

# PROGRAM

## SUNDAY MORNING JULY 26

Posters will be on display 10:00 a.m. – 6:00 p.m.  
(See details beginning on page 67)

### S1 **Beyond the Standard Plate Count: Entering the Era of Food Microbiomics**

*Oregon Convention Center, Oregon Ballroom 201*

**Organizer: Gregory Siragusa**

**Convenor: Jairus David**

*Sponsored by the IAFP Foundation*

8:30 Microbiome of Packaged Refrigerated Raw Meat Microbial Progression  
ANDREW BENSON, University of Nebraska-Lincoln, Lincoln, NE, USA

9:00 Microbiome Analysis of Smoked Fish  
MATT RAINIERI, Acme Smoked Fish, Brooklyn, NY, USA

9:30 The Cheese Microbial Ecosystem  
BENJAMIN WOLFE, Harvard, Cambridge, MA, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

### S2 **Metagenomic Analysis Pipelines: Really Learn about Your Food from Your NGS Data!**

*Oregon Convention Center, Oregon Ballroom 201*

**Organizers and Convenors: Karen Jarvis, Andrea Ottesen, Jennifer Patro**

*Sponsored by the IAFP Foundation*

10:30 Microbiome Profiling Using 16S rRNA Amplicon Sequencing: Practical Considerations for Study Design and Data Analysis  
JAMES WHITE, Resphera Biosciences, Baltimore, MD, USA

10:50 Metagenomic Applications for Characterizing the Food Microbiome  
DAVID CHAMBLISS and STEFAN EDLUND, IBM Almaden Research Center, San Jose, CA, USA

11:10 Shotgun Metagenomics Based Rapid Screening of Foodborne Pathogens Using GENIUS®  
NUR HASAN, CosmosID, College Park, MD, USA

11:30 Industry's Use of Next Gen Methods to Address Food Quality and Food Safety Questions  
YANYAN HUANG, ConAgra Foods, Omaha, NE, USA

**12:00 Lunch available in the Exhibit Hall**

### S3 **Microbial Indicators: They are What You Make of Them**

*Oregon Convention Center, Oregon Ballroom 202*

**Organizer and Convenor: Manan Sharma**

*Sponsored by the IAFP Foundation*

8:30 A Brief History of the Use of Microbial Indicators in Food Testing

JEFFREY KORNACKI, Kornacki Microbiology Solutions, Inc., Madison, WI, USA

9:00 Finding *Listeria* spp. before *Listeria monocytogenes* Finds You  
PETER TAORMINA, John Morrell & Co., Cincinnati, OH, USA

9:30 The Use of Microbial Indicators in Pre-harvest Environments: The Instruction Manual Got Lost  
KAREN KILLINGER, Washington State University, Pullman, WA, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

10:30 Indicators for Viral Foodborne Pathogens: Get Your Coliforms out of Here  
KALMIA KNIEL, University of Delaware, Newark, DE, USA

11:00 Sense and Nonsense of the Use of *Enterobacteriaceae* or *E. coli* for Pathogen Control: The European Perspective  
MIEKE UYTENDAELE, Ghent University, Ghent, Belgium

