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# CORDELIA A. RUNNING, PH.D.

## CURRICULUM VITAE

Associate Professor  
Purdue University  
Department of Nutrition Science  
Stone Hall 209  
700 W State Street  
West Lafayette, IN 47909  
cunning@purdue.edu  
<http://www.spitlab.org>

### EDUCATION

- 2015 Ph.D. in Food Science, emphasis Ingestive Behavior  
Purdue University
- 2011 M.Sc. in Food Science, emphasis Food Chemistry  
Purdue University
- 2005 B.A. in Chemistry, Minor in Near Eastern Language and Culture  
Indiana University

### ACADEMIC APPOINTMENTS

- 2022- Present Associate Professor  
Department of Nutrition Science  
Purdue University
- 2016- 2022 Assistant Professor  
Department of Nutrition Science  
Department of Food Science (2016 – 2019)  
Purdue University
- 2015-2016 Postdoctoral Researcher  
Department of Food Science  
Prof. John Hayes, Sensory Evaluation Center, Pennsylvania State University
- 2012-2015 Research assistant, instructor, and doctoral student  
Department of Nutrition Science, Department of Food Science  
Prof. Richard Mattes  
Dissertation: *Human sensitivity to and qualitative perception of non-esterified fatty acids*

2010-2011      Research assistant and master's student  
Department of Food Science  
Prof. Srinivas Janaswamy  
Dissertation: *Structural and functional changes in iota-carrageenan upon addition of salts and sweeteners*

## OTHER APPOINTMENTS

2011              Savory Flavors Intern, Sensient Flavors  
2005-2010      Intelligence Analyst  
                        Defense Intelligence Agency  
                        Jacksonville Sheriff's Office  
                        North Florida High Intensity Drug Trafficking Area Task Force

## AWARDS

2019    Emerging Luminaries in Nutrition, Exercise, and Metabolism Research, IU School of Public Health  
2019    Polak Young Investigator Award, Association for Chemoreception Science  
2019    Rising Star in Texture Research, Journal of Texture Studies  
2019    Purdue Department of Nutrition Science Jane S. Link Outstanding Teacher Nominee  
2018    Purdue Department of Food Science Kohl's Early Career Teaching Award Nominee  
2018    Purdue Research Foundation Faculty International Travel Award  
2017    Patsy J. Mellott Teaching Innovation Award, Purdue University  
2014    NIH T32 pre-doctoral fellow, Ingestive Behavior Research Center Purdue University  
2014    1<sup>st</sup> prize Poster presentation Food Oral Processing Conference  
2014    North Carolina State University Building Future Faculty Program  
2014    Association for Chemoreception Sciences Travel Award  
2013    Rose Marie Pangborn Sensory Science Scholarship  
2013    Society of Flavor Chemists Feeding Tomorrow Scholarship  
2012    Institute of Food Technologists Sensory and Consumer Science Division Scholarship  
2010    Purdue University Ross Fellowship  
2002    Indiana University Gill Center for Biomolecular Research Scholarship

## GRANTS

Indiana CTSI PDT              Running, Gletsu-Miller (Co-PIs)                      04/15/2022 – 05/31/2023  
*Trading sugar for sparkle: Sensory changes after substitution of unsweetened, flavored sparkling water for sugar-sweetened sodas*  
This project will explore replacing sugar-sweetened sodas with unsweetened, but flavored, sparkling waters in college students.

NIH R21DC017559      Running (PI)      09/21/2018 – 03/31/2023  
National Institute of Deafness and Communications Disorders  
*Salivary interactions with chemosensation*

This project will evaluate whether human saliva adapts to exposure to spicy, fatty, and bitter stimuli, and how that adaptation may influence the experience of flavor.

Purdue HHS Renewal Award      Running (PI)      06/01/2021 – 08/31/2022  
Purdue College of Health and Human Sciences

*Veggie Gummy Bears: A gamified approach for helping people learn to like vegetables*

This project explores repeated exposing people to vegetable flavors as part of a game. These exposures should improve acceptance of actual vegetables, which will be tracked through sensory assessments.

Indiana CTSI CDMD      Gletsu Miller(PI), Hannon, Running (Co-PIs)      06/06/2019 – 05/31/2021  
IU Center for Diabetes and Metabolic Diseases

*Reducing Sugar Sweetened Beverage Consumption and Glycemia in Adolescents Using Sparkling Waters*

This project will explore swapping sugar-sweetened sodas for unsweetened, but flavored, sparkling waters in adolescents at risk of developing diabetes. Dr. Running's role is to oversee formulation and sensory testing of the sparkling waters to determine: 1) overall acceptability, and 2) how much sugar can be removed at a time before the adolescents refuse to consume the waters instead of sugary sodas.

