



# **Economic Analysis and Food Safety: The Food Safety Modernization Act**

***Agricultural and Applied  
Economics Association  
Post-Conference Workshop***



**United States Department of Agriculture  
Economic Research Service  
355 E Street, SW  
Washington, DC 20024  
(First Floor Conference Room)**



**August 7, 2013  
8:30 a.m. - 5:00 p.m.**

# Economic Analysis and Food Safety: The Food Safety Modernization Act

**Wednesday, August 7, 2013**

8:30 a.m. - 8:50 a.m.  
8:50 a.m. - 9:00 a.m.

## Registration

### Welcome to Economic Research Service (ERS)

*Mary Bohman, Administrator, ERS*

9:00 a.m. - 10:00 a.m.

## Introduction

### Overview of the Food Safety Modernization Act (FSMA)

*Don Kraemer, Senior Advisor, Center for Food Safety and Applied Nutrition, FDA*

10:00 a.m. - 10:15 a.m.

## Break

10:15 a.m. - 11:15 a.m.

## What Can Economic Research Contribute to the Implementation of FSMA?

**Goal:** To identify methods and findings from prior and ongoing economic research that can help inform research supporting FSMA implementation.

*Moderator: Sandy Hoffmann, ERS*

*Rapporteur: Sven Anders, University of Alberta*

*Speakers:*

- Monitoring Enforcement and Compliance: Lessons from Environmental, Health, and Safety Regulations  
*Jay Shimshack - Tulane University*
- Accreditation Systems: Certifying Inspectors  
*Paige Van Poppelen, Dave Schweikhardt, and Brent Ross - Michigan State University*
- Measuring Impacts of Training Programs  
*Clare Narrod - Joint Institute for Food Safety and Applied Nutrition, University of Maryland*

11:15 a.m. - 12:15 p.m.

## FSMA Implementation Discussion: Regulatory and Compliance Research and Data Needs

**Goal:** To identify important FSMA implementation issues including research and data needs.

*Moderator: Suzanne Thornsby, ERS*

*Rapporteur: Helen Jensen, Iowa State University*

*Panelists:*

- Inspections and Compliance  
*Don Kraemer, Senior Advisor, Center for Food Safety and Applied Nutrition, Team, FDA*
- FSMA Implementation from the Retail Industry Point of View  
*Hilary Thesmar, Food Marketing Institute*
- Public Health-Based Verification and Impacts on Compliance  
*Janell Kause, Food Safety and Inspection Service, USDA*

12:15 p.m. - 1:15 p.m.

## Lunch (onsite)

1:15 p.m. - 2:15 p.m.

## What Can Economic Research Contribute to Evaluation of FSMA?

**Goal:** To identify methods and findings from prior and ongoing economic research that can help inform research supporting evaluation of FSMA.

*Moderator: Linda Calvin, ERS*

*Rapporteur: Clark Nardinelli, FDA*

**Wednesday, August 7, 2013**

**What Can Economic Research Contribute to Evaluation of FSMA? (Continued)**

*Speakers:*

- FDA's Regulatory Impact Analysis for FSMA  
*Brad Brown - FDA*
- Lessons from the USDA's Mandatory HACCP for Meat and Poultry  
*Mary Muth - RTI International*
- Combining Economics and Science in Benefit/Cost Analysis  
*Erik Lichtenberg - University of Maryland*

2:15 p.m. - 2:30 p.m.

**Break**

2:30 p.m. - 3:30 p.m.

**FSMA Evaluation Discussion: Research and Data Needs for Evaluating Changes in the Food Industry and Public Health**

**Goal:** To identify important FSMA evaluation issues including research and data needs.

*Moderator: Andrew Estrin, FDA*

*Rapporteur: Rachael Goodhue, University of California-Davis*

*Panelists:*

- Obstacles and Opportunities for the Produce Industry: Implications for Research and Data Needs  
*David Gombas, United Fresh*
- Measuring Illnesses Averted by the Preventive Controls Rule: Research and Data Needs  
*David Zorn, FDA*
- Obstacles and Opportunities for Small Farms: Implications for Research and Data Needs  
*Gretchen Wall and Elizabeth Bihn, Produce Safety Alliance, Cornell University*

3:30 p.m. -5:00 p.m.