11:30 Panel Discussion

**12:00 Lunch available in the Exhibit Hall**

## Check the Program Addendum for Changes to the Program

Symposia

Roundtables

Technicals

Blue Text – Developing Scientist Competitors

- RT1 Debate: Current Perspectives in Food Safety**  
*Oregon Convention Center, Oregon Ballroom 203*  
**Organizer: Delia Murphy**  
**Convenors: Joe Shebuski, Jean Anderson**  
*Sponsored by the ILSI North America Technical Committee on Food Microbiology*
- 8:30
- Is Shoe Leather Epidemiology Dead in the Age of Whole Genome Sequencing?
  - Is Sustainability Treading on Food Safety?
  - Is Sodium Reduction in Processed Foods a Risk to Food Safety?
- Panelists:  
ERIC BROWN, U.S. Food and Drug Administration-CFSAN, College Park, MD  
MARTIN WIEDMANN, Cornell University, Ithaca, NY, USA  
KATHY GOMBAS, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA  
PETER TAORMINA, John Morrell & Co., Cincinnati, OH, USA  
KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- S4 Achieving Actionable Information from Food Safety Inspections**  
*Oregon Convention Center, Oregon Ballroom 203*  
**Organizers: Brian Nummer, Ruth Petran**  
**Convenor: Brian Nummer**
- 10:30 Health Inspection Data Alignment: Case Studies Using the Health Department Intelligence System  
MIRIAM EISENBERG, EcoSure, a Division of Ecolab, Lincolnshire, IL, USA
- 11:00 Case Studies in Self-inspection Data Capture  
JEFFREY LINDHOLM, ICertainty, Inc., Omaha, NE, USA
- 11:30 Focusing Food Safety Efforts in Response to Risk-based Inspection Data  
CHIRAG BHATT, Bloomin Brands, Inc., Tampa, FL, USA
- 12:00 Lunch available in the Exhibit Hall**
- S5 Advanced Food Packaging Systems for Enhancing Product Safety**  
*Oregon Convention Center, B110 – B112*  
**Organizer and Convenor: Allen Saylor**
- 8:30 Overview of Modern Food Packaging Technology  
TBD
- 9:00 “Smart” Food Packaging Systems for Enhancing Food Safety  
PAUL BUTLER, IDTechEx Ltd., Cambridge, UK
- 9:30 Interleaving, Stacking, and Food Package Handling Equipment’s Impact on Food Safety  
ALLEN ELY, Packaging Progressions, Collegeville, PA, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- 10:30 Challenges and Benefits of Multi-layered Packaging for Foods and Beverages  
BRIAN THANE, Tetra Pak Inc., Denton, TX, USA
- 11:00 Packaging Challenges for the Food Processing Industry  
TBD
- 11:30 FDA’s Perspective on Food Packaging and Food Safety Challenges  
KATHY GOMBAS, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA
- 12:00 Lunch available in the Exhibit Hall**
- RT2 Poultry Slaughter Modernization and Evaluation of Process Control**  
*Oregon Convention Center, B113 – B114*  
**Organizers: John Marcy, Amit Morey**  
**Convenor: John Marcy**  
*Sponsored by the IAFP Foundation*
- 8:30 Panelists:  
DANIEL ENGELJOHN, U.S. Department of Agriculture-FSIS, Washington, D.C., USA  
SCOTT EILERT, Cargill Turkey and Cooked Meats, Wichita, KS, USA  
DAN ZELENKA, Tyson Foods, Springdale, AR, USA  
ASHLEY PETERSON, National Chicken Council, Washington, D.C., USA  
SHELLY MCKEE, USA Poultry & Egg Export Council, Stone Mountain, GA, USA  
ROY BIGGS, Tegel Foods Ltd, Auckland, New Zealand
- RT3 The Black Box of Qualitative Performance Standards for Meat and Poultry: The Drive to Quantitate *Salmonella***  
*Oregon Convention Center, B113 – B114*  
**Organizers: Hari Prakash Dwivedi, Jennifer McEntire**  
**Convenor: Hari Prakash Dwivedi**  
*Sponsored by the IAFP Foundation*
- 10:30 Panelists:  
EMILIO ESTEBAN, U.S. Department of Agriculture-FSIS-OPHS-EALS, Athens, GA, USA  
SHARON WAGENER, Ministry for Primary Industries, Wellington, New Zealand  
JEFFREY FARBER, University of Guelph, Guelph, ON, Canada  
IAN JENSON, Meat and Livestock Australia, North Sydney, Australia  
ANGELA SIEMENS, Cargill, Wichita, KS, USA  
JOHN MARCY, University of Arkansas, Fayetteville, AR, USA



Blue Text – Developing Scientist Competitors

- S6 Who's Going to Fill Your Shoes? Capacity Building for the Future**  
*Oregon Convention Center, B115 – B116*  
**Organizers and Convenors: Lone Jespersen, Sara Mortimore, Wendy White**
- 8:30 Developing Competencies and Curriculum for the Future Food Protection Professionals  
JULIA BRADSHER, International Food Protection Training Institute, Battle Creek, MI, USA
- 9:00 How to Reach the Next Generation: A Millennial's Perspective  
KATHERINE SATCHWELL, University of Alberta, Edmonton, AB, Canada
- 9:30 Identifying the Need for Auditor Competency  
MARK OVERLAND, Cargill, Bloomington, MN, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- 10:30 Continuing Professional Development  
BRIAN BEDARD, Grocery Manufacturers Association Science and Education Foundation, Washington, D.C., USA
- 11:00 Capacity Building for the Future  
LONE JESPERSEN, Maple Leaf Foods, Mississauga, ON, Canada
- 11:30 Educating the Next Generation of Food Safety Professionals: An Academic Perspective  
LEE-ANN JAYKUS, North Carolina State University, Raleigh, NC, USA
- 12:00 Lunch available in the Exhibit Hall**
- RT4 Aquaponics: How Do We Safely Produce Fish and Vegetables in the Same Water?**  
*Oregon Convention Center, B117 – B119*  
**Organizers: Kathleen Rajkowski, Tori Stivers**  
**Convenor: Tori Stivers**  
*Sponsored by the IAFP Foundation*
- 8:30 Panelists:  
KATHLEEN RAJKOWSKI, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA  
TREVOR SUSLOW, University of California, Davis, CA, USA  
MICHELLE SMITH, U.S. Food and Drug Administration, College Park, MD, USA  
SARAH TABER, The Aquaponics Association, Gainesville, FL, USA  
PAUL HARDEJ, FarmedHere, LLC, Bedford Park, IL, USA  
STEVEN HUGHES, Aquaculture Research Education Center, Cheyney University, Cheyney, PA, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- S7 Preventing Foodborne Illnesses from Donated or Recovered Foods**  
*Oregon Convention Center, B117 – B119*  
**Organizers: Yale Lary, Jena Roberts, Lily Yang**  
**Convenors: Atallah Baroudi, Yale Lary, Sharon Wood**
- 10:30 What Foods are Safe to Donate, What are the Legalities and Challenges  
MITZI BAUM, Feeding America, Chicago, IL, USA
- 11:00 Wholesale Perspective – When and How to Donate or Destroy Foods  
FRANK FERKO, US Foodservice, Rosemont, IL, USA
- 11:20 Innovative Food Safety Practices for Donating Food from On-site Food Service Operations  
BRIAN TURNER, Sodexo, Downers Grove, IL, USA
- 11:40 Retail Grocer Perspective – What to Donate, What to Destroy and How It is Done  
TODD ROSSOW, Publix Super Markets, Inc., Lakeland, FL, USA
- 12:00 Lunch available in the Exhibit Hall**
- S8 Designing Microbiologically Safe Microwaveable Foods: Electromagnetic and Microbial Modeling Approaches**  
*Oregon Convention Center, C120 – C122*  
**Organizers: Jeyamkondan Subbiah, Harshavardhan Thippareddi**  
**Convenors: Rocelle Clavero, Harshavardhan Thippareddi**
- 8:30 Safety of Microwaveable Refrigerated and Frozen Foods – An Industry Perspective  
SANJAY GUMMALLA, American Frozen Food Institute, McLean, VA, USA
- 9:00 Safety of Microwaveable Refrigerated and Frozen Foods – A Regulatory Perspective  
WILLIAM SHAW, U.S. Department of Agriculture-FSIS, Washington, D.C., USA
- 9:30 Developing and Validating Cooking Instructions for Frozen, Microwaveable Foods in a Test Kitchen  
STEVE VLOCK, ConAgra Foods, Omaha, NE, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- 10:30 A Virtual Test Kitchen (Modeling and Simulation) for Designing Microwaveable Foods  
JEYAMKONDAN SUBBIAH, University of Nebraska-Lincoln, Lincoln, NE, USA
- 11:00 Utility of the Virtual Test Kitchen for Designing Microwaveable Foods – Case Studies  
DAVID JONES, University of Nebraska-Lincoln, Lincoln, NE, USA