*Additional Purdue COVID Disruption Funding*      10/01/2021 – 04/30/2022  
Purdue University

Indiana CTSI PDT-788      Running (PI)      02/01/2018 – 08/30/2021

Indiana Women's Global Health Initiative and Clinical and Translational Sciences Institute  
*Exploring realistic treatments to reduce the burden of swallowing difficulties in aging and neurodegenerative disorders*

The goal of this project is to evaluate the acceptability and efficacy of flavors as an alternative approach to thickening in order to improve safety of swallowing for individuals with neurodegenerative disease and swallowing disorders

Purdue Center for Families      Gletsu Miller (PI)      05/01/2019 – 08/31/2019  
Justice Family Nutrition Grant

*Just Noticeable Differences in Sweetness perception in reduces sugar beverages*

The goal of this project was to observe how much sugar could be removed from a Cola beverage before individuals would notice a change in sweetness. Data were gathered as pilot information for ongoing federal grant submissions.

Purdue Research Foundation      Running (PI)      06/01/2018 – 07/31/2018  
Faculty Summer Salary Grant

*Exploring realistic treatments to reduce the burden of swallowing difficulties in aging and neurodegenerative disorders*

This grant provided faculty support for Dr. Running for the summer while she working on the WGHI/CTSI grant described above.

USDA Hatch No 1013624                      Running (PI)    10/01/2017 – 09/30/2022

National Institute of Food and Agriculture

*Interactions of diet, flavor, and saliva*

Under this grant, we will explore the relationships of exposure to flavors of interest for human health, salivary proteomic patterns, and oral sensations.

AgSEED 69980                                      Running (PI)    03/01/2017 – 04/30/2018

Purdue University College of Agriculture

*Interactions of proteins from milk, milk substitutes, and saliva with chocolate polyphenols*

The goal is this project was to evaluate how these proteins and polyphenols interact to influence flavor and bioactivity, and how feedback from these interactions alters salivary secretion.

## **PUBLICATIONS**

### PEER REVIEWED JOURNAL ARTICLES

Davis L. A. & Running C.A. (2023) Good is sweet and bad is bitter: Conflation of affective value of aromas with taste qualities in untrained participants. *J Sens Stud*, 38(3): e12820.

Davis L.A., Lee K., Wierenga M., Running C.A. (2023) Salivary flow and turbidity development inconsistently associated with lower taste intensity of vegetables and juices. *Food Qual Pref*, 106: 104807.

Valicente V.M., Sharpe K.B., Gletsu-Miller N., & Running C.A. (2023) Just noticeable difference in sweetness perception of cola: Small changes in sugar are noticeable. *J Sens Stud*, 38(1): e12803.

Huang L.C. & Running C.A. (2022) Associations among fatty food sensations and saliva's emulsifying properties. *Chem Sens*, 47: bjac013.

Davis L.A. & Running C.A. (2021) Repeated exposure to epigallocatechin gallate solution or water alters bitterness intensity and salivary protein profile. *Phys Beh*, 242: 113624.

Crawford C.R. & Running C.A. (2020) Addition of chocolate milk to diet corresponds to protein concentration changes in human saliva. *Phys Beh*, 225: 113080.

Wierenga M.R., Crawford C.R., & Running C.A. (2020) Older US adults like sweetened colas, but not other chemesthetic beverages. *J Texture Stud*, 2020: 1-11.

Calvert R.D., Crawford C.R., & Running C.A. (2020) The prevalence of improper solution making technique places molar solutions in crisis. *J Food Sci Educ*, 2020(3): 183-191.

Kershaw J.C. & Running C.A. (2019) Data approximation strategies between generalized line scales and the influence of labels and spacing. *J Sens Stud*, 34:e12507

Fitzgerald C., Wiese G., Moorthi R.N., Moe S.M., Hill Gallant K., & Running C.A. (2019) Characterizing Dysgeusia in Hemodialysis Patients. *Chem Sens*, 44(3):165-171.

Kershaw J.C. & Running C.A. (2019) Dose-response functions and methodological insights for sensory tests with astringent stimuli. *J Sens Stud*, 34(1):e12480.

