful Eating is Related to Stress-related Eating, Perceived Stress, and Appraisal of Resources to Cope: an Application of the Transactional Model of Stress and Coping*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2020.

- Adewumi OE, Knol LL, Appel SJ, Crowe-White KM, Brantley C. *Insulin Resistance is Related to Appraisal of Ability and Resources to Cope with Stress among Overweight Women.* Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2020.
- Gosa MM, Bryan MH, Cook CH, Crowe-White KM, Bolland AC. Usefulness of the Adapted Pre-Feeding Skills Checklist for Identification of Oral Phase Dysphagia in Children. Annual Convention of the American Speech-Language-Hearing Association (ASHA), November 2020.
- Knol LL, Crowe-White KM, Appel S. *Mindful Eating is Related to Lower Intake of Energy and Added Sugars among Overweight, Premenopausal Women*. American Society for Nutrition Conference, June 2020.
- \*Bragg AE, Crowe-White KM, Ellis AC, Locher J, Ard J, Studer M, Phillips F, Samsel S, Parton J. Changes in Cardiometabolic Risk among Obese Older Adults after a 12-month Exercise and Diet Intervention. American Society for Nutrition Conference, June 2020.
- \* Ellis AC, Hansen AB, Baidwaan N, Aryan Nagabooshanam V, Crowe-White KM. Associations between Cognitive Function and Bioactive Food Compounds in 100% Watermelon Juice. Gerontological Society of America Annual Meeting, November 2019. Innovation in Aging. 2019;3(S1);656.
- Knol LL, Crowe-White KM, Appel JS, Brantley C, Senkus KE, Gerald AN. A Mindful Eating Intervention Improves Serum Antioxidant Capacity: Pilot Study Results from Project Mindful Eating. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2019.
- \*Knol LL, Crowe-White KM, Appel SJ, et al. Serum Antioxidant Capacity is related to Eating with Awareness. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2019.
- Crowe-White KM, Jung SE, Bragg A, Senkus KE. Functional Sugar-Free Gums Infused with Spices Improve the Antioxidant Capacity of Saliva. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2019.
- Jung SE, Crowe-White KM, Shin YH, Severt KS. *Intention to Purchase Functional Sugar-free Gum Infused with Antioxidants from Spices for Vascular Health using the Value Attitude Behavior Model*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2019.
- Jung SE, Shin YH, Im J, Hermann J, Ellis AC, Crowe-White KM. Determinants of Low-Income Older Adults to Consume Fruits and Vegetables. Annual Conference of the Society for Nutrition Education and Behavior, July 2019.
- \*Stumpf A, Broman K, Senkus KE, Tan L, Crowe-White KM, Park H. Lycopene Protects
   Cortical Neurons via Oxidative Stress-mediated ΔN-Bcl-xL Formation. American Society for
   Nutrition 2019 Conference, June 2019. Curr Dev Nutr. June 2019;3(6). doi:
   10.1093/cdn/nzz052.FS05-08-19
- \*KE Senkus, Kwan S, Tan L, **Crowe-White KM**. Adipose Tissue Development and Metabolic Profile of Neonatal and Weanling Sprague-Dawley Rats in Response to a Maternal High Fat Diet Supplemented with Lycopene. American Society for Nutrition 2019 Conference, June 2019. Curr Dev Nutr. June 2019;3(6). doi: 10.1093/cdn/nzz029.FS06-02-19
- \*Kwan S, KE Senkus, **Crowe-White KM**, Tan L. *Maternal Vitamin A Supplementation Modulates Adipose Tissue Development in Offspring of Rats Consuming a High-Fat Diet.*American Society for Nutrition 2019 Conference, June 2019. *Curr Dev Nutr.* June 2019;3(6).

