

# Carolina R. Cawthon, PhD, RDN, LD

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## EDUCATION AND TRAINING

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<i>Florida State University, Postdoctoral Fellow</i>	Sep 2020 — Jan 2024
NIH Chemosensory Training Grant Appointee (NIH T32 DC000044)	2020 — 2023
<i>The University of Georgia, Ph D. Foods and Nutrition</i>	May 2020
<i>The University of Georgia, Dietetic Internship (1200 hours supervised practice)</i>	Aug 2015 – Aug 2017
<i>The University of Georgia, Bachelor of Science, Dietetics major; Biochemistry minor</i>	May 2015

## APPOINTMENTS and RESEARCH EXPERIENCE

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<i>Department of Nutrition, University of Tennessee-Knoxville</i>	Aug 2024 —
Assistant Professor	
<i>Department of Psychology, Program in Neuroscience, Florida State University</i>	Sep 2020 — July 2024
Spector Lab, Principal Investigator: Alan C. Spector	
My role: Research Faculty I, Feb 2024 – present; Postdoc Sep 2020 – Jan 2024	
<ul style="list-style-type: none"><li>• Design, conduct, and disseminate results of taste- and ingestive behavior-related behavioral experiments in rats</li><li>• Technical skills include operation of gustometers, Davis rigs, 5-item Food Choice Monitor, analysis of continuously monitored food-intake data, gustatory nerve transection</li></ul>	
<i>Department of Nutritional Sciences, University of Georgia</i>	2015 — 2020
Gastrointestinal Neurophysiology Lab, Principal Investigator: Claire B. de La Serre	
My role: Graduate Student	
<ul style="list-style-type: none"><li>• Designed, conducted, and disseminated results of experiments investigating microbiota-gut-brain signaling, specifically bacterial signaling to vagal afferent neurons</li></ul>	
<i>Department of Biochemistry &amp; Molecular Biology, University of Georgia</i>	2014 — 2015
Wood Lab, Principal Investigator: Zachary A. Wood	
My role: Undergraduate Researcher	
<ul style="list-style-type: none"><li>• Studied enzyme structure, kinetics using an in vitro model of wild-type and mutant UDP-glucose dehydrogenase</li></ul>	

## RESEARCH SUPPORT

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<i>Current Grants</i>	Jan 2024 – Dec 2026
R21DC021498 Early Career Research Award	
\$125,000/year direct costs	

## TEACHING

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<i>Department of Nutritional Sciences, University of Georgia</i>	
Instructor of Record, FDNS 2100 Human Nutrition and Food	Spring 2020
Guest Lecturer, FDNS 4620/6620 Management of Foodservice Organizations	Spring 2018, Spring 2020
Teaching Assistant, FDNS 4500/6500 Medical Nutrition Therapy I	Fall 2017, Fall 2018, Fall 2019
Teaching Assistant, FDNS 4520/6520 Clinical Nutrition Interventions	Spring 2019

Teaching Assistant, FDNS 4620/6620 Management of Foodservice Organizations  
Guest Lecturer, FDNS 4590/6590 Metabolism and Physiology of Food Intake, Energy  
Balance, and Obesity  
Teaching Assistant, FDNS 4570/6570 Inherited Metabolic Disorders

Spring 2017, Spring 2019  
Spring 2017, Spring 2019  
Spring 2018

## PUBLICATIONS

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### *Peer-Reviewed Journal Articles (\*denotes co-first authors)*