**Wrap-up Discussion on Research and Data Needs**

**Goal:** The rapporteurs from each session will form a panel to start off the discussion on the themes they have heard developing over the day on research and data needs. They will also discuss additional ideas that have not yet been raised. A representative from USDA - National Institute of Food and Agriculture (NIFA) will also participate on the panel. The session will conclude with general discussion on any additional research and data issues.

*Moderator: Jay Variyam, ERS*

*Panelists:*

*Helen Jensen - Iowa State University*  
*Sven Anders - University of Alberta*  
*Rachael Goodhue - University of California-Davis*  
*Clark Nardinelli - Chief Economist, FDA*  
*Isabel Walls - USDA, Office of the Chief Scientist, NIFA*

5:00 p.m.

**Close of Workshop**

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## Biographies

### **Sven Anders, University of Alberta**

Sven Anders is an Associate Professor of Agricultural Economics and Food Marketing in the Department of Resource Economics and Environmental Sociology at the University of Alberta. Sven received his M.Sc. and Ph.D. degrees in Agricultural Economics from the Justus-Liebig University in Giessen, Germany. Before coming to Canada he worked as a Postdoctoral Fellow at the Food Marketing Policy Center at the University of Massachusetts. His research interests lie in the economics of vertical food marketing and retailing, with a focus on food safety and quality policies in the context of food supply chains and international trade performance. His research includes work on issues of the industrial organization of grocery retailing, consumer behavior, and the economics of certification standards. Sven has published and conducts research in the area of quality and safety standards in international food trade. He teaches undergraduate agricultural microeconomics, economics of world food and agriculture, and selected topics to nutrition and science students.

### **Elizabeth Bihn - Cornell University, National Good Agricultural Practices Program (GAPS)/Produce Safety Alliance**

Dr. Elizabeth (Betsy) A. Bihn is a Senior Extension Associate in the Department of Food Science at Cornell University. Betsy received her B.S. in Zoology from Ohio State University, M.S. in Horticulture from the University of Florida, and Ph.D. in Food Science from Cornell University. Betsy is the Director for the Produce Safety Alliance (PSA) that was created to assist growers with GAPs understanding and implementation prior to and after final issuance of the FDA produce safety regulation. She has been the program coordinator for the GAPs Program since 1999, working directly with fresh produce growers and farm workers. Betsy regularly conducts GAPs training workshops and has written many award-winning extension publications used by growers to develop farm food safety plans and implement produce safety practices. Her current projects include developing on-farm risk-assessment decision trees and the creation of the PSA food safety curriculum.

### **Mary Bohman - Economic Research Service, Administrator**

Mary Bohman is Administrator of USDA's Economic Research Service. She previously served as Acting Administrator and Director of the agency's Resource and Rural Economics Division. Mary joined ERS in 1997 and has served as Deputy Director for Research in ERS's Market and Trade Economics Division (MTED) and as Chief of MTED's Europe, Africa, and Middle East Branch. Other public service positions include details to the White House Office of Science and Technology Policy and USDA's Under Secretary for Farm and Foreign Agricultural Services. From 1990 to 1997, she was on the Agricultural Sciences faculty at the University of British Columbia.

### **J. Bradley Brown - U.S. Food and Drug Administration (FDA)**

Dr. J. Bradley Brown is the Chief Economist in the Center for Food Safety and Applied Nutrition (CFSAN) at FDA, which is within the Department of Health and Human Services. In that role, he provides leadership and coordination in the analysis and development of FDA's food and cosmetic regulations and guidance documents. Dr. Brown joined FDA in August 2002 as a staff economist at CFSAN. He has performed analysis in support of the Egg Safety Rules, the HHS Task Force on Drug Reimportation, and the Bioterrorism Regulations. Dr. Brown earned his Ph.D. in Economics from the University of Texas-Austin, with a concentration in the fields of Environmental and Natural Resource Economics, Computational Economics, and Econometrics.



## Biographies

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### **Linda Calvin - USDA, Economic Research Service**

Linda Calvin is an agricultural economist with USDA's Economic Research Service, specializing in research on topics affecting the fruit and vegetable industries, particularly food safety, phytosanitary barriers to trade, general trade, and labor/mechanization issues. Her food safety case studies have included assessments of the foodborne illness outbreaks associated with Guatemalan raspberries, Mexican green onions, and California leafy greens. Her current research is on retail demand for produce after foodborne illness outbreaks and the costs for California leafy greens growers to implement current food safety standards. She has a Ph.D. in agricultural economics from the University of California at Berkeley.