- Gosa MM, Bryan MH, Crowe-White KM, Bolland AC. Characteristics of Children Referred for Outpatient Dysphagia Assessment: Pilot Data from the F3D Study. Annual Convention of the American Speech-Language-Hearing Association (ASHA), November 2018.
- Crowe-White KM, Bolland AC, Bryan MH, Gosa MM. Relationship between Problematic Pediatric Feeding Behavior and Nutritional Intake in Young Children. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2018.
- Ellis A, Crowe-White KM. Associations between Dietary Intake and Vascular Resistance among Post-menopausal Women. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2018.
- KE Senkus, Tan L, **Crowe-White KM**. *Lycopene and Metabolic Syndrome*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2018.
- Crowe-White KM, Watson A, Doucet J, Bolland A, Bryan M, Gosa M. *Relationship between Problematic Pediatric Feeding Behavior and Nutritional Intake in Young Children*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2018.
- \*KE Senkus, Tan L, **Crowe-White KM**. Lycopene Attenuates High-Fat Diet-Induced Oxidative Stress in Sprague-Dawley Rats. American Society for Nutrition Conference, June 2018.
- Crowe-White KM, Dudenbostel T, Ellis A. *Bioavailability and Acute Effects of Bioactive Compounds in Watermelon Juice on Blood Pressure*. American Society for Nutrition Conference, June 2018.
- Jung SE, Ellis A, Crowe-White KM. Older Women's Intention to Consume 100% Watermelon Juice for Vascular Health. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2017.
- \*Aiken S, Knol L, **Crowe-White KM**, Turner LW. *Blogs Featuring Homemade Infant Formula Recipes Offer Controversial Advice to Consumers: a Qualitative Analysis*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2017.
- \*Crowe-White KM, Burns T, Buzzard J, Dolan L, Register S, Ellis A. *Knowledge and Intake of Nutrient-Dense Dietary Patterns are Deficient among College Students*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2017.
- \*Ellis A, Burns T, Buzzard J, Dolan L, Register S, **Crowe-White KM**. Food Insecurity among College Students does not differ by Affiliation in Greek Life. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2017.
- Ellis A, Dudenbostel T, **Crowe-White** KM. *Acute Effects of Watermelon on Vascular Function and Serum Antioxidant Capacity*. Experimental Biology Conference, April 2017.
- Crowe-White KM, Ellis A, Locher J, et al. *Relationship between Cardiometabolic Disease Risk Staging and Serum Antioxidant Capacity in Obese Older Adults*. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2016.
- \*Gibson M, Crowe-White KM. Effects of Processing on the Phytochemical Profile and Antioxidant Capacity of Four Honey Varietals. Institute of Food Technologists Annual Meeting, July 2015.
- Ellis A, Crowe-White KM. Dietary Acidity/Alkalinity and its Relationship with Bone Health among Older Adults. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2015.
- Foster A, Crowe-White KM, Knol L, Singh R. Expanding Dietary Offerings for Individuals with Phenylketonuria through Sensory Evaluation of Low-Protein Foods with Glycomacropeptide-based Medical Formula. Academy of Nutrition and Dietetics Food and

- Nutrition Conference and Expo, October 2015.
- Skonberg D, Crowe KM, Bushway A, Baxter S. Efficacy of Ozone Against Listeria inocua on Raw Salmon Fillets. Institute of Food Technologists Annual Meeting, July 2007.
- Crowe KM, Bushway A, Bushway R, Dentici K, Perkins B. *Degradation of Phosmet through Microbial Mineralization and Postharvest Application of Hydrogen Peroxide and UV*. Pacifichem International Chemical Congress, December 2005.
- Crowe KM, Bushway A, Bushway R. Effects of Chemical and Photochemical Oxidation Processes on the Microbial Population and Pesticide Residues of Lowbush Blueberries. Institute of Food Technologists Annual Meeting, July 2005.
- Crowe KM, Bushway A, Leathem W. Incorporation of Food Chemistry into the Secondary Educational System through the NSF GK-12 Program at the University of Maine. Institute of Food Technologists Annual Meeting, July 2005.
- Crowe KM, Bushway A, Bushway R. Postharvest Hydrogen Peroxide Applications for Lowbush Blueberries (Vaccinium angustifolium). Institute of Food Technologists Annual Meeting, July 2004.
- Crowe KM, Morcom M, Bushway A. Enhancing Food Science Education through the National Science Foundation at the University of Maine. Institute of Food Technologists Annual Meeting, July 2004.
- Crowe KM, Bushway A, Bushway R, Perkins B. *Microbial Quality and Safety of Lowbush Blueberries (Vaccinium angustifolium) as Influenced by Traditional and Emerging Disinfectant Technology*. Institute of Food Technologists Annual Meeting, July 2003.
- Crowe KM, Bushway A, Bushway R. Effects of Postharvest Treatments on the Microbiological Quality and Pesticide Residues of Lowbush Blueberries. Institute of Food Technologists Annual Meeting, June 2002.
- Camire M, Crowe KM, Ghazanfar S, Dougherty M. *Daily Raisin Consumption Improves Serum Lipids*. Annual Conference of Experimental Biology, April 2002.