- Voelker A.L., Miller J., Running C.A., Taylor L.S., Mauer L.J. (2018). Chemical stability and reaction kinetics of two thiamine salts (thiamine mononitrate and thiamine chloride hydrochloride) in solution. *Food Res Int*, 112: 443-456.
- Kershaw J.C. & Running C.A. (2018). Conditioning of human salivary flow using a visual cue for sour candy. *Arch Oral Biol*. 92: 90-95.
- Running C.A. (2018). Desensitization but not sensitization from commercial chemesthetic beverages. *Food Qual Pref*, 69: 21-27.
- Running C.A. (2018). Oral sensations and secretions. *Phys Beh*, 193B: 234-237.
- Running C.A. & Hayes J.E. (2017). Sip and Spit or Sip and Swallow: choice of methods differentially alters taste intensity estimates across stimuli. *Phys Beh*, 181: 95-99.
- Running C.A., Hayes J.E., and Ziegler G.R. (2016). Degree of free fatty acid saturation influences chocolate rejection in human assessors. *Chem Sens*, 42(2): 161-166.
- Running C.A. and Hayes J.E. (2016). Expectation and expectoration: information manipulation alters spitting volume, a common proxy for salivary flow. *Phys Beh*, 167:180-187
- Running C.A. and Mattes R.D. (2016). A Review of the Evidence Supporting the Taste of Non-esterified Fatty Acids in Humans. *J Am Oil Chem Soc*, 93: 1325-1336.
- Zaveri T., Running C.A., Surapaneni L., Ziegler G.R., & Hayes J.E. (2016). Innovative sensory methods to assess acceptability of mixed polymer semisoft ovules for microbicide applications. *Drug Deliv Transl Res*, 6(5), 551-564.
- Dhillon J., Running C.A., Tucker R.M., & Mattes R.D. (2016) Effects of Food Form on Appetite and Energy Balance. *Food Qual Prefer*, 48, 368-375.
- Running C.A., Craig B.A., and Mattes R.D. (2015) Oleogustus: The unique taste of fat. *Chem Sens*, 40(7), 507-516.
- Running C.A. and Mattes R.D. (2015) Humans are more sensitive to the taste of linoleic and  $\alpha$ -linolenic than oleic acid. *Am J Physiol-Gastr L* 308(5), G442-G449.
- Running C.A. (2015) High rates of false positives in common sensory threshold tests. *Atten Percept Psycho* 77(2), 692-700.
- Running C.A. and Mattes R.D. (2014) Different oral sensitivities to and sensations of short, medium, and long chain fatty acids in humans. *Am J Physiol-Gastr L* 307(3), G381-389.
- Tucker R.M., Mattes R.D., & Running C.A. (2014) Mechanisms and effects of fat taste in humans. *BioFactors*, 40(3), 313-326.
- Running C.A., Mattes R.D., & Tucker R.M. (2013) Fat taste in humans: Sources of within- and between-subject variability. *Prog Lipid Res*, 52(4), 438-445.
- Running C.A., Falshaw R., & Janaswamy S. (2012) Trivalent iron induced gelation in lambda-carrageenan. *Carbohydr Polym*, 87(4), 2735-2739.

## BOOK CHAPTERS

- Lee J., Tucker R.M., Tan S., Running C.A., Jones J.B., & Mattes R.D. (2015) Nutritional implications of taste and smell. In R. Doty (Ed.), *Handbook of Olfaction and Gustation*. John Wiley & Sons, Inc, New York, NY.
- Running C.A. & Hayes J.E. (2016) Individual differences in multisensory flavour. In B. Piqueras Fiszman & C Spence (Eds.), *Multisensory Flavor Perception: From Fundamental Neuroscience through to the Marketplace*. Woodhead Publishing, Oxford.

## OTHER PUBLICATIONS

- Calvert R.D., Andolino C.J., & Running C.A. (2020) Food Chemistry: Experiments for labs and kitchens. Purdue University Department of Nutrition Science Open Educational Resources. <https://docs.lib.purdue.edu/fnoer/1/>
- Running C.A. (2016) Human oral sensory systems and swallowing. *Perspectives of the ASHA Special Interest Groups, SIG 13: Perspectives on Swallowing and Swallowing Disorders (Dysphagia)* March 2016, Vol. 1, 38-47.
- Running C.A. & Mattes R.D. (2012) Dietary energy density and weight loss. *Food Technology*, 66(8).

