Abstract: Diets rich in fruits and vegetables are associated with decreased risk for a variety of chronic diseases. However, causal studies are lacking in deciphering the chemical compounds responsible for these health benefits. The Cooperstone lab is focused on using omics based approaches to understand 1) how genetic and environmental factors affect the biosynthesis of phytochemicals in crops, and 2) how these compounds affect human health. Our projects combine analytical chemistry with plant genetics/genomics, transcriptomics, microbiomics, sensory science, human nutrition, and bioinformatics. Today I will discuss some recent work in both tomato and apple that show the utility of our integrated approach.

About the Speaker: Dr. Jessica Cooperstone is an Assistant Professor in the departments of Horticulture and Crop Science, and Food Science and Technology at The Ohio State University, and was hired under the Foods for Health focus area of the Discovery Themes Initiative. She received her B.S. in Food Science from Cornell University and her Ph.D. in Food Science & Technology from The Ohio State University. She and her team are interested in understanding the chemical basis for the health benefits associated with fruit and vegetable rich diets. From fundamental studies in crops, to nutrition-based clinical trials, her group works across the plant-food-nutrition-health continuum. Jess and her team are located at the interface of plant, food and nutrition sciences, and utilize bioinformatics based approaches, which she will talk about today.

Jessica Cooperstone, PhD
Friday, March 5th, 11:00am-12:00pm
Carmen Zoom