# **INVITED ORAL PRESENTATIONS**

#### **International**

- Crowe-White KM. *Umami Tastants on Sodium Reduction: State of the Science*. Korean Society of Food Science and Technology, June 2023.
- Neggers Y, Crowe KM. Nutrition in Pregnancy: Comparative Assessment of Emerging and Established Risk Factors including Dietary Antioxidant Intake and their Association with Low Birth Weight in Cuba and Alabama. University of Havana and the College of San Geronimo, University of Alabama-Cuba Initiative, February 2012.

## **National**

- Crowe-White KM. Coconut Oil: Super Food or Super Fad. Military Families Learning Network. October 2018. <a href="https://learn.extension.org/events/3418">https://learn.extension.org/events/3418</a>
- Crowe-White KM. *Trans Fat in Foods Update*. Military Families Learning Network. February 2016. https://learn.extension.org/events/2356%20February%202016

#### State

• Crowe-White KM, Senkus KE. *Dietary Nitrates: Friends or Foe?* Alabama Dietetic Association Annual Meeting, February 2020.

- Crowe-White KM. Influence of Adiposity on the Functional Role of Lycopene in Cardiometabolic Health. Samford University Nutrition Conference, September 2018.
- Crowe-White KM. The MOXIE Study: Modulating Oxidative Stress and Inflammation in Elders through 100% Watermelon Juice Consumption. Alabama Family and Consumer Sciences Conference, February 2017.
- Crowe KM. The Adiposity Trap: Impact of Obesity on Circulating Levels of Antioxidants. Alabama Dietetic Association Annual Meeting, March 2014.
- Crowe KM. Functional Foods: Why Prescriptive Eating Matters. Alabama Dietetic Association Annual Meeting, March 2012.

# STUDENT MENTORSHIP

# **Mentorship Summary (as of 2023)**

- Doctoral Students 5
- MS Students (thesis and non-thesis) 9
- Undergraduate Students in Research 18

### **Dissertation Chair**

- Janie C. DiNatale. *Dietary Nitrate as an Adjuvant Therapy for Hypertensive Pregnancies and a Nutritional Modifier of Cardiometabolic Programming in Offspring*. Committee Chair (2020 present).
- Katelyn E. Senkus. *Mouth Rinses Infused with Nitrates/Nitrites and Antioxidants to Support the Entero-salivary Pathway for Oral and Vascular Health.* Committee Chair (2018 2023).

#### **Dissertation Committee Member**

- Swetha Reddy Allamreddy. *Optimizing Advanced Drug Delivery for Targeting Hyperglycemia and Inflammation in Diabetes*. Committee Member (2022 present)
- Khondoker Adeba Ferdous. *Effect of fucoxanthin on mitochondrial function against excitotoxicity*. Committee Member (2023 present)
- Moresh Shokri. *Roles of ATF6 Transcription Factors in the Regulation of Cardiac Calcium Handling and Disease Progression*. Committee Member (2022 present)

#### **Thesis Chair**

- Amelia Foster. *Sensory Comparison of Low-Protein Recipes with Glycomacropeptide-Containing BetterMilk*<sup>TM</sup> *among Adults with PKU*. Committee Chair (2013 2014).
- Elizabeth Donahue. *Improving Dietary Protein Intake among Residents of Long-Term Care Facilities through the Development and Sensory Testing of Protein-Enhanced Soups*. Committee Co-Chair (2012 2013).

### **Thesis Committee Member**

• Mickalyn Summerford. *All Purées Are Not Created Equal: An Investigation of the Nutritional and Food Properties of Puréed Foods Commonly Consumed in the First Year of Life.* Committee Member (2017 – 2019).

• Caroline Glagola-Dunn. *Financial Impact of Grocery Tax on Fruit and Vegetable Purchases in Alabama*. Committee Member (2011 – 2012).