## PRESENTATIONS

### TALKS

- Running C.A. 2023. Sensory approaches for learning to like healthier foods. HHS Extension Virtual Roundtable. Invited speaker.
- Running C.A. 2022. Functional saliva assays related to food perception and intake. Michigan State University Food Science and Human Nutrition Department Fall Seminar Series.
- Running C.A. 2022. Oleogustus. Health Matters Convention. Invited keynote speaker. Originally scheduled Málaga, Spain, shifted online.
- Running C.A. 2022. Chocolate, chemosensation, and saliva. Senior Chemists Committee, American Chemical Society National Meeting Spring 2022. Invited speaker. San Diego, CA, USA.
- Running C.A. 2022. Careers in salivary research. American Association for Dental, Oral, and Craniofacial Research. Invited panelist. Atlanta, GA, USA.
- Running C.A. 2021. Chemesthetic beverages for safe swallowing. Women's Global Health Institute Symposium. Invited speaker. West Lafayette, IN, USA.
- Running C.A. 2021. Saliva & Sensation. Food Sensory Conference. Keynote speaker. Hangzhou, China.
- Running C.A. 2021. Oleogustus: what it is, and what it isn't. Association for Chemoreception Sciences Annual Meeting. Industry symposium invited speaker. Bonita Springs, FL, USA.
- Running C.A. 2021. Individual biological differences that influence diet acceptance. Indiana Nutrition Council. Invited speaker. Indianapolis, IN, USA.
- Running C.A. 2020. Sensation, Diet, and Saliva—How oral biochemistry and eating habits may influence individual flavor experiences. Department of Food Science and Nutrition Seminar, University of Minnesota. Minneapolis, MN, USA.
- Running C.A. 2020. Remote chemistry labs using sensory evaluation techniques. Department of Food Science and Technology Fall Seminar Series, Virginia Tech. Roanoke, VA, USA.
- Ennis J.M. & Running C.A. 2020. Upskill your subjects. AigoraCast, Artificial Intelligence for Sensory and Consumer Scientists. Online.
- Running C.A. 2020. Making bitter better. Indiana HORT Conference and Expo, Wine and Grapes. Indianapolis, IN, USA.

- Running C.A. 2019. Making bitter sweeter and sweet sourer: sensory and psychophysical approaches to nutrition. Emerging Luminaries: Rising Stars in Nutrition, Exercise, and Metabolism. Bloomington, IN, USA.
- Running C.A. 2019. Sensory sorting methods and analysis. University of California at Davis. Davis, CA, USA.
- Wierenga M., Janetsian-Fritz S.S., Oberlin B.G., Dzemiđic M., Kareken D.A., & Running C.A. 2019. Sweet liking may enhance sour tolerance. 13<sup>th</sup> Pangborn Sensory Science Symposium. Edinburgh, United Kingdom.
- Running C.A. 2019. Diet and dietary context influence expression of salivary proteins that may modulate oral sensation. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA.
- Running C.A. 2018. Spit, flavor, and health. Colorado State University. Fort Collins, CO, USA.
- Running C.A. 2018. Diet influences saliva. Sensorium 2018. West Lafayette, IN, USA.
- Running C.A. 2018. Flavor influences diet, but diet may also influence saliva, which in turn may influence flavor. 256<sup>th</sup> American Chemical Society National Meeting. Boston, MA, USA.
- Running C.A. 2018. Saliva, Perception, Ingestion, and Tongues. Kalsec. Kalamazoo, MI, USA.
- Crawford C.R. & Running C.A. 2018. Exposure to chocolate almond milk likely increases human salivary expression of proline rich proteins. 5<sup>th</sup> International Conference on Food Oral Processing. Nottingham, United Kingdom.
- Running C.A. 2017. Revisiting how asking the right, or wrong, questions changes the outcome of sensory data. 12<sup>th</sup> Pangborn Sensory Science Symposium. Providence, RI, USA.
- Running C.A. 2017. Oleogustus: Fatty taste, but maybe not how we expected. 4<sup>th</sup> Flavors, Fragrances, and Perception Symposium. Rutgers University, New Brunswick, NJ, USA.
- Running C.A. 2017. Individual variability in sensory perception: Sources and opportunity. Texture Expert Convening. Hoffman Estates, IL, USA.
- Running C.A. 2017. Just how many is one drink anyway? Beer Institute reception, Experimental Biology. Chicago, IL, USA.
- Running C.A. & Hayes JE. 2016. Swallow timing associates with timing of perceived intensity. 4<sup>th</sup> International Conference on Food Oral Processing. Lausanne, Switzerland.
- Running C.A. 2015. Oleogustus: The unique taste of fat. International Avocado Brainstorming Conference 2015. Ica, Peru.
- Running C.A., Craig BA, & Mattes RD. 2015. Qualitative perception of non-esterified fatty acids: potential overlap with bitter or unpleasant stimuli. 6<sup>th</sup> Annual Winter Ingestion Conference. St. Moritz, Switzerland.
- Running C.A. & Mattes RD. 2014. Differences in oral sensation among unsaturated non-esterified fatty acids. 3<sup>rd</sup> International Conference on Food Oral Processing. Wageningen, Netherlands.