- CR Cawthon**, GD Blonde, AC Spector. Lingual taste nerve transection alters food selection, macronutrient intake, and meal patterns in rats consuming a cafeteria diet without changing total energy intake. *eNeuro* 2024;11(3).
- CR Cawthon**, AC Spector. The nature of available food choices affects intake and meal patterns of rats offered a palatable cafeteria-style diet. *Nutrients* 2023;15 (24):5093.
- CR Cawthon**, GD Blonde, V Nisi, HM Bloomston, B Krubitski CW le Roux, AC Spector. Chronic semaglutide treatment in rats leads to daily excessive concentration-dependent sucrose intake. *J Endocr Soc* 2023.
- JS Kim, KC Williams, RA Kirkland, R Schade, KG Freeman, **CR Cawthon**, AW Rautmann, JM Smith, GL Edwards, TC Glenn, PV Holmes, G de Lartigue, CB de La Serre. The Gut-Brain Axis Mediates Bacterial Driven Modulation of Reward Signaling. *Molec Metab* 2023.
- CR Cawthon**, CB de La Serre. The critical role of CCK in the regulation of food intake and diet-induced obesity. *Peptides* 2021; 170492.
- CR Cawthon**, RA Kirkland, S Pandya, N Brinson, CB de La Serre. Non-neuronal crosstalk promotes an inflammatory response in nodose ganglia cultures after exposure to byproducts from gram positive, high-fat-diet-associated gut bacteria. *Physiol Behav* 2020; 113124.
- JS Kim, RA Kirkland, SH Lee, **CR Cawthon**, KW Rzepka, DM Minaya, G de lartigue, K Czaja, CB de La Serre. Gut microbiota composition modulates inflammation and structure of the vagal afferent pathway. *Physiol Behav* 2020; 113082.
- EA Klingbeil\*, **CR Cawthon\***, RA Kirkland, CB de La Serre. Potato-resistant starch supplementation improves microbiota dysbiosis, inflammation, and gut-brain signaling in high fat-fed rats. *Nutrients* 2019;11(11):2710.
- CR Cawthon**, CB de La Serre. Gut bacteria interaction with vagal afferents. *Brain Res* 2018;1693B:134-9.
- T Sen, **CR Cawthon**, BT Ihde, A Hajnal, PM DiLorenzo, CB de La Serre, K Czaja. Diet-driven microbiota dysbiosis is associated with vagal remodeling and obesity. *Physiol Behav* 2017;173:305-17.

### *Manuscripts in preparation*

- CR Cawthon**, GD Blonde, AC Spector. The effects of octreotide on gut hormones and food intake in rats after gastric bypass surgery. *Manuscript in preparation*.
- CR Cawthon**, AC Spector. The effects of semaglutide on lean and DIO rats offered a cafeteria diet and sucrose. *Manuscript in preparation*.

### *Instructional Materials*

- AC Berg, **CR Cawthon**, D Everson. C.O.R.E. (Confidence Ownership Responsibility and Exercise) Parent nutrition education curriculum. 2016.

### *Popular Press and Web Publications*

- AC Berg, **CR Cawthon**. Senior Sense Quarterly Newsletter: Eggs are back! The new Dietary Guidelines for Americans. Web page, print, 2016. 24, No. 1, 4-5. Retrieved from <http://www.fcs.uga.edu/news/tag/senior+sense>
- AC Berg, **CR Cawthon**. Nutrition for 4-H Foods Projects: Recipe selection and menus. 2015. Retrieved from <http://www.georgia4h.org/foodsandnutrition/nutrition.htm>
- AC Berg, **CR Cawthon**. Nutrition for 4-H Foods Projects: MyPlate. 2015. Retrieved from <http://www.georgia4h.org/foodsandnutrition/nutrition.htm>

AC Berg, **CR Cawthon**. Nutrition for 4-H Foods Projects: Dairy foods project. 2015. Retrieved from <http://www.georgia4h.org/foodsandnutrition/nutrition.htm>

AC Berg, **CR Cawthon**. Walk GA Blog: Staying on track through the holidays: Are we missing the point? 2015. UGA Extension. Retrieved from <http://blog.extension.uga.edu/walkgeorgia/>

AC Berg, **CR Cawthon**. Senior Sense Quarterly Newsletter: Should I be worried about Vitamin D? Web page, print, 2015. 23, No. 4. Retrieved from [http://www.fcs.uga.edu/docs/DBL\\_Vol\\_29\\_5.pdf](http://www.fcs.uga.edu/docs/DBL_Vol_29_5.pdf)

## PRESENTATIONS

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*Original Research Presented at Professional Conferences (\*denotes presenter)*