11:30 Designing Microbial Challenge Studies for Validating Cooking Instructions for Microwaveable Foods  
HARSHAVARDHAN THIPPAREDDI, University of Nebraska-Lincoln, Lincoln, NE, USA

**12:00 Lunch available in the Exhibit Hall**

**S9 Southeast Asia: Issues and Initiatives for Food Safety**

*Oregon Convention Center, C123*

**Organizers and Convenors: Linda Leake, Isabel Walls**

*Sponsored by the IAFP Foundation*

8:30 Meeting Regional Challenges: Malaysia is Leading the Way with ASEAN Food Safety Capacity Building Initiatives  
CHEOW KEAT CHIN, Ministry of Health Malaysia, Putrajaya, Malaysia

9:00 Singapore's Food Safety Rode Map: A Proactive Farm to Fork Strategy for Global Competitiveness  
MATHEW LAU, Nanyang Polytechnic, Yio Chu Kang, Singapore

9:30 Food Safety Issues: Role of Global Food Safety Curricula Initiative and Capacity Building to Protect Public Health  
M. AMAN WIRAKARTAKUSUMAH, Institut Pertanian Bogor, Bogor, Indonesia

**10:00 Break – Refreshments available in the Exhibit Hall**

**S10 The Vegetarian Lifestyle: Molecular Responses of Enteric Pathogens to Fresh Produce**

*Oregon Convention Center, C123*

**Organizer: Shirley Micallef**

**Convenors: Tong Liu, Shirley Micallef**

10:30 Genome-wide Transcriptional Profiling of *Salmonella* Typhimurium Epiphytically Attaching and Colonizing Tomato Plants  
SHIRLEY MICALLEF, University of Maryland-College Park, College Park, MD, USA

10:50 To Biofilm or Not to Biofilm: Role in Enteric Pathogen Attachment to Produce  
FRANCISCO DIEZ-GONZALEZ, University of Minnesota, Saint Paul, MN, USA

11:10 Shared Strategies between Plant Colonization and Host Infection  
MARIA BRANDL, USDA-ARS-WRRC, Produce Safety and Microbiology Research Unit, Albany, CA, USA

11:30 Proteomic Analysis of *Salmonella* Colonizing Produce  
XU LI, University of Nebraska-Lincoln, Lincoln, NE, USA

**12:00 Lunch available in the Exhibit Hall**

**T1 Technical Session 1 – Food Law and Regulation, Low Water Activity and Dairy and Beverages Technical Session**

*Oregon Convention Center, C124*

**Convenors: Dana Gradl, Brian Sauders**

T1-01 8:30 An Integrated Approach to a Process-based Quality and Food Safety Management System at Dr. Pepper/Snapple Group Multi Sites

FREDERIC CHERNE, George Russel, Andrew Smith, Dr. Pepper/Snapple Group, Williamson, NY, USA

T1-02 8:45 Import Alert Action Taken by the U.S. Food and Drug Administration as a Result of Regulatory Food Testing by the New York State Rapid Response Team during an International *Salmonella* Outbreak Investigation  
BRIAN SAUDERS, Erin Sawyer, John Luker, David Nicholas, Paula Huth, Mark Chen, Angela Hardin, Daniel Rice, New York State Department of Agriculture and Markets, Division of Food Laboratory, Albany, NY, USA

T1-03 9:00 A Novel Approach to FSIS Intensified Sampling in Response to a *Salmonella* Outbreak in Chicken Products  
STEPHANIE DEFIBAUGH-CHAVEZ, Alice Green, Danah Vetter, Aphrodite Douris, U.S. Department of Agriculture-FSIS, Washington, D.C., USA

T1-04 9:15 A Regulatory Agency Model for Identifying and Triaging Emerging Food Safety Issues: Best Practices and Lessons Learned

Alexander Domesle, NATE BAUER, Denise R. Eblen, U.S. Department of Agriculture, College Station, TX, USA

T1-05 9:30 Impact of Handling Practices on the Microbiota of Inshell California Walnuts

GORDON DAVIDSON, Thomas Williams, Linda J. Harris, University of California, Davis, Davis, CA, USA

