

Exponent®
Engineering & Scientific Consulting

Maria Cotter, Ph.D.

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Professional Profile

Dr. Cotter is a sensory scientist with a background in leveraging consumer responses to aid in product development decisions. She possesses expertise in chemosensory perception, sensory-driven consumer product innovation, and applying mixed-method approaches to uncover nuanced insights into human behavior and sensory experiences.

Much of Dr. Cotter's work integrates the dynamic relationship between sensory perception, human factors, and the impact on consumer experiences. Her qualitative expertise enables her to deeply explore consumer narratives and preferences, providing a comprehensive understanding of products and broader use constructs.

Dr. Cotter works with clients in industry, trade associations, insurance and law firms to understand and utilize human perception (e.g., olfactory, visual, tactile) to support science-driven claim language and regulatory analysis. Her work also extends to novel applications of implicit (e.g. biometric signal capture) and explicit (e.g. surveys, descriptive analysis) measurement and evaluation to quantify unique elements of consumer decision-making in virtual/mixed/augmented reality, and luxury service environments.

Prior to joining Exponent, Dr. Cotter completed her Ph.D. at The Ohio State University, where she studied Food Science and Technology with focus on sensory science, and consumer decision-making and engagement with products and services when faced with controlled biases.

Academic Credentials & Professional Honors

Ph.D., Food Science and Technology, The Ohio State University, 2021

B.S., Food Science, Michigan State University, 2017

Phi Tau Sigma - The honor society of food science and technology

Prior Experience

Graduate Research Associate, The Ohio State University, 2017-2021

Professional Affiliations

Society of Sensory Science Professionals (SSP)

Institute of Food Technologists (IFT)

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Publications

Cotter, MT., Whitecotton, M., Peterson, D.G., & Simons, C.T. (2022). The impact of applied labeling context on consumer acceptance of differently valenced products. Food Quality and Preference, 97, 104491.

Cotter, MT., Peterson, D.G., & Simons, C.T. (2022). The impact of multi-session testing on panelist engagement measured by the engagement Questionnaire (EQ). Food Quality and Preference, 96, 104412.

Barry, J., Bielaczyc, N., Heisler, D., Henne, R., Hembroff, L., Raven, M.R., Reed, K., Cotter, M.T., & Howell, K. (2018). Michigan Livestock Producer Capacity Assessment Final Report. Michigan State University Center for Regional Food Systems.

Presentations

Cotter, M., Hannum, M., & Simons, C.T. It's Plane to See – Understanding panelist implicit reactions during an in-flight immersion. Oral presentation, 6th SSP Consumer Behavior Scientific Session, Virtual, 2020.

Cotter, M. & Simons, C.T. The impact of applied context on taint detection of chocolate milk measured with implicit and explicit methods. Oral presentation, IFT Sensory & Consumer Sciences Pangborn, Virtual, 2020.

Bodner, R., Whitecotton, M., Cotter, M. & Simons, C.T. Use of Eye-Tracking Technology as Potential Confirmation for Hedonic Ratings of Positivity and Negativity Biases in Consumer Sensory Evaluation. Poster presentation, Ohio Valley IFT FoodSURE Research Forum, Columbus, OH, 2019.