#### CONFERENCE ABSTRACTS (EXCLUDING TALKS ABOVE)

- Moding K., Kielb E., Davis L., Kim G., Running C.A. 2023. Veggie Gummy Bears: A Gamified Approach for Helping Children Learn to Like Vegetables. Nutrition 2023. Boston, MA USA.

- Davis L. & Running C.A. 2022. The Gummy Flavor Game: Gamifying Vegetable Flavor Exposure to Increase Liking. Nutrition 2022. Virtual.
- Valicente V., Gletsu Miller N., Running C.A. 2022. Sensory Effects of Replacing Sugar Sweetened Sodas with Unsweetened, Flavored Sparkling Water. Nutrition 2022. Virtual.
- Pacheco K., Kapur N., & Running C.A. 2022. Influence of starchy diet on saliva and sensation. Nutrition 2022. Virtual.
- Kantor S., Malandraki G.A., & Running C.A. 2022. Flavor perception in patients with Parkinson's disease with dysphagia and healthy controls. Dysphagia Research Society 30<sup>th</sup> Annual Meeting. Virtual and San Juan, Puerto Rico, USA.
- Running C.A. 2021. The pudding assay—A practical, cheap method for quantifying human salivary amylase activity. 6th International Conference on Food Oral Processing. Valencia, Spain and Virtual.
- Valicente V., Sharpe K., Gletsu Miller N., Running C.A. 2021. "Just Noticeable Difference" in sweetness perception of cola-flavored carbonated beverage: Small changes are noticeable. Association for Chemoreception Sciences Annual Meeting. Virtual oral presentation.
- Huang L. & Running C.A. 2021. Associations among fatty food sensations, diet, and expectorated emulsions. Association for Chemoreception Sciences Annual Meeting. Virtual. Poster Presentation.
- Davis L. & Running C.A. 2020. Exposure to polyphenols alters sensation and salivary protein profile. International Symposium on Olfaction and Taste. Portland, OR. Oral Presentation.
- Calvert R.D., Crawford C.R., & Running C.A. 2020. The prevalence of improper solution-making technique places molar solutions in crisis. American Chemical Society National Meeting and Expo. Philadelphia, PA. Oral Presentation.
- Wierenga M., Crawford C.R., Running C.A. 2019. Older adults disliked chemesthetic beverages. Indiana Clinical and Translational Sciences Institute. Indianapolis, IN, USA. Poster Presentation.
- Davis L., Running C.A. 2019. Collection method alters observed concentration of salivary proteins important to oral sensation. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Wierenga M., Crawford C.R., Running C.A. 2019. Water should not feel like slime: Sensory acceptability of chemesthetic beverages for managing swallowing disorders. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Janetsian-Fritz S.S., Oberlin B.G., Dzemic M., Running C.A., Kareken D.A. 2019. Greater sour liking is associated with AUDIT and novelty seeking. Research Society on Alcohol. Minneapolis, Minnesota, USA. Poster Presentation.
- Calvert R., Andolino C., Running C.A. 2019. Thinking outside the bench: Teaching chemistry of foods in kitchens. Institute of Food Technologists Annual Meeting and Expo. New Orleans, Louisiana, USA. Poster Presentation.
- Andolino C., Calvert R., Running C.A. 2019. A teaching laboratory on the physical and chemical properties of sweeteners. Institute of Food Technologists Annual Meeting and Expo. New Orleans, Louisiana, USA. Poster Presentation.