T1-06 9:45 Evaluation of Vacuum Steam Pasteurization to Inactivate *Salmonella* PT30, *Escherichia coli* 0157:H7, and *Enterococcus faecium* on Flaxseed  
MANOJ SHAH, Julie Sherwood, Kari Graber, Teresa Bergholz, North Dakota State University, Fargo, ND, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

T1-07 10:30 Influence of Sucrose, Fructose, and Sorbitol on the Survival of *Salmonella* in a Low-water Activity Whey Protein Model System at 70°C

STEPHANIE BARNES, Joseph Frank, University of Georgia, Athens, GA, USA

T1-08 10:45 The Influence of Fat Content on *Salmonella* Survival in a Low-water Activity Model Food System at 50, 60, 70 and 80°C

LISA TRIMBLE, Joseph Frank, University of Georgia, Athens, GA, USA

 Symposia

 Roundtables

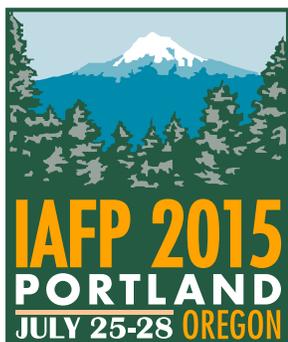
 Technicals

Blue Text – Developing Scientist Competitors

- T1-09 11:00 **Mesophilic and Thermophilic Sporeformers are of Primary Concern in Dairy Powders: A Survey Across the United States**  
KANIKA CHAUHAN, Postdoctoral Associate, Cornell University, Ithaca, NY, USA
- T1-10 11:15 **Prevalence of Pathogenic Shiga Toxin-producing *E. coli* (pSTEC) O157 and Non-O157 in Raw Milk Samples**  
SYLVIE HALLIER-SOULIER, Sandrine Dunglas, Christelle Nahuet, Aurore Besson, Sarah Jemmal, Dany Montagnac, Sabine Delannoy, Sarah Ganet, Sebastien Bouton, Patrick Fach, Estelle Loukiadis, Pall GeneDisc Technologies, Bruz, France
- T1-11 11:30 **Food Safety Concerns Regarding the Consumption and Sale of Unpasteurized Milk in Ireland**  
KARL MCDONALD, Carol Nolan, Wayne Anderson, The Food Safety Authority of Ireland, Dublin, Ireland
- T1-12 11:45 **Validating Environmental Pathogen Monitoring Programs in Small Dairy Processing Facilities**  
SARAH BENO, Matthew Stasiewicz, Robert Ralyea, Nicole Martin, Martin Wiedmann, Kathryn Boor, Cornell University, Ithaca, NY, USA
- 12:00 Lunch available in the Exhibit Hall**
- T2 Technical Session 2 – Modeling and Risk Assessment**  
*Oregon Convention Center, C125 – C126*  
**Convenors: Yi Chen, Michelle Danyluk**
- T2-01 8:30 **Neural Network Model for Behavior of *Salmonella* in Chicken Meat during Cold Storage**  
THOMAS OSCAR, U.S. Department of Agriculture-ARS, Princess Anne, MD, USA
- T2-02 8:45 **Development of a Graphical-user Interface to Optimize the Temperature for the Supply Chain of Leafy Greens Using Nonlinear Programming**  
ABHINAV MISHRA, Elisabetta Lambertini, Abani Pradhan, University of Maryland, College Park, MD, USA
- T2-03 9:00 **Dynamic Analysis, Prediction, and Monte Carlo Simulation of Growth of *Clostridium perfringens* in Cooked Beef**  
LIHAN HUANG, U.S. Department of Agriculture-ARS, Wyndmoor, PA, USA
- T2-04 9:15 **Modeling the Growth/No Growth Response of Non-O157 Shiga Toxin-producing *Escherichia coli* to Temperature, pH and Water Activity**  
LIN LI, Randall Phebus, Harshavardhan Thippareddi, University of Nebraska-Lincoln, Lincoln, NE, USA
- T2-05 9:30 **Development of Modeling and Validation Software Called FAME**  
HEEYOUNG LEE, Beomyoung Park, Mi-Hwa Oh, Eunji Gwak, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea
- T2-06 9:45 **A Meta-analysis Model Based on the Bigelow Equation to Determine Thermal Inactivation Parameters of *Alicyclobacillus acidoterrestris* in Fruit Beverages**  
Ursula Gonzales-Barron, VASCO CADAVEZ, Leonardo do Prado Silva, Anderson de Souza Sant'Ana, School of Agriculture, Polytechnic Institute of Braganza, Braganza, Portugal
- 10:00 Break – Refreshments available in the Exhibit Hall**
- T2-07 10:30 **Quantitative Risk Assessment of *Toxoplasma gondii* Infection through Consumption of Fresh Pork in the United States**  
MIAO GUO, Elisabetta Lambertini, Robert Buchanan, Jitender Dubey, Dolores Hill, H. Ray Gamble, Jeffrey Jones, Abani Pradhan, University of Maryland, College Park, MD, USA
- T2-08 10:45 **Quantitative Microbial Risk Assessment of Salmonellosis from Australian Pork Burgers**  
PHILLIP GURMAN, Tom Ross, Andreas Kiermeier, South Australian Research and Development Institute, Adelaide, Australia
- T2-09 11:00 **Quantitative Analysis of the Public Health Impact of *E. coli* O157:H7 Cross-contamination in Beef Processing Plants**  
ANAND ADITYA, Rolando Flores, Bing Wang, University of Nebraska-Lincoln, Lincoln, NE, USA
- T2-10 11:15 **Risk Assessment of *Vibrio parahaemolyticus* and Interventions for Raw Oysters in Taiwan**  
Hsin-I Hsiao, Cheng-An Hwang, Vivian Chi-Hua Wu, YENSHAN HUANG, National Taiwan Ocean University, Keelung, Taiwan
- T2-11 11:30 **Norovirus Transmission during Produce Harvest and Packing: A Quantitative Microbial Risk Assessment Model Approach**  
ANNA FABISZEWSKI DE ACEITUNO, Kira Newman, Lee-Ann Jaykus, Juan Leon, Emory University, Atlanta, GA, USA
- T2-12 11:45 **A Food Processing Vulnerability Tool Exploring Public Health Risks**  
EMMA HARTNETT, Greg Paoli, Donald W Schaffner, Charles Haas, Risk Sciences International, Ottawa, ON, Canada
- 12:00 Lunch available in the Exhibit Hall**