### **Andrew Estrin - U.S. Food and Drug Administration (FDA)**

Andrew Estrin is a senior economist with FDA's Center for Food Safety and Applied Nutrition, where he has worked since 2002. He has been a principal economist analyzing benefits and costs for over a dozen proposed and final rules, including, among others, those that would improve traceability in the food supply, allow various nutrient content and health claims on food labels, and allow food manufacturers choice in the temperature-indicating technologies used during processing, as well as for FSMA's produce safety proposed rule. He also served as a policy analyst while on detail at FDA's Mexico City office in 2010. He received his Ph.D. in Agricultural and Resource Economics from the University of California at Davis and his B.S. degree in Economics from Northwestern University. Prior to enrolling in the Ph.D. program, he worked for several years as a supply chain manager for importers of fresh produce and frozen seafood and was a Peace Corps Volunteer in Costa Rica.

### **David Gombas - United Fresh Produce Association, Senior Vice President for Food Safety and Technology**

In his position as Senior Vice President, David provides food safety, microbiology, regulatory, and public policy assistance for the fresh and fresh-cut produce industry. He has written numerous publications on food safety and is co-editor, writer, or technical reviewer for seven commodity-specific food safety guidelines. David is currently coordinator of the Produce GAPs Harmonization Initiative and the U.S. National Technical Working Group for GlobalG.A.P and serves on the National Advisory Committee on Microbiological Criteria for Foods (NACMCF). David received his B.S. degree in Food Science from Rutgers University, his M.A. from Massachusetts Institute of Technology, and his Ph.D. in Food Microbiology from University of Massachusetts. Previously, David has held food safety and microbiology positions with the National Food Processors Association, Campbell Soup Company, Kraft Foods, and the National Center for Food Safety and Technology, where he worked with the U.S. Food and Drug Administration to develop HACCP training courses for FDA investigators.

### **Rachael Goodhue - University of California-Davis**

Rachael E. Goodhue is Professor, Department of Agricultural and Resource Economics at the University of California-Davis. Her research interests include agricultural and agri-environmental policy, agricultural marketing and contracting, pesticide use and regulation, and property rights and natural resource management. She earned a B.A. in Economics from Swarthmore College and a M.S. and Ph.D. in Agricultural and Resource Economics from the University of California-Berkeley.

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## Biographies

### **Sandra Hoffmann - USDA, Economic Research Service**

Sandra Hoffmann's recent research as an ERS economist focuses on the costs of foodborne illness and methods to attribute foodborne illnesses to their food sources. Prior to joining ERS, she was a Research Fellow at Resources for the Future and on the faculty of the University of Wisconsin-Madison. She has advised the U.S. EPA and the OECD on the valuation of environmental risks to children's health and has served on a National Academy of Sciences committee on the Effectiveness of National Biosurveillance Systems. She has a Ph.D. from the University of California-Berkeley Dept. of Agricultural Resource Economics and a J.D. from the University of Michigan.

### **Helen H. Jensen - Iowa State University**

Dr. Helen H. Jensen is Professor of Economics and leads the food and nutrition policy research division in the Center for Agricultural and Rural Development (CARD) at Iowa State University, an internationally recognized research center that addresses issues of the food, agricultural, and natural resource sectors. Her research focuses on the design and economics of food and nutrition programs and policies, nutritional enhancement of foods, food demand and markets, and food safety regulations. She was elected Fellow of the Agricultural and Applied Economics Association (AAEA) in 2012 and recently served on the Association's Board of Directors. She has served on several committees of the National Academy of Sciences, including the recent Institute of Medicine committees to incorporate new scientific recommendations on diet and nutrition into USDA's major food programs. She is currently a member of the WHO Foodborne Disease Burden Epidemiology Reference Group (FERG). Dr. Jensen holds a Ph.D. in agricultural economics from the University of Wisconsin.

### **Janell Kause - U.S. Department of Agriculture**

Janell Kause serves as the Scientific Advisor for Risk Assessment at the USDA's Food Safety and Inspection Service. In this capacity, she provides scientific leadership as well as direction and guidance on the development, adaptation, and application of microbial and nonmicrobial risk assessments to guide science-based food safety policies and programs on effectively preventing foodborne illness in the U.S. She has served on numerous national and international committees related to the advancement of the science of risk assessment, including scientific workgroups for the International Life Sciences Institute, Resources for the Future, and the Asian Pacific Economic Corporation. She also served in the development of USDA's Scientific Integrity Policy. Ms. Kause holds a dual Master's degree in Public Health and Public Policy in the area of risk policy from the University of Michigan.