#### **Mentored Non-Thesis Research for MS Students**

- Anna Bragg M.S. Nutrition. Changes in Cardiometabolic Risk among Obese Older Adults after a 12-Month Exercise and Diet Intervention. Advisor for NHM 598 Independent Research, 2019-2020.
  - o J Acad Nutr Diet. Accepted July 21, 2021.
- Katelyn E. Senkus M.S. Nutrition. *Lycopene and Metabolic Syndrome: A Systematic Review of the Literature*. Advisor for NHM 598 Independent Research, 2017-2018.
  - o *Adv Nutr.* 2019;10:19-29.
- Tinsley Phillips M.S. Nutrition. *Relationship between Lycopene and Cognitive Function in Mid to Late Adulthood: A Systematic Review*. Advisor for NHM 598 Independent Research, 2016-2017.
  - o J Nutr Sci. 2019;8(e20):1-8.
- Hannah Haas Barnett M.S. Nutrition. *Intake of omega-6:omega-3 PUFA and its Relationship with Cardiometabolic Risk Factors in a Racially Diverse Sample of Children*. Advisor for NHM 598 Independent Research Study, 2015 2016.
  - o Curr Dev Nutr. 2018;2:nzy014.
- Karen Breshears M.S. Nutrition. *Acceptability of Gluten-Free Bread Products Made with Nutritious Alternative Grains*. Advisor for NHM 598 Independent Research Study, (2011 2012).
  - o *J Food Res.* 2013;2(4):1-10.

## **Mentored Undergraduate Student Research**

- Mary Stahlman. Epigenetic Influences of Prenatal Dietary Nitrate on Cardiovascular Risks among Offspring from Obese Pregnancies. Advisor for Randall Research Scholars Program 2021.
- Elisabeth Pettibone and Alex Parks. Functional Sugar-Free Gums Infused with Spices Improve the Antioxidant Capacity of Saliva. Advisor for Undergraduate Research Mentorship 2018-2019.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2019.
- Anna Bragg. Acute Effects of 100% Watermelon Juice on Serum Antioxidant Capacity. Advisor for Undergraduate Research Mentorship 2016-2017.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2017.
- Katelyn Senkus & Jala Lockhart. Sensory Comparison of 100% Watermelon Juice with an Isocaloric Placebo Beverage, Advisor for Undergraduate Research Mentorship 2016-2017.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2017.
- Lauren Burkley. *Impairments in Taste Perception among Individuals with Autism Spectrum Disorder: a Systematic Review*. Advisor for Undergraduate Research Mentorship 2016-2017.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2017.

- Luke Dolan, Stephanie Register, Julie Buzzard, Taylor Burns. *Dietary Advice for Transitioning Athletes: the DATA Project*. Advisor for Undergraduate Research Mentorship 2016-2017.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2017.
- Sara Kazyak. *Acute Effects of 100% Watermelon Juice on Vasodilation*. Advisor for Undergraduate Research Mentorship 2016-2017.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2017.
- Anna Bragg. *Cardiometabolic Disease Staging and Inflammatory Status in Obese Older Adults*. Advisor for Undergraduate Research Mentorship 2016.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2016.
  - Poster presentation at Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, October 2016.
- Rainey Gerald. Accuracy of Dietary Recalls and Food Frequency Questionnaires in Determining Nutrient Intake. Co-advisor for Undergraduate Research Mentorship 2016.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2016.
- Reagan Hattaway & Mary Clay Kline. *Phenolic and Flavonoid Content of Phyllostachys aurea*. Advisor for the University of Alabama's Emerging Scholar Program 2015-2016.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2016.
- Madeline Gibson. *Characterizing the Phenolic Profile of Raw and Pasteurized Honey*. Advisor for the University of Alabama's Emerging Scholar Program 2014-2015.
  - o Poster presentation at the Institute of Food Technologists Annual Meeting 2015.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2015.
- Mary Muffly. *The Acid-Base Hypothesis: Dietary Protein and Bone Health among Older Adults*. Advisor for the University of Alabama's Emerging Scholar Program 2014-2015.
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2015.
- Elizabeth Murray. *Phenolic Content and Antioxidant Density of Solid Fruit versus 100% Fruit Juice*. Advisor for NHM 491 Directed Independent Study 2012.
  - o J Acad Nutr Die.t 2013;113:1354-1358
  - o J Nutritional Ecol Food Re.s 2014;2:49-53
  - Poster presentation at the University of Alabama Undergraduate Research and Creative Activity Conference 2013

# TEACHING EXPERIENCE AND COURSE DEVELOPMENT

- NHM 602 Methods in Translational Nutrition Research
- NHM 558 Nutrition in the Prevention of Chronic Disease
- NHM 454 Experimental and Functional Foods
- NHM 395 Research Methods in Food and Nutrition
- NHM 253 Food Science

### COURSE DEVELOPMENT FOR ONLINE DELIVERY

- NHM 558 Nutrition in the Prevention of Chronic Disease
- NHM 454 Experimental and Functional Foods
- NHM 253 Food Science