- CR Cawthon\***, CN Boyle, AV Nisi, GD Blonde, B Krubitski, CW le Roux, TA Lutz, AC Spector. Octreotide treatment increases meal size of a palatable cafeteria diet but not of chow in female rats after Roux-en-Y gastric bypass. *Poster Presentation*.  
Society for the Study of Ingestive Behavior, Chicago, Illinois July 2024
- CR Cawthon\***, GD Blonde, VA Nisi, HM Bloomston, B Krubitski, CW le Roux, AC Spector. The Effects of Semaglutide on Meal Patterns in Rats Given Chow and Sucrose Solutions. *Oral Presentation*.  
Society for the Study of Ingestive Behavior, Portland, Oregon July 2023
- CR Cawthon\*** and AC Spector. Combined Transection of the Glossopharyngeal and Chorda Tympani Nerves Alters Food Choice, Macronutrient Intake, and Meal Patterns in Male Rats. *Poster Presentation*.  
Association for Chemoreception Sciences, Bonita Springs, Florida April 2023
- CR Cawthon\***, GD Blonde, CW le Roux, AC Spector. The Effects of Semaglutide Treatment on Energy Intake, Sucrose Preference, and Body Weight Loss in Rats. *Oral Presentation*.  
Society for the Study of Ingestive Behavior, Porto, Portugal July 2022
- CR Cawthon\***, AC Spector. The Response of Rats to Cafeteria Diets is Influenced by Specific Food Choices and Varies Over Time. *Poster Presentation*.  
Society for the Study of Ingestive Behavior, Porto, Portugal July 2022
- CR Cawthon\***, RA Kirkland, EA Klingbeil, CB de La Serre. Microglia depletion in the nodose ganglion prevents high-fat diet induced hyperphagia in male Wistar rats. *Oral Presentation*.  
Inaugural University of Georgia Obesity Initiative Symposium, Athens, Georgia March 2020  
Second Place, Best Oral Presentation
- CR Cawthon\***, RA Kirkland, CB de La Serre. Glial cross-talk promotes inflammatory response in nodose ganglia culture after exposure to by-products from gram-positive, high-fat-diet-associated gut microbes. *Poster Presentation*.  
Society for the Study of Ingestive Behavior, Utrecht, Netherlands July 2019  
Best Poster Presentation Award Winner
- EA Klingbeil\*, **CR Cawthon**, RA Kirkland, CB de La Serre. Potato resistant starch supplementation improves microbiota dysbiosis, inflammation and vagal signaling in high fat fed rats.  
Society for the Study of Ingestive Behavior, Bonita Springs, Florida July 2018
- CR Cawthon\***, RA Kirkland, CB de La Serre. Metabolites from obesity-associated bacteria promote inflammation in cultured vagal afferent neurons. *Oral Presentation*  
Society for the Study of Ingestive Behavior, Montreal, Quebec July 2017
- CR Cawthon\***, NA Brinson, R Kirkland, CB de La Serre. Metabolites from obesity-associated bacteria promote inflammation of vagal afferent neurons. *Poster Presentation*  
Georgia Nutrition Council Conference, Augusta, Georgia March 2016  
Student Research Presentations Overall First Place Award Winner

*Other Presentations and Invited Seminars*

- CR Cawthon\***. Food intake is an outcome of behavior: How it happens matters. *Invited seminar*.  
University of Georgia, Department of Nutritional Sciences August 2024

<b>CR Cawthon*</b> . Using Animal Studies to Make Sense of Human Food Intake Behavior. British Association for Parenteral and Enteral Nutrition. <i>Invited presentation.</i>	November 2022
<b>CR Cawthon*</b> . Food Addiction: Fact or Fiction University of Georgia, Department of Nutritional Sciences	October 2017
S Belcher, <b>CR Cawthon*</b> , L Coheley, N Motoyasu. Good Diets Gone Fad. University of Georgia, Department of Nutritional Sciences	November 2015