### **Donald W. Kraemer - U.S. Food and Drug Administration, Senior Advisor**

Don Kraemer is the Senior Advisor in FDA's Center for Food Safety and Applied Nutrition. His current position covers oversight of the FSMA Preventive Controls Team, with responsibility for development of the preventive controls rules and guidance. Before that, Don was the Deputy Director, Center for Food Safety and Applied Nutrition, with general responsibility for administration of FDA food safety and nutrition efforts including regulatory policy, budget, facilities, and personnel issues, in support of the Center Director. Don was also the Acting Director and Associate Director for the Office of Seafood Safety. There, he was responsible for administration of seafood policy and research divisions, including the development of policy and government and industry training in FDA's Seafood Hazard Analysis Critical Control Point (HACCP) Program. Don did post-graduate work in food science, food microbiology, and food engineering at the University of Massachusetts and Purdue University. He has a B.S. in Plant and Soil Science from the University of Maine.

## Biographies

# Economic Analysis and Food Safety: The Food Safety Modernization Act

### **Erik Lichtenberg - University of Maryland**

Erik Lichtenberg is a professor in the Department of Agricultural and Resource Economics at the University of Maryland, College Park, where he has been a faculty member since 1988. He served as senior economist for agriculture, natural resources, and international trade on the President's Council of Economic Advisors in 2003-2004. Prior to coming to the University of Maryland, he was director of environmental economics at the Western Consortium for Public Health and a Pew Fellow in health policy at the University of California-San Francisco. He is a fellow of the Agricultural and Applied Economics Association and recently completed a term as co-editor of the *American Journal of Agricultural Economics*, the leading journal in the field of agricultural and resource economics. He served on National Academy of Sciences expert panels on genetically modified organisms and precision agriculture. His work has earned him a number of awards, including a Fulbright Scholar Award, the University of Maryland College of Agriculture and Natural Resources Alumni Association Award for Excellence in Research, a Bronze Medal from University of Helsinki, and the Publication of Enduring Quality Award from the Agricultural and Applied Economics Association.

### **Mary Muth - RTI International**

Mary K. Muth is director of RTI International's Food and Nutrition Policy Research Program and conducts research studies to analyze the impacts of food safety, nutrition, food assistance, food labeling, food marketing, and other types of policies and regulations. She has authored or co-authored over 80 project reports and policy briefs; presented her research at the annual meetings of the Agricultural and Applied Economics Association (AAEA) and numerous other conferences and workshops; and published papers in the *Journal of Law and Economics*, *Journal of Agricultural and Resource Economics*, *Journal of Food Protection*, *Journal of the Academy of Nutrition and Dietetics*, and other journals. She has testified before Congress and briefed Congressional and Administration staff on study results. She also served on the Institute of Medicine committees "Strategies to Reduce Sodium Intake" and "Examination of the Adequacy of Food Resources and SNAP Allotments." Previously, she served as the chair of the AAEA Food Safety and Nutrition Section. She has a Ph.D. in Economics from North Carolina State University, an M.S. in Agricultural Economics from Cornell University, and a B.S. in Agricultural and Managerial Economics from the University of California-Davis. Dr. Muth is also an adjunct associate professor in the Department of Agricultural and Resource Economics at North Carolina State University.

### **Clark Nardinelli - U.S. Food and Drug Administration, Chief Economist**

Clark Nardinelli serves as FDA's Chief Economist. Before joining the FDA in 1995, he spent many years teaching economics at various universities, including the University of Virginia, Tulane University, Clemson University, and the University of Maryland-Baltimore County. During his university career, he specialized in teaching intermediate microeconomics, economic history, and economic development. He currently directs the work of the Economics Staff in the Office of the Commissioner, where his responsibilities include supervising and reviewing cost-benefit analyses of FDA regulations and other public health policies. For good or ill, he has supervised over 200 benefit-cost analyses. Dr. Nardinelli's recent interests include work on best practices for FDA benefit-cost analyses, integrating uncertainty into the economic analysis of public health policies, and evaluating the economics of policies to deal with addiction.

