

## Transforming Agriculture Webinar Series: Climate-Food-Health Nexus

### Speaker Bios



**Dr. Michael Bukowski** is a research chemist at the Beltsville Human Nutrition Research Center (BHNRC) within the USDA-Agricultural Research Service. Holding a Ph.D. in biological inorganic chemistry from the University of Minnesota, Dr. Bukowski has built a career working at disciplinary interfaces with tools from mass spectrometry, spectroscopy, chromatography, analytical, bioanalytical, bioinorganic catalysis, and polymer chemistry. Joining USDA as a postdoctoral associate in 2012, he was hired in 2014 to run the Nutritional Analytics and Clinical Chemistry Core labs at the Grand Forks Human Nutrition Research Center. During his time there he developed new methods for the analysis of lipids and lipophilic biomarkers in human plasma, bovine milk, and oilseed crops. He also developed methods for laboratory automation that improved precision, accuracy, and throughput for chemical analyses. Joining the BHNRC in 2021, his research interests include development of improved methodologies for carbohydrate analysis, and identifying critical linkages between climate and the food system that will impact human nutrition. Today's talk will focus on the potential and actual impact of changes in cultivar and climate which will alter the content of essential fatty acids in the human diet at a food system level.



**Sheila Fleischhacker, PhD, JD, RDN** serves as a National Science Liaison at the National Institute of Food and Agriculture (NIFA) focusing on nutrition and food safety. She is entering her third year on a joint detail between NIFA and FNS serving as the Senior Technical Advisor on the Secretary's core priority to tackle food and nutrition insecurity. In 2021, Dr. Fleischhacker worked with the US Global Research Change Program interagency work group on Climate Change and Human Health to develop a workstream focused on intersections between [climate change, food systems, and nutrition security](#). This workstream has grown to more than 100 federal staff and is focusing on developing an indicator case study for vibriosis. Previously, Dr. Fleischhacker served as the Senior Advisor of Nutrition and Food Safety at USDA Office of the Chief Scientist (2017-2018), on detail from the National Institutes of Health (2012-2018) where she helped put forth the first-of-its kind National Nutrition Research Roadmap and chaired a [USDA Inter-Departmental Nutrition Workshop Series](#). Sheila received her B.S. in 2000 and J.D. in 2007, with a Certificate in Health Law from Loyola University Chicago and a Ph.D. in Integrative Biosciences/Nutritional Sciences from The Pennsylvania State University in 2004. Her post-doctoral training focused on urban and regional planning and public health nutrition at the University of North Carolina at Chapel Hill. She completed her R.D.N. internship through a distance program at Iowa State University in 2018. She was admitted into the Illinois Bar in November 2007.