# TIME MANAGEMENT SESSION



## Where'd My Day Go? Time & Attention in an Always- Available World

by Merlin Mann



- Ever been working on something really important only to find yourself constantly wondering what catastrophe might be waiting for you back in your E-mail inbox?
  - Ever respond to one simple text and have it suddenly turn into a 2-hour/50 message table tennis match?
  - Ever sat in what feels like the same go-nowhere meeting you've been having every week for five years?
- Ever wonder if there's any hope for reclaiming your time and attention? You're not alone.

Seems like every day we're presented with more and more stuff that wants our time and attention on its own schedule and terms. So, how can we shake that terrible feeling of overwhelm and dread in order to get back to focusing on the work that we know really matters?

In this talk, Merlin Mann demonstrates how changing technology and culture have unintentionally plotted to upset the balance of scarcity and plenty in our lives—and why leaving that imbalance unaddressed can be poison to every knowledge worker.

You'll learn why it's critically important to set and honor boundaries that protect your time as well as how to develop new skills to guard against unwanted or unproductive drains on your already-overwhelmed attention.

This provocative and engaging presentation applies refreshing, high-level thinking to the problem of how to renegotiate and reclaim the attention you've ceded to others, as well as fostering discussion on the changes your team can start making today to improve work culture and create a healthy, respectful, and productive work environment.

Merlin Mann is known for his ability to help knowledge workers, executive teams, and all manner of creative types (including food safety professionals) discover how to reclaim their attention, improve their productivity, and fundamentally reinvent their approach to doing the work that they love. Merlin has received rave reviews for delivering energetic productivity talks at Apple, Google, Yahoo!, Adobe, Xerox PARC, and many other companies and organizations. Merlin co-hosts the Back To Work podcast, an award-winning talk show discussing productivity, communication, work barriers, constraints, tools, and more. He delivers practical, useful, and entertaining insight into the challenges of doing great work in an environment defined by distraction and incongruous expectations.



**SUNDAY, JULY 26, 2015 – 12:15 P.M. – 1:15 P.M.**  
**OREGON CONVENTION CENTER, B113–B114**

## SUNDAY AFTERNOON JULY 26

Posters will be on display 10:00 a.m. – 6:00 p.m.  
(See details beginning on page 67)

**12:15 p.m. – 1:15 p.m.** – **Time Management Session –**  
Merlin Mann – Where'd My Day Go? Time and Attention in an Always-Available World  
*Oregon Convention Center, B113–B114*

**S11** **The Rise of the Genomes II: Practical Integration of Whole Genome Sequencing into Food Safety**  
*Oregon Convention Center, Oregon Ballroom 201*  
**Organizer: Delia Murphy**  
**Convenors: Deann Akins-Lewenthal, Peter Gerner-Smidt**  
*Sponsored by the ILSI North America Technical Committee on Food Microbiology*

1:30 Back to Basics: What is Whole Genome Sequencing? Why the Hype?  
DAVID ENGELTHALER, Translational Genomics Research Institute, Flagstaff, AZ, USA

2:00 Is Whole Genome Sequencing Really Replacing Traditional Microbiology?  
PETER GERNER-SMIDT, Centers for Disease Control and Prevention, Atlanta, GA, USA

2:30 Whole Genome Sequencing Has Transformed Detection and Investigation of Outbreaks!  
KATHIE GRANT, Public Health England, London, England

**3:00 Break – Refreshments available in the Exhibit Hall**

3:30 Whole Genome Sequencing for Surveillance of the Food Supply – Stopping Outbreaks before They Appear!  
PETER EVANS, U.S. Food and Drug Administration, College Park, MD, USA

4:00 Practical Experience with Whole Genome Sequencing in the Food Industry  
LEEN BAERT, Nestlé Research Center, Vers chez le Blanc, Switzerland

4:30 Speaker Roundtable

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S12** **Evolving Methods for Foodborne Illness Source Attribution**

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers: Christopher Alvares, Michael Batz**  
**Convenors: Michael Batz, Kristin Holt**

1:30 Application of a Bayesian Frequency-matching Model for Attributing Salmonellosis to FDA and FSIS Regulated Products  
ANTONIO VIEIRA, U.S. Centers for Disease Control and Prevention, Atlanta, GA, USA