- Cladis D. P., Andolino C., Calvert R., Running C.A. 2019. Demonstrating protein functionality in foods: an innovative teaching lab for students in any setting. Institute of Food Technologists Annual Meeting and Expo. New Orleans, Louisiana, USA. Poster Presentation.
- Running C.A. 2018. Diet influences saliva. Sensorium 2018. West Lafayette, IN, USA. Oral presentation.
- Crawford C.R., Running C.A. 2018. Exposure to chocolate almond milk likely increases human salivary expression of proline rich proteins. 5th International Conference on Food Oral Processing. Nottingham, UK. Oral presentation.
- Kershaw J. & Running C.A. 2018. Fruit and Vegetable Intake is Associated with Alterations in Bitterness and Astringency Perception. Nutrition 2018. Boston, MA, USA. Oral and poster presentations
- Voelker A., Running C.A., Taylor L., Mauer L. 2018. Chemical stability and reaction kinetics of two thiamine salts in solution. Whistler Center for Carbohydrate Research Annual Meeting. West Lafayette, IN, USA. Poster Presentation.
- Kershaw J.C., Running C.A. 2018. Fruit and vegetable intake associations with alterations in bitterness and astringency perception. Nutrition 2018. Boston, MA, USA. Oral presentation.
- Kershaw J.C., Running C.A. 2017. Can “the pace” of fruit and vegetable consumption alter taste perception? Methodological considerations for astringency research. Pace of Life and Feeding: Health Implications. West Lafayette, IN, USA. Poster Presentation.
- Crawford C.R., Running C.A. 2017. Replacing “astringency” descriptor with “dry, rough” results in minimal changes in ratings for astringent flavors. Pace of Life and Feeding: Health Implications. West Lafayette, IN, USA. Poster Presentation.
- Crawford C.R., Running C.A. 2017. Replacement of the ‘astringent’ sensory descriptor with ‘dry/ rough’ does not affect panelist ratings. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Running C.A. 2017. Mouth-watering in response to a visual sour candy cue. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Running C.A., Craig B.A., Mattes R.D. 2015. The taste quality of nonesterified fatty acids differs from prototypical bitter compounds. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Running C.A., Craig B.A., Mattes R.D. 2015. Qualitative perception of non-esterified fatty acids: potential overlap with bitter or unpleasant stimuli. 6th Annual Winter Ingestion Conference. St. Moritz, Switzerland. Oral presentation.
- Running C.A., Daniel J.R., Mattes R.D. 2014. Oral sensitivity to NEFA increases with decreasing chain length and increasing degree of unsaturation. Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL, USA. Poster Presentation.
- Running C.A., Mattes R.D. 2014. Differences in oral sensation among unsaturated non-esterified fatty acids. 3rd International Conference on Food Oral Processing. Wageningen, Netherlands. Oral presentation.
- Running C.A., Patel B.K., Janaswamy S., Campanella O.H. 2012. Effect of rebiana and salt on the iota-carrageenan structure and functionality. 11th International Hydrocolloids Conference. West Lafayette, IN, USA. Poster Presentation.

## CAMPUS AND DEPARTMENTAL PRESENTATIONS

- Valicente V., Sharpe K., Gletsu Miller N., Running C.A. 2020. “Just Noticeable Difference” in Sweetness Perception of cola: Small changes in sugar are noticeable. Interdepartmental Nutrition Program Spring 2020. West Lafayette, IN, USA. Poster Presentation.
- Calvert R.D., Crawford C.R., Running C.A. 2020. The Prevalence of Improper Solution-Making Technique Places Molar Solutions in Crisis. Interdepartmental Nutrition Program Spring 2020. West Lafayette, IN, USA. Poster Presentation.
- Davis L.A., Running C.A. 2020. Exposure to Polyphenols Alters Sensation and Salivary Protein Profile. Interdepartmental Nutrition Program Spring 2020. West Lafayette, IN, USA. Poster Presentation.
- Wierenga M., Crawford C.R., Running C.A. 2019. Older adults dislike chemesthetic beverages. Ethics of Eating, Purdue Ingestive Behavior Research Center Symposium. West Lafayette, IN, USA. Poster Presentation.
- Janetsian-Fritz S.S., Oberlin B.G., Dzemic M., Running C.A., Kareken D.A. 2019. Greater sour liking is associated with AUDIT and novelty seeking. Greater Indy Society for Neuroscience. Indianapolis, IN. Poster Presentation.
- Davis L., Running C.A. 2019. Collection method alters observed concentration of salivary proteins important to oral sensation. Interdepartmental Nutrition Program Spring 2019. West Lafayette, IN, USA. Poster Presentation.
- Wierenga M., Crawford C.R., Running C.A. 2019. Water should not feel like slime: Sensory acceptability of chemesthetic beverages for managing swallowing disorders. Purdue Undergraduate Research Conference. West Lafayette, IN, USA. Poster Presentation.
- Crawford C.R., Running C.A. 2018. Consumption of cocoa polyphenols increases specific salivary proteins. Department of Nutrition Science Corporate Affiliates Meeting. West Lafayette, IN, USA. Poster Presentation.
- Kershaw J.C., Running C.A. 2018. “You’ll get used to it” – Does habitual fruit and vegetable intake correlate with sensory perception. Department of Nutrition Science Corporate Affiliates Meeting. West Lafayette, IN, USA. Poster Presentation.
- Odrón M., Running C.A. 2017. Making better beverages to manage swallowing disorders. Department of Nutrition Science Corporate Affiliates Meeting. West Lafayette, IN, USA. Poster Presentation.
- Running C.A. 2017. Psychophysics of flavor: A tool for health interventions. Behavioral Neuroscience Seminar Series. West Lafayette, IN, USA. Oral presentation.
- Running C.A. 2017. Sensations and expectations. Department of Nutrition Science May Conference. West Lafayette, IN, USA. Oral presentation.
- Running C.A. 2017. Gimme your spit: Using saliva to pursue better compliance to healthy diets. Department of Nutrition Science Corporate Affiliates Meeting. West Lafayette, IN, USA. Oral presentation.
- Running C.A. 2015. Oleogustus: Different tastes of fatty acids. Department of Food Science Seminar Series. University Park, PA, USA. Oral presentation.
- Running C.A., Mattes R.D. 2014. Fatty acid taste: History and new findings. Ingestive Behavior Seminar Series. West Lafayette, IN, USA. Oral presentation.

