Kristi M. Crowe-White, PhD, RD

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Academics

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
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Scholarly Training

- 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. 2019 to present
 - Associate Professor, Human Nutrition
 - Assistant Professor, Human Nutrition
- Time, Inc. The Southern Progress Corporation

2016 – to present 2010 – 2016 2007- 2009

• Food Chemist

Research Focus

- Aim 1 Investigate the impact of bioactive compounds and functional foods on redox and inflammatory balance along with clinical outcomes related to obesity, cardiometabolic disease, and aging.
- Aim 2 Explore epigenetic influences and genetic variants underlying individual responsiveness to nutrition interventions for the purpose of optimizing treatment effectiveness.

Intellectual Properties

• The University of Alabama, **Crowe-White KM**. U.S. Patent Application Publication No. 2020/0038319: "Antioxidant Infused Gum for Improving Oral Health," February 6, 2020.

Funded Research - External

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 (PI, 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
- 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
- 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
- Gosa M. Collaborators: Bolland A, Crowe-White KM (co-I). (2018). Usefulness of the Adapted Pre-Feeding Skills Checklist for Identification of Oral Phase Dysphagia in Non-Medically Complex Children with Feeding Difficulties. American Speech-Language-Hearing Foundation.

Award: \$10,000.00

- 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
- Ellis AC, Crowe-White KM (co-PI). (2015-2017). Acute Effects of Watermelon on Vascular • Function and Serum Lycopene. Academy of Nutrition and Dietetics Healthy Aging Dietetics Practice Group.

Award: \$4.000.00

- 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: \$15,000.00
- Allison DB, Crowe KM (co-I). (2012). Scientific Approaches for Increasing Research • Integrity in Nutrition and Energetics. The Coca-Cola Company Conference Grant. Award: \$149.498.00
- 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

Funded Research - Internal

- 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 <u>Modulating Oxidative Stress and Inflammation in Elders: The MOXIE Study</u>. 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 https://www.ncbi.nlm.nih.gov/myncbi/1v1JHv96rke5l/bibliography/public/

* denotes student-mentored research

- Park H, Hayden MM, Bannerman S, Jansen J, Crowe-White KM. Effects of Carotenoids in Neurodegeneration. *Molecules*. Accepted July 27, 2020.
- 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*. Accepted June 22, 2020.
- 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*. Accepted June 8, 2020.
- **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.* Accepted May 30, 2020.
- 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.
- 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.

- 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.
- 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.
- *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. doi:10.1080/10408398.2019.1665495
- 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). doi:10.3390/antiox8060195.
- *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.
- 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*. E-pub ahead of print – August 2019. doi: 10.1080/19320248.2019.1658682
- 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
- *Crowe-White KM, Phillips TA, Ellis AC. Lycopene and Cognitive Function. *J Nutr Sci.* 2019;8(e20):1-8.
- 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.
- 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.
- *Senkus KE, Tan L, Crowe-White KM. Lycopene and Metabolic Syndrome: A Systematic Review of the Literature. *Adv Nutr*. 2019;10:19-29.
- *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.
- 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.
- **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.
- 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.
- 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.

- *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.
- Crowe KM, Allison DB. Evaluating Bioactive Food Components in Obesity and Cancer Prevention. *Crit Rev Food Sci Nutr.* 2015;55:732-734.
- *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.
- **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.
- **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.
- Crowe KM. Designing Functional Foods with Bioactive Polyphenols: Highlighting Lessons Learned from Original Plant Matrices. *J Human Nutr Food Sci.* 2013;1:1018-1019.
- 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, 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.
- Ellis A, **Crowe KM**, Lawrence J. Obesity-related Inflammation: Implications for Older Adults. *J Nutr Gerontol Geriat*. 2013;32:263-290.
- *Breshears K, Crowe KM. Sensory and Textural Evaluation of Gluten-Free Bread Substituted with Amaranth and Montina[™] Flour. *J Food Res.* 2013;2(4):1-10.
- 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.
- 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.
- **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.
- 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.
- 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.
- **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.
- 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*. <u>https://www.andeal.org/files/files/Umami/Umami in Foods White Paper.pdf</u>

Web-based 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. <u>http://www.alabamacme.uab.edu/geriatrics.aspx</u>

Peer-Reviewed Oral Presentations (* denotes student-mentored research)

- *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 C. A., **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)