2:00 A Two-stage Statistical Model to Estimate Outbreak-based Food Source Attribution for Four Major Foodborne Pathogens  
R. MICHAEL HOEKSTRA, Centers for Disease Control and Prevention, Richmond, VA, USA

2:30 Evaluating Uncertainties in Source Attribution Based on Foodborne Outbreak Data  
MICHAEL BAZACO, U.S. Food and Drug Administration, College Park, MD, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

3:30 Attributing *Salmonella* to Food Sources Using Whole Genome Sequencing  
CRAIG HEDBERG, University of Minnesota, Minneapolis, MN, USA

4:00 FoodNet Canada's Source Attribution of Campylobacteriosis Using an Innovative Subtyping Method of Comparative Genomic Fingerprinting  
FRANK POLLARI, Public Health Agency of Canada, Guelph, ON, Canada

4:30 TBD

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S13** **Pathogen Control Processes for Pet Food Manufacturing**

*Oregon Convention Center, Oregon Ballroom 203*

**Organizers: Bradley Marks, Michele Evans**  
**Convenor: Peter Taormina**

1:30 Implementing cGMPs in Pet Food Manufacturing Systems – Special Challenges  
MICHELE EVANS, Hills Pet Nutrition, Topeka, KS, USA

2:00 Novel Application of Competitive Microflora for Preventing Pathogens in the Pet Food Processing Environment  
SIOBHAN REILLY, Log10 Probiotics, Ponca City, OK, USA

2:30 Validation of a Process Kill Step – A Case Study with a Dry Pet Food Product  
ADAM WATKINS, Mars Global Petcare, Nashville, TN, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

**S14** **Safe Food for the Entire Family: The Global Pet Food Safety Frontier**

*Oregon Convention Center, Oregon Ballroom 203*

**Organizers: Robert Buchanan, Linda Leake**  
**Convenors: Elisabetta Lambertini, Linda Leake, Abani Pradhan**

3:30 *Salmonella* Transmission Linked to Contamination of Pet Foods: What We Have Learned  
ROBERT BUCHANAN, University of Maryland, College Park, MD, USA

4:00 The Deadly Jerky Pet Treats Mystery: Are We Close to Solving the Case?  
LEE ANNE PALMER, U.S. Food and Drug Administration, Rockville, MD, USA

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

S  
U  
N  
D  
A  
Y  
  
P  
M

4:30 Pet Food Processing Regulations: The Impact of the Food Safety Modernization Act on Pet Food Manufacturing  
KARL NOBERT, The Nobert Group, LLC, Sterling, VA, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S15 20 Years of Risk-based International Trade — Successes and Failures of the WTO**

*Oregon Convention Center, B110 – B112*

**Organizers: Yuhuan Chen, Ian Jenson, Isabel Walls**  
**Convenors: Yuhuan Chen, Isabel Walls**

*Sponsored by the IAFP Foundation*

1:30 WTO, SPS, TBT – How the System Works and What It Means  
GRETCHEN STANTON, World Trade Organisation, Geneva, Switzerland

2:00 Risk and Risk Analysis – The State of the Art  
SARAH CAHILL, Food and Agriculture Organization of the United Nations, Rome, Italy

2:30 An Acceptable Level of Consumer Protection – Multiple Meanings  
JENS KIRK ANDERSEN, Technical University of Denmark, Copenhagen, Denmark

**3:00 Break – Refreshments available in the Exhibit Hall**

3:30 International Risk Assessments – International Agreement?  
ROBERT BUCHANAN, University of Maryland, College Park, MD, USA

4:00 Risk Assessment and WTO Dispute Resolution  
ANDREW STEPHENS, U.S. Food and Drug Administration, Washington, D.C., USA

4:30 International Trade Barriers – Can the System Work Better?  
IAN JENSON, Meat and Livestock Australia, North Sydney, Australia

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**RT5 Preharvest Control of Zoonoses: Opportunities and Hurdles**

*Oregon Convention Center, B113 – B114*

**Organizers: Carl Custer, Divya Jaroni**  
**Convenor: Carl Custer**

1:30 Panelists:  
TREVOR SUSLOW, University of California, Davis, CA, USA  
MOHAMMAD KOOHMARAIE, IEH Laboratories & Consulting Group, Lake Forest Park, WA, USA  
DANIEL ENGELJOHN, U.S. Department of Agriculture-FSIS, Washington, D.C., USA  
MARK BERRANG, U.S. Department of Agriculture-ARS, Athens, GA, USA  
BOB O’CONNOR, Foster Farms Poultry, Livingston, CA, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

**RT6 Food Safety Training for Non-native English Speakers**

*Oregon Convention Center, B113 – B114*

**Organizer: Phillip Crandall**  
**Convenor: Francie Buck**

*Sponsored by International Commission in Food Mycology (ICFM), BCN Research Laboratories, Inc., Universal Sanitizers and Supplies, Inc., AEMTEK, Inc.*

3:30 Panelists:  
PHILIP CRANDALL, University of Arkansas, Fayetteville, AR, USA  
LONE JESPERSEN, Maple Leaf Foods, Mississauga, ON, Canada  
DANIEL OKENU, HEB, San Antonio, TX, USA  
KATEY KENNEDY, U.S. Food and Drug Administration, Beaverton, OR, USA  
GINA KRAMER, Savour Food Safety International, Columbus, OH, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S16 Is There a Role for “Modern Toxicology” in Regulatory Science?**