Running C.A., Mattes R.D. 2014. Not all fat tastes the same. Next Generations Research Scholars. West Lafayette, IN, USA. Poster Presentation.

Running C.A., Daniel J.R., Mattes R.D. 2013. Influence of non-esterified fatty acid structure on oral sensory response. Department of Nutrition Science Corporate Affiliates Meeting. West Lafayette, IN, USA. Poster Presentation.

## **TEACHING**

### **PRIMARY INSTRUCTOR**

Food Chemistry, 4 credits, Purdue University (Annually, Fall 2016 – Present; 50-75 students)

Essentials of Nutrition, 3 credits, Purdue University (Spring 2022, 120 students)

Journey through the Gastrointestinal Tract, 2 credits, Purdue University (Spring 2020, 5 students)

Foods and Nutrition Internship, 1-3 credits, Purdue University (Fall, Spring, Summer, 2016 – 2019; 1-3 students)

Food Science I, 3 credits, Purdue University (Spring & Fall 2018; 30-60 students)

Nutrition Science Seminar, 1 credit, Purdue University (Spring 2018, 2022; 30-40 students)

Ingestive Behavior Seminar, 1 credit, Purdue University (Spring 2017; 10 students)

Human Sensory Systems and Sensory Evaluation, 3 credits, Purdue University (Spring 2015; 12 students)

### **GUEST LECTURER**

Sensory Evaluation, Pennsylvania State University (Fall 2015)

Principles of Sensory Evaluation, Pennsylvania State University (Spring 2016)

Human Sensory Systems and Sensory Evaluation, Purdue University (Fall 2019)

### **TEACHING ASSISTANT**

Human Sensory Systems and Sensory Evaluation, Purdue University (Spring 2013, 2014)

## **SOCIETY AND PROFESSIONAL MEMBERSHIPS**

American Chemical Society

ACS Media Expert (trained, invited panel who respond to media/public inquiries)

American Society for Nutrition

Association for Chemoreception Sciences

Public Information and Affairs Committee, 2015 – Present

Institute of Food Technologists

Phi Tau Sigma

Purdue Ingestive Behavior Research Center

Executive Committee Member, 2014 – Present

Society for Sensory Professionals

Society for the Study of Ingestive Behavior

## **AD-HOC REVIEWER**

### JOURNALS

American Journal of Clinical Nutrition  
Appetite  
Archives of Oral Biology  
Biological Research for Nursing  
Chemical Senses  
Chemosensory Perception  
Current Opinion in Behavioral Sciences  
Food Quality and Preference (editorial board member)  
Food Research International  
Foods  
Journal of Food Science  
Journal of Sensory Studies  
Journal of the Science of Food and Agriculture  
Journal of Texture Studies (editorial board member)  
Journal of Visualized Experiments  
Nutrients  
Physiology & Behavior  
PLOS One

### FUNDING AGENCIES

United States Department of Agriculture  
National Institute of Health  
National Science Foundation, USA  
National Science Center, Poland  
Netherlands Organisation for Scientific Research  
Deutsche Forschungsgemeinschaft (German Research Foundation)  
French National Research Agency

## **OTHER SERVICE**

### CONFERENCE COMMITTEES

Association for Chemoreception Sciences Program Committee. 2021 – present.  
13<sup>th</sup> Pangborn Sensory Science Symposium. Jul 28 – Aug 1, 2019  
    Scientific committee member  
Ethics of Eating Fall 2019  
    Sponsored by Purdue University Ingestive Behavior Research Center.  
    Conference planning committee member

12<sup>th</sup> Pangborn Sensory Science Symposium. Aug 20-24, 2017

Scientific committee member

The Pace of Life and Feeding: Health Implications. Oct 2-4, 2017

Sponsored by Purdue University Ingestive Behavior Research Center.