- Douglas J, **Crowe-White KM**, Ellis AC, Bui C, Voruganti S, Yaffe K. *Change in Body Mass Index is Assocated with Change in Cognition in Older Adults*. The 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.
- *Senkus KE, Crowe-White KM, Knol L. 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.
- 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 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.
- 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.
- *Brantley C, Knol L, **Crowe-White KM**, Appel SJ, Adewumi OE. *Mindful Eating is related to Lower Intake of Energy and Added Sugars among Overweight, Premenopausal Women.* 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 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 △N-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).
- *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.
- 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.
- 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

• 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. <u>https://learn.extension.org/events/3418</u>

• **Crowe-White KM.** *Trans Fat in Foods Update*. Military Families Learning Network. February 2016. <u>https://learn.extension.org/events/2356%20February%202016</u>

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.

Dissertation Committees

• Katelyn E. Senkus. *Mouth <u>Rinses Infused with Nitrates/Nitrites and Antioxidants to Support the Entero-salivary Pathway for Oral and Vascular Health.* Committee Chair (2018 - present).</u>

Thesis Committees

- 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).
- Amelia Foster. *Sensory Comparison of Low-Protein Recipes with Glycomacropeptide-Containing BetterMilk*TM *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).
- Caroline Glagola-Dunn. *Financial Impact of Grocery Tax on Fruit and Vegetable Purchases in Alabama.* Committee Member (2011 2012).

Mentored Capstone 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.
 - \circ Accepted for presentation at American Society for Nutrition 2020, June 2020.
- Katelyn E. Senkus M.S. Nutrition. Lycopene and Metabolic Syndrome: A Systematic Review of the Literature. Advisor for NHM 598 Independent Research, 2017-2018.
 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 JNutr 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.
 - 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).
 - *J Food Res.* 2013;2(4):1-10.

Mentored Undergraduate Student Research

- 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.
 - 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 Diet 2013;113:1354-1358
 - J Nutritional Ecol Food Res 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 and Treatment of Chronic Disease
- NHM 454 Experimental and Functional Foods
- NHM 295 Research Methods in Food and Nutrition
- NHM 253 Food Science

Course Development for Online Delivery

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

Professional Service Positions

National

- Academy of Nutrition and Dietetics (all appointed positions)
 - $\circ~$ Evidence Analysis Library: Flavon-3-ols and CVD Workgroup
 - Chair of the Guideline Committee, January 2020 present
 - Evidence Analysis Library: Umami and Sodium Reduction Workgroup
 Content Advisor and Author, June 2020 present
 - o Council on Research, 2016-2017
 - Evidence-Based Practice Committee, 2015-2018
 - o Committee Chair, 2016-2017
 - Evidence Analysis Library Chair, Dietary and Metabolic Impact of Fruit Juice Consumption, 2013-2014
 - Evidence Analysis Library Chair, Umami in Healthy Eating, 2012-2014
 - o Evidence Analysis Library Member, Umami in Foods, 2011-2013
 - Co-author of the Academy position paper on functional foods.
 - *J Acad Nutr Diet.* 2013;113:1096-1103.

• American Society for Nutrition

- Nutrition Translation Research Interest Group, 2018 present
 - Advisory Committee, Academic Representative, August 2019 present

• Editorial Board Appointments

o Journal of Human Nutrition and Food Science, June 2013 – present

• Invited Reviewer

- o Journal of the Academy of Nutrition and Dietetics
- Journal of Food Science
- o USDA SBIR Phase I Food Science and Nutrition Program Grants

• Institute of Food Technologists

- Food Science Expert, 2007 present
- Outstanding Section Volunteer, 2010
- Nutrition Division Research Reviewer, 2008-2012
- Southeast Section Chair, 2009-2010

University/State Service

- Alabama Research Institute on Aging (ARIA)
 - Executive Committee, 2019 to present
 - Faculty Associate 2016 to present
- University of Alabama
 - o Institutional Biological Safety Committee Chair, 2012 present
 - Food Science Club Chair, 2014 2016
 - Preceptor for NHM 491 Research Externship, 2016 present

- Advisory Boards Appointed Positions
 - University of Alabama at Birmingham Leadership Education in Pediatric Nutrition Advisory Board, 2020 - present
 - University of Alabama at Birmingham Pediatric Pulmonary Advisory Board, 2020 present
 - Samford University Department of Nutrition Advisory Board, 2007 present
 - 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
- Alabama Obesity Initiative, 2010 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

- 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, 1st 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 YoBon Berry Bites, 2006
- 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