*Oregon Convention Center, B115 – B116*

**Organizers and Convenors: Suzanne Fitzpatrick, Marianne Solomotis**

*Sponsored by the IAFP Foundation and Thermo Scientific*

1:30 FDA Chemical-specific Regulatory Needs  
SUZANNE FITZPATRICK, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

2:00 Integrated Approaches to Testing for Endocrine Disruption in Chemical Safety Assessments  
DAVID DIX, EPA, Washington, D.C., USA

2:30 The Body Reassembled: In Vitro Models for Safety Assessment  
ROBERT CHAPIN, Pfizer Pharmaceuticals, Inc., New London/Norwich, CT, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

3:30 Comparison of Simultaneous In Vivo with In Vitro Studies: Diglycolic Acid as an Example  
ROBERT SPRANDO, U.S. Food and Drug Administration, Laurel, MD, USA

4:00 Extrapolation of In Vitro Toxicity Assay Results to Provide Information Regarding In Vivo Exposures  
HARVEY CLEWELL, The Hamner Institutes for Health Sciences, Research Triangle Park, NC, USA

4:30 Translation of In Vitro Results to the Industry and Consumer  
HEIDI BIALK, PepsiCo, Valhalla, NY, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**



Symposia



Roundtables



Technicals

Blue Text – Developing Scientist Competitors

**S17** **Updating Our Knowledge in Assessing Food Safety Risk: Meta-analysis, Bayesian Statistics and Beyond**

*Oregon Convention Center, B117 – B119*

**Organizers: Vasco Cadavez, Ursula Gonzales-Barron, Vijay Juneja**

**Convenor: Vijay Juneja**

*Sponsored by the IAFP Foundation*

- 1:30 Meta-analysis Modelling for Summarizing the Effect of Interventions for Food Safety Decision-making  
URSULA GONZALES-BARRON, School of Agriculture, Polytechnic Institute of Braganza, Braganza, Portugal
- 2:00 How Bayesian Methods Might be Integrated in Food Safety Risk Assessment Process  
MOEZ SANAA, ANSES, Maisons Alfort, France
- 2:30 Using Published Data and Expert Elicitation to Update *L. monocytogenes* Risk Models  
YUHUAN CHEN, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA
- 3:00 Break – Refreshments available in the Exhibit Hall**
- 3:30 Bayesian Approaches to Microbial Risk Assessment  
MICHAEL WILLIAMS, Risk Assessment Division, Food Safety and Inspection Service, USDA, Fort Collins, CO, USA

- 4:00 Construction of Meta-analytical Predictive Microbiology Models  
VASCO CADAVEZ, School of Agriculture, Polytechnic Institute of Braganza, Braganza, Portugal
- 4:30 A Bayesian Approach to Interpreting Quality Control Data of *Cronobacter* spp. in Infant Powder Formula  
FRIEDRICH WESTERHOLT, University College Dublin, Dublin, Ireland

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S18** **Recent Developments in Food Mycology: From Safety to Spoilage**

*Oregon Convention Center, C120 – C122*

**Organizers: Margarita Gomez, Emilia Rico-Munoz**

**Convenors: Frank Burns, Margarita Gomez**

- 1:30 Fungal Associations in Foods and Their Role in Food Safety and Spoilage  
ROBERT SAMSON, CBS-KNAW Fungal Biodiversity Centre, Utrecht, Netherlands
- 2:00 New Developments in Detection and Identification of Foodborne Molds  
JOS HOUBRAKEN, CBS-KNAW Fungal Biodiversity Centre, Utrecht, Netherlands

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

## Join bioMérieux at the 14<sup>th</sup> Annual Scientific Symposium

### What is “Big data” and How Might Metagenomics, Whole Genome Sequences, and other Large Data Sets Change Food Microbiology?

Sunday, July 26th at 6pm in the Oregon Convention Center

*bioMérieux Welcomes Moderator, Gary Acuff, PhD*

Everyone tells us that whole genome sequencing, metagenomics, and other forms of big data are going to lead to improved food safety and make our lives as food microbiologists easier. These new molecular tools are generating tremendous amounts of data, but from a practical day-to-day basis, how is the potential for all of this data going to affect how food microbiology labs operate and how food safety programs are established? Do public health and regulatory labs need different data than a food company lab? These are just some of the questions that will be addressed by a panel of experts at the bioMérieux 14th Annual Symposium.

For more information or to register visit:  
<https://microsite.biomerieux-usa.com/iafp2015/>

FOOD SAFETY  
DECIDE WITH CONFIDENCE



S  
U  
N  
D  
A  
Y  
  
P  
M

2:30 The Effect of Low pH and Oxygen Content on Mycotoxin Production in Beverages and Acid and Acidified Products  
ULF THRANE, Jens Frisvad, Technical University of Denmark, Lyngby, Denmark

**3:00 Break – Refreshments available in the Exhibit Hall**

3:30 Novel Compounds Used as Preservatives in Beverages and Low pH Products  
NARESH MAGAN, Cranfield University, Bedfordshire, United Kingdom

4:00 Role of Hydrophobins Produced by Fungi during the Induction of Primary Gushing of Bottled Beer  
LUDWIG NIESSEN, Lehrstuhl für Technische Mikrobiologie, Freising, Germany

4:30 Occurrence of Heat-resistant Mold Ascospores in the Beverage Processing Environment: Assessment and Elimination  
EMILIA RICO-MUNOZ, BCN Research Laboratories, Inc., Rockford, TN, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**T3 Technical Session 3 – Laboratory and Detection Methods**