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### **Clare Narrod - University of Maryland, Joint Institute for Food Safety and Applied Nutrition (JIFSAN)**

Clare Narrod is a research scientist and risk analysis program manager at JIFSAN. She received her Ph.D. in Energy Management and Environmental Policy in 1997 and a Master's Degree in International Development and Appropriate Technology, both from the University of Pennsylvania. From 1998 to 2000 she served as an American Association for the Advancement of Science Risk Analysis Fellow at USDA. Prior to coming to JIFSAN, she worked at International Food Policy Research Institute, the Office of Risk Assessment and Cost-Benefit Analysis of USDA, and the Food and Agriculture Organization. Currently, she is working to develop metrics to evaluate the impact of JIFSAN's food safety train-the-trainers programs in countries abroad. Other research interests have been to identifying cost-effective aflatoxin risk-reduction measures for poor producers in developing countries and understanding the role of public-private partnerships in improving market access for the poor. She has field experience in Brazil, China, Costa Rica, Ethiopia, Ghana, India, Indonesia, Kenya, Nigeria, Thailand, Mali, Mexico, Vietnam, and Zambia. From 2010 to 2012, she was appointed to the National Academy of Sciences on the Institute of Medicine's consensus committee that wrote the report "Strengthening Core Elements of Food Safety Regulatory Systems in Developing Countries." She also is on the board of directors for the Center for Foodborne Illness, Research & Prevention.

### **Brent Ross - Michigan State University**

Brent Ross is an Assistant Professor specializing in food industry management in the Department of Agricultural, Food and Resource Economics at Michigan State University. His primary research interests include the dynamics of entrepreneurship and the use of simulation methods to explore organizational phenomena in the agri-food system. His current and previous research studies have focused on modeling the process of identifying and exploiting entrepreneurial opportunities in the agri-food system, the role of social capital in network formation and sustainability, financing alternative governance structures in agri-food industries, and business development in Least Developed Countries. Brent also teaches courses in food industry management and food marketing.

### **David Schweikhardt - Michigan State University**

David Schweikhardt is a Professor specializing in agricultural and international trade policy in the Department of Agricultural, Food, and Resource Economics at Michigan State University. His teaching responsibilities have included courses in agricultural policy and international trade policy. His research and extension work has focused on agricultural and trade policy, including the North American Free Trade Agreement (NAFTA), the General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO), and all U.S. farm bills since 1990.

### **Jay Shimshack - Tulane University**

Jay Shimshack is Associate Professor of Economics at Tulane University and Director of the Program for Responsible Regulation at the Murphy Institute. He holds a Ph.D. from University of California-Berkeley and a B.S. from Cornell University. His major fields are regulation, environmental economics, and applied microeconomics and policy. Specific research interests include the monitoring and enforcement of law; corporate social responsibility; information, transparency, and advisories; and environmental health. His work has been published in the *Journal of Environmental Economics and Management*, the *Journal of Health Economics*, the *Journal of Economic Literature*, the *American Journal of Agricultural Economics*, and elsewhere. He serves on the editorial board of the *Journal of Environmental Economics and Management*. At Tulane, Dr. Shimshack teaches environmental economics, statistics, microeconomics, and the law and economics of compliance. He has also held positions at Tufts University, the University of California, and the University of Michigan.



## Biographies

# Economic Analysis and Food Safety: The Food Safety Modernization Act

### **Suzanne Thornsby - USDA, Economic Research Service (ERS)**

Suzanne Thornsby is a Cross-Commodity Economist in the Crops Branch of the Markets and Trade Economics Division of ERS. Her primary responsibilities are in vegetable and fruit markets. Areas of research interest are global produce markets and international trade, food safety, market structure, and technological change. Prior to joining ERS in 2012, Suzanne was an Associate Professor in Agricultural, Food, and Resource Economics at Michigan State University, where her focus was horticulture markets and international trade. She received her Ph.D. in Agricultural Economics from Virginia Tech.

### **Hilary S. Thesmar - Food Marketing Institute, Vice President of Food Safety Programs**

In her role as vice president of food safety programs for the Food Marketing Institute (FMI), Dr. Hilary Thesmar provides leadership for all food safety programs for FMI's retail and wholesale members, as well as support for members on food safety training programs, recall plans and management, crisis management, research, and overall safety and sanitation programs. Prior to joining FMI, Dr. Thesmar served as the senior director of scientific and regulatory affairs for the National Turkey Federation (NTF). In this role, she led the scientific and regulatory affairs department in developing programs on food safety, environmental concerns, animal health and welfare, worker safety, and health and human resources. Previously, Dr. Thesmar was director of the Egg Safety Center in Washington, D.C. and also worked with the Egg Nutrition Center. Dr. Thesmar has a Ph.D. in Food Technology from Clemson University.