# PROFESSIONAL SERVICE POSITIONS

#### **National**

- Academy of Nutrition and Dietetics (appointed positions)
  - o Evidence Analysis Library: Flavon-3-ols and Cardiometabolic Disease Workgroup
    - Chair of the Guideline Committee and First Author, 2020 2022
  - Evidence Analysis Library: Umami and Sodium Reduction Workgroup
    - Content Advisor and First Author, 2020-2022
  - Council on Research, 2016-2017
  - Evidence-Based Practice Committee, 2015-2018
    - Committee Chair, 2016-2017
  - o Evidence Analysis Library: Dietary and Metabolic Impact of Fruit Juice
    - Committee Chair 2013-2014
  - Evidence Analysis Library: Umami in Healthy Eating
    - Committee Chair, 2012-2014
  - Evidence Analysis Library: Umami in Foods
    - Committee Member, 2011-2013
  - o Co-author of the Academy position paper on functional foods.
    - J Acad Nutr Diet. 2013;113:1096-1103
- Academy of Nutrition and Dietetics (elected position)
  - Cardiovascular Health and Wellbeing Dietetic Practice Group Executive Committee, Membership Engagement Chair, 2023 - present
- American Society for Nutrition (elected position)
  - o Nutrition Translation Research Interest Group, Academic Advisor, 2018 present
- Editorial Board Appointments
  - o Annals of Medicine, Associate Editor of Nutrition, 2020 present
    - Guest Editor for Food as Medicine Special Issue, 2023 present
  - o *Brain Disorders*, Guest Editor for Special Issue on Oxidative Stress, Antioxidant Defense, and Neurodegeneration 2021 2023
  - o Journal of Dietary Supplements, Associate Editor, 2023 present
  - o Journal of Food Science, Associate Editor, 2022 present
  - o Nutrition and Healthy Aging, Editorial Board, 2023 present
- Institute of Food Technologists
  - o Media Spokesperson, 2007 present
  - Outstanding Section Volunteer, 2010
  - o Nutrition Division Research Reviewer, 2008-2012

o Southeast Section Chair, 2009-2010

# **University/State Service**

- Alabama Research Institute on Aging
  - o Executive Committee, 2019 present
  - o Faculty Associate 2016 present

## • University of Alabama

- o Center for Convergent Bioscience and Medicine
  - Advisory Board 2021 present
- o Institutional Biological Safety Committee
  - Chair, 2012 present
- o Food Science Club
  - Academic Advisor, 2014 2016
- Preceptor for NHM 491 Research Externship, 2016 2018

# • Advisory Boards (appointed positions)

- o McCormick Science Institute Scientific Advisory Council, 2023 present
- o Produce for Better Health Foundation Scientific Advisory Council, 2021 2023
- University of Alabama at Birmingham Leadership Education in Pediatric Nutrition Advisory Board, 2020 - 2023
- University of Alabama at Birmingham Pediatric Pulmonary Advisory Board, 2020
   2023
- o Samford University Department of Nutrition Advisory Board, 2007 present
- o Alabama Obesity Initiative Conference Committee Chair, 2010 2016

### PROFESSIONAL MEMBERSHIPS

- Academy of Nutrition and Dietetics, 2009 present
- American Chemical Society, 2006 present
- American Society for Nutrition, 2016 present
- Institute of Food Technologists, 2001- present
- Kappa Omicron Nu Honor Society, 1999 present
- Phi Kappa Phi Honor Society, 2003 present
- Phi Tau Sigma Honor Society, 2001 present

### **HONORS AND AWARDS**

- National Academy of Inventors Inductee 2023
- Samford University School of Public Health Alumni of the Year Award 2017
- University of Alabama President's Faculty Research Award 2016
- University of Alabama College of Human Environmental Sciences Leadership Board Excellence in Scholarly Research Award 2015
- Academy of Nutrition and Dietetics Foundation Margaret D. Simko Memorial Award for Excellence in Clinical Poster Session, 1<sup>st</sup> runner up, October 2015
- University of Alabama at Birmingham Outstanding Alumni in Nutrition Spotlight, 2012

- University of Maine Dow, Griffee, & Clements Outstanding Graduate Research Award, 2005
- Institute of Food Technologists Food Product Development Competition
   First Place, University of Maine, 2006
- o That Flace, Oniversity of Walle, 2000
- Northeast Region Institute of Food Technologists Graduate Scholarship (4), 2003-2006
- Phi Mu Women in Science Graduate Research Scholarship (2), 2004-2006
- Proctor & Gamble Co. Graduate Research Fellowship, 2005-2006
- University of Maine Department of Food Science & Human Nutrition Graduate Research Scholarship, 2002 & 2004