## AWARDS AND HONORS

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Florida State University Office of Postdoctoral Affairs, 5-Minute Research Talk (5MR) First Place Award Winner	September 2023
Florida State University Office of Postdoctoral Affairs Travel Award	August 2022
Florida State University NIH Chemical Senses Training Grant Appointee	Sep 2020 – Aug 2023
University of Georgia Obesity Initiative (UGAOI), Second Place Student Oral Presentations, UGAOI Inaugural Symposium, Athens Georgia	March 2020
Academy of Nutrition and Dietetics, <i>Irene J. Jones Memorial Scholarship</i> Recipient	2019 — 2020
University of Georgia College of Family and Consumer Sciences, <i>Pearce L. and Mary Wells Elkins Scholarship</i> Recipient	2019 — 2020
Society for the Study of Ingestive Behavior, Best Poster Presentation Award Recipient, SSIB Annual Meeting, Utrecht, Netherlands	July 2019
University of Georgia College of Family and Consumer Sciences, Foods and Nutrition Department Travel Award Recipient	July 2019
University of Georgia College of Family and Consumer Sciences, FACS Funds for Excellence Travel Award Recipient	July 2019
University of Georgia, Graduate School International Travel Award Recipient	July 2019
Academy of Nutrition and Dietetics, <i>Foundation Commission on Dietetics Registration Doctoral Scholarship</i> Recipient	2018 — 2019
University of Georgia College of Family and Consumer Sciences, <i>Sharon Boone Hamner Foods and Nutrition Scholarship</i> Recipient	2018 — 2019
Academy of Nutrition and Dietetics, <i>Patsyjane O'Malley Memorial Scholarship</i> Recipient	2017 — 2018
University of Georgia College of Family and Consumer Sciences, <i>Anne and Earl Haltiwanger Scholarship</i> Recipient	2017 — 2018
University of Georgia College of Family and Consumer Sciences, <i>Ruth Rowan Morrison Graduate Endowment in Nutrition Studies</i> Recipient	2017 — 2018
Northeast Georgia Dietetic Association, Graduate Scholarship Recipient	May 2017
Georgia Academy of Nutrition and Dietetics, Outstanding Dietetic Intern Award	March 2017
Georgia Nutrition Council, <i>Holly B. Alley Scholarship</i> Recipient	March 2017
Georgia Nutrition Council, Student Research Presentations Overall First Place Award Winner, Georgia Nutrition Council Conference, Augusta Georgia	March 2017
University of Georgia College of Family and Consumer Sciences, <i>Costa Travel Fund</i> Award Recipient	January 2017
University of Georgia College of Family and Consumer Sciences, Foods and Nutrition Department Travel Award Recipient	January 2017

University of Georgia, Graduate School Assistantship	2015 — 2017
University of Georgia, First Honor Graduate (First Honor Graduates represent the top 0.5% (or less) of the graduating class)	May 2015

## SERVICE AND PROFESSIONAL AFFILIATIONS

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<i>Association for Chemoreception Sciences</i>	2021 — present
<i>Society for the Study of Ingestive Behavior</i> New Investigator Advisory Board, Member, 2019 — 2024	2017 — present
<i>Georgia Academy of Nutrition and Dietetics</i>	2013 — present
<i>Academy of Nutrition and Dietetics</i> Student Host, Food and Nutrition Conference and Expo, Atlanta, Georgia, October 2014	2013 — present
<i>Florida State University Postdoc Association</i> Social Chair, 2021 — 2023	2021 — 2024
<i>Blue Key National Honor Society</i> Secretary, 2019 — 2020	2018 — 2020
<i>Northeast Georgia Dietetics Association</i> Immediate Past-president, 2019 — 2020 President, 2018 — 2019 President-elect, 2017 — 2018 Treasurer, 2016 — 2017	2015 — 2021
<i>University of Georgia Foods and Nutrition Graduate Student Organization</i> Treasurer, 2016 — 2017	2015 — 2020
<i>University of Georgia, Department of Nutritional Sciences, Awards Committee</i>	2017 — 2018
<i>University of Georgia, Department of Nutritional Sciences, Graduate Recruitment Committee</i>	2016 — 2017
Peer reviews: <i>American Journal of Physiology-Regulatory, Integrative and Comparative Physiology; Appetite</i>	

## SELECTED COMMUNITY OUTREACH AND VOLUNTEER WORK

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Academy of Nutrition and Dietetics, Dietitians in Integrative and Functional Medicine Dietetics Practice Group Guest reviewer of educational materials for continuing education of DPG members	April 2020
University of Georgia Extension, 4H Served as Preparation Judge for Senior Food Challenge competition	November 2019
University of Georgia Extension, 4H Judged Junior and Senior food projects at District Project Achievement held at Rock Eagle	March 2015, March 2016
Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo Student Host: Set-up and closed Silent Auction, assisted with Kids Eat Right Gala ticket pickup, received Foundation donations	October 2015
<i>Healthy Living</i> , special magazine section to the <i>Hartwell Sun</i> Contributor, “Eating Healthy on a Budget” which offered suggestions and recipes for nutritious, frugal meals	September 2014