Conference planning committee member

## MENTORING

### POSTDOCTORAL SCHOLARS

Jonathan Kershaw 2017 – 2018, Purdue University

Ryan Calvert 2019 – 2020, Purdue University

### GRADUATE STUDENTS- PRIMARY ADVISOR

Lissa Davis 2023 PhD, Purdue University Nutrition Science

Vinícius Valicente 2023 PhD, Purdue University Nutrition Science

Kathryn Pacheco 2022 Master's, Purdue University Nutrition Science

Li-Chu Huang 2021 Master's, Purdue University Nutrition Science

Sarah Pitts 2021 Master's, Purdue University Food Science

Co-advised with Dr. Lisa Mauer

Ciera Crawford 2018 Master's, Purdue University Food Science

### GRADUATE STUDENTS- COMMITTEE MEMBER

Li-Chu Huang Present PhD, Purdue University Nutrition Science

Eunjin Cheon 2022 PhD, Purdue University Nutrition Science

Adrienne Voelker 2020 PhD, Purdue University Food Science

Jordan Oshiro 2017 Master's, Purdue University Nutrition Science

### GRADUATE STUDENTS- TEACHING MENTOR

Chaylen Andolino 2022 PhD, Purdue University

Ryan Calvert 2019 PhD, Purdue University

### UNDERGRADUATE STUDENTS

Neha Kapur 2022, Purdue University

Neyven Garal 2022, Purdue University

Madeline Harper 2019 – 2022, Purdue University

Keona Lee 2018 – 2021, Purdue University

Purdue Office of Undergraduate Research Scholarship recipient

Madison Wierenga 2018 – 2020, Purdue University

Purdue Office of Undergraduate Research Scholarship recipient

Bridget Owens 2019, Purdue University

Andrea Richardson 2019 – 2020, Purdue University

Michele Dixon 2019, Purdue University

Ciara Fitzgerald 2017, Purdue University

Miguel Odrón 2017, Purdue University

Cameron Wicks	2016, Purdue University
Marielle Donahue	2016, Pennsylvania State University
Katherine Mobley	2016, Pennsylvania State University

## **MEDIA IMPACT**

- “The food science behind what makes leftovers tasty (or not)” PBS News Hour, December 2022  
<https://www.pbs.org/newshour/science/the-food-science-behind-what-makes-leftovers-tasty-or-not>
- “Ranking Artificial Flavors by How Much They Taste Like the Real Thing” Mel Magazine, September 2019 <https://melmagazine.com/en-us/story/ranking-artificial-flavors-by-how-much-they-taste-like-the-real-thing>
- “What’s the Best Way to Get Rid of a Bad Aftertaste?” Time magazine, May 2019  
<http://time.com/5584027/how-to-get-rid-of-aftertaste/>
- “Spit-Take! The Science Of Saliva And Those Bitter Bites” NPR Wow in the World Sept 2018  
<https://www.npr.org/2018/09/07/645663488/spit-take-the-science-of-saliva-and-those-bitter-bites>
- “SPIT Lab Finds How Saliva Shapes Taste” Inside Science, Aug 2018  
<https://www.insidescience.org/news/spit-lab-finds-how-saliva-shapes-taste>
- “Your Spit Might Help You Learn to Eat Your Greens” New York Times, Aug 2018  
<https://www.nytimes.com/2018/08/20/science/saliva-bitter-tastes.html>
- “The Scientific Reason Lemonade Tastes So Good” Real Simple Magazine, Jul 2016  
<https://www.realsimple.com/food-recipes/citric-acid-benefits>
- “Scientists makes the case for a 6<sup>th</sup> taste – but it’s less than tasty” National Public Radio, Aug 2015 <http://www.npr.org/sections/thesalt/2015/08/02/428643391/oleogustus-is-the-newly-discovered-taste-and-boy-is-it-bad>
- “Oleogustus: Why we all might be getting a new taste for fat” The Guardian, Jul 2015  
<https://www.theguardian.com/science/2015/jul/24/oleogustus-why-we-might-all-be-getting-a-new-taste-for-fat>
- “A new taste has been added to the human palate” Time, Jul 2015  
<http://time.com/3973294/fat-taste-oleogustus/>