### **Paige Van Poppelen - Michigan State University**

Paige Van Poppelen is a graduate research assistant in the Department of Agricultural, Food, and Resource Economics at Michigan State University. She holds a B.S. in International Business from Central Michigan University and will receive her M.S. in May 2014. Paige is conducting research on the role of third-party certification in the food system. In addition, she is employed as an intern at Dairy Management, Inc., where she focuses on assessing the sustainability of dairy production systems.

### **Jay Variyam - USDA, Economic Research Service— Director, Food Economics Division (FED)**

Jay Variyam's research interests as Director of the FED Division of ERS include economics of food choices, nutrition, and obesity, with a focus on the roles of food prices, nutrition information, and educational attainment. He has also worked on small business economics and the estimation of econometric models with latent variables. As FED Director, he leads ERS's food policy research focused on Federal food and nutrition assistance programs and research on a variety of other subjects, including the use of behavioral economics to understand and improve diet quality; the economic effects of food taxes and subsidies; food availability, affordability, and access; evaluation of policies for promoting fruit and vegetable consumption; monitoring the use and estimating the benefits of nutrition information programs such as nutrition labeling; assessing the economic cost of foodborne diseases; investigating the market and regulatory factors that drive food safety investments; examining trends in and the effects of dining out on diet quality; exploring the effects of food prices on obesity; the characteristics of food markets; and the interplay among consumers, government regulation, and food markets. A major emphasis is on developing consumer and food market data, including data on food prices, food purchases, and consumer dietary behaviors and time use. Jay holds a Ph.D. in agricultural economics from the University of Georgia.

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### **Gretchen L. Wall - Cornell University, Produce Safety Alliance Coordinator (PSA)**

Gretchen is the coordinator and extension specialist for PSA, a cooperative agreement between the USDA, FDA, and Cornell University. The PSA is focused on developing a science-based, on-farm food safety education and training program for fresh fruit and vegetable farmers and regulatory personnel. This curriculum will help prepare farmers to meet the first-ever produce safety regulation promulgated by the FDA as part of the Food Safety Modernization Act (FSMA) and will aid in providing a consistent food safety message to growers, educators, regulatory personnel, and the produce industry. Gretchen is also an active member of the National Good Agricultural Practices Program team (GAPS) and assists in workshop development, delivery, and outreach efforts for on-farm food safety to fruit and vegetable farmers in New York. Gretchen received her M.Sc. degree in the Interdisciplinary Food Science/Food Safety Program at Colorado State University and her B.S. degree in Food Science from Pennsylvania State University.

### **Isabel Walls - USDA, Office of the Chief Scientist**

Dr. Walls is the Senior Advisor for Food Safety, Nutrition, and Health at USDA's Office of the Chief Scientist, where she coordinates multi-agency activities in food safety and nutrition. Within USDA, Dr. Walls has previously served as a National Program Leader for the National Institute of Food and Agriculture (NIFA), where she provided scientific leadership to food safety programs; as a Senior Advisor at USDA's Foreign Agricultural Service; and as a Senior Scientist at the Food Safety and Inspection Service. Before joining USDA, Dr. Walls served as a Senior Scientist at the International Life Sciences Institute, directing the development of expert panel scientific reports related to food safety and environmental risk assessment. Prior to this, she was a Research Microbiologist at the Grocery Manufacturers Association, undertaking food safety and food quality laboratory research. Dr. Walls has co-authored more than 30 peer-reviewed publications and has given numerous invited presentations worldwide. She is a Past President of the International Association for Food Protection.

### **David Zorn - U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition**

Dr. David Zorn is the Director of Social Sciences in FDA's Center for Food Safety and Applied Nutrition. He oversees the use of economic research and analysis on food safety and nutrition, as well as FDA's use of the Food Advisory Committee. He has worked on a broad range of regulatory initiatives relating to food safety and nutrition, as well as tobacco controls and prescription drug importation. He joined FDA in 1992 after earning his Ph.D. in Economics from George Mason University, specializing in the fields of Industrial Organization, Public Choice, and Law and Economics.

## Participant List

# Economic Analysis and Food Safety: The Food Safety Modernization Act

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# Economic Analysis and Food Safety: The Food Safety Modernization Act

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