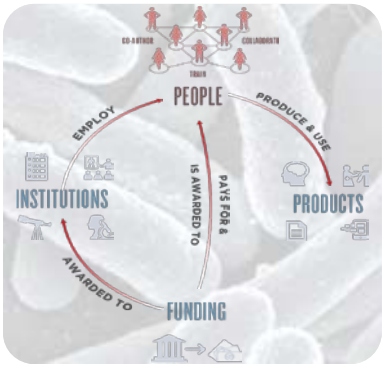
Workshop on Assessing the Public Value of Government-funded University-based Research on Food Safety
December 1, 2015, Washington, DC



Food safety research is essential to improving the safety of our food supply, and strengthening food safety research is a national priority. The Food Safety Modernization Act of 2011 contains provisions designed to enhance the coordination of food safety research. Implementation of the Act will affect long-standing research programs at federal laboratories, universities, hospitals, and other research institutions. Yet key questions are unanswered—notably what research is already being done in the field, how many researchers are active in food safety research, how do research funding patterns affect workforce development, research capacity, and the kind of research produced.

Our study targets a key agricultural priority—improving U.S. food safety. At the heart of our methodology is the innovative UMETRICS approach of tracing research inputs to results at a granular level. Digital technologies are used to capture the data needed to demonstrate broad scientific, social, economic, and workforce results of Federal S&T expenditures at nine Committee on Institutional Cooperation (CIC) universities. Specifically, our approach uses natural language processing to describe (i) *what* research is being done, using proposal and award text to identify the research topics in a portfolio. Administrative records at universities and funding agencies describe (ii) *who* is doing the research on federally supported grants on food safety and (iii) *with whom*. This is made possible because data are drawn directly from payroll records, which also have occupational classifications of each individual employed—including graduate students. This enables a characterization of the variety of occupational categories directly supported by agency funding. Finally, in response to question (iii), we are creating links between researchers funded to do work on food safety and the ways in which their ideas are transmitted. We focus on the activities of not just principal investigators, but also the postdocs, graduate students and undergraduate students working on food safety. We capture a broad range of the ways they communicate their ideas—such as curriculum vitae data, university websites, dissertation databases, patent databases, and other sources, potentially including links to data at the U.S. Census Bureau; together, these sources are used to describe *what results* the funding has generated.

The purpose of this workshop is to convene leaders from universities, government organizations, NGOs, and industry, to provide critical reviews of the foundations for the UMETRICS approach to tracing inputs through outputs in research related to food safety. We also aim to receive input on our book contracted by Cambridge University Press. We will discuss food safety definitions, different ways of measuring food safety using text analysis, methods of identifying food safety businesses using industry classification and patent measures, and frameworks for identifying possible comparator groups. We will also have preview presentations of the empirical outcomes using the UMETRICS approach, such as dissertations in food safety, earnings of doctoral students trained in food safety research relative to others, and placement of doctoral students firms and other institutions. Please see the workshop agenda on the following page of this summary.

Research Team

Kaye Husbands Fealing, Georgia Tech
Sandra Hoffmann, U.S. Department of Agriculture
Stan Johnson, National Center for Food and Agricultural Policy
John L. King, University of California-Davis
Julia Lane, New York University
Christina Jones, American Institutes for Research
Yeong Jae Kim, Georgia Tech
Evgeny Klochikin, American Institutes for Research

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