*Oregon Convention Center, C123*

**Convenors: Kaiping Deng, Leslie Thompson**

T3-01 Assessment of Pre-enrichment Conditions for Molecular and Cultural Detection of *Listeria* Species and *L. monocytogenes* from Produce Cooling and Packing Environmental Samples  
1:30 JANNETH PINZON, Adrian Sbodio, Lindsay Derby, Jeremy Roland, Kristin Livezey, W. Evan Chaney, Trevor Suslow, University of California, Davis, Davis, CA, USA

T3-02 Assessment on the Sensitivity and Specificity of Five Culture Media in the Detection of Environmental *Escherichia coli* O157  
1:45 MYRIAM GUTIERREZ, Marlene Janes, Damir Torrico, Louisiana State University, Baton Rouge, LA, USA

T3-03 Development of an Improved Sampling Method for Concentrating Viruses from Bioaerosols  
2:00 JEFFREY CHANDLER, Margaret Davidson, Joshua Schaeffer, Alma Perez-Mendez, John Volckens, Sheryl Magzamen, Lawrence Goodridge, Stephen Reynolds, Bledar Bisha, University of Wyoming, Laramie, WY, USA

T3-04 Challenges to Develop a Detection Method for Hepatitis A Virus of Culture or Clinical Origin from Frosting Containing Berries  
2:15 EFI PAPAFRAGKOU, U.S. Food and Drug Administration-CFSAN, Laurel, MD, USA

T3-05 Characterization of Outer Membrane of *Salmonella* Responding to Different Inactivation Treatments Using Surface Enhanced Raman Spectroscopy  
2:30 HUA ZHANG, Dillon Murray, Lynne McLandsborough, Lili He, University of Massachusetts, Amherst, Amherst, MA, USA

T3-06 Development of a Novel CRISPR-based Molecular Typing Method of *Salmonella*  
2:45 Xiaofei Zhuang, DAO-FENG ZHANG, Xiujuan Zhou, Xianming Shi, Chunlei Shi, Shanghai Jiao Tong University, Shanghai, China

**3:00 Break – Refreshments available in the Exhibit Hall**

T3-07 Immunosensor-based Simultaneous Detection of 7 Major STEC Serotypes  
3:30 Ning Gao, Keith Schneider, Kwang Cheol Jeong, SOOHYOUN AHN, University of Florida, Gainesville, FL, USA

T3-08 Application of a Novel Four-plex Quantitative PCR Assay for Quantification of *Escherichia coli* O157 on Cattle Hide and Carcass  
3:45 LANCE NOLL, Pragathi Shridhar, Xiaorong Shi, Natalia Cernicchiaro, David Renter, Jianfa Bai, TG Nagaraja, Kansas State University, Manhattan, KS, USA

T3-09 Colorimetric-SERS Dual Detection of Food Contaminants Using Aptamer-gold Nanoparticle Conjugates  
4:00 SHINTARO PANG, Lili He, University of Massachusetts, Amherst, Amherst, MA, USA

T3-10 Validation of a Gold Nanoparticle DNA-based Biosensor for the Detection of Non-PCR Amplified Bacterial Foodborne Pathogens in Solid Food Matrices  
4:15 Masson Blow, Evangelyn Alocilja, SYLVIA VETRONE, Whittier College, Whittier, CA, USA

T3-11 Evaluation of an Automated Most Probable Number System for Use in Measuring Bacteriological Quality of Grade “A” Milk Products: A Method Validation Study  
4:30 SAMANTHA LINDEMANN, Matthew Kmet, Ravinder M. Reddy, J. Stan Bailey, Steffen Uhlig, Ramesh Yettella, U.S. Food and Drug Administration, Bedford Park, IL, USA

T3-12 Accuracy and Precision of Analyst and Method Performance in Testing Indicator Organisms in Infant Formula Based on a Proficiency Study  
4:45 RAVINDER M. REDDY, Robert Newkirk, Samantha Lindemann, Hossein Daryaei, Christopher Powers, Steffen Uhlig, U.S. Food and Drug Administration, Bedford Park, IL, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**T4 Technical Session 4 – General Microbiology**

*Oregon Convention Center, C124*

**Convenors: Alvin Lee, Hyun-Gyun Yuk**

T4-01 Assessment of the Effect of Ingredients on Pathogen Survival in Cookie Dough  
1:30 SHUANG WU, Alan Gutierrez, Keith Schneider, George Baker, Kwang Cheol Jeong, Soohyoun Ahn, University of Florida, Gainesville, FL, USA

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

T4-02  
1:45 Analysis of Osmotic Stress on Methicillin-resistant *Staphylococcus aureus* (MRSA)  
AARON PLEITNER, Soraya Chaturongakul, Haley Oliver, Purdue University, West Lafayette, IN, USA

T4-03  
2:00 *Lactobacillus plantarum* Isolates from Different Vegetables That Have Antifungal Activity against the Common Cheese Spoilage Mold *Penicillium commune* are Genetically Related  
Whitney Beddoes, Nidhi Bansal, MARK TURNER, University of Queensland, Brisbane, Australia

T4-04  
2:15 Assessing Immunological Risk of *Listeria* Infection in the Aging Population Using a Susceptible Animal Model  
MOHAMMAD SAMIUL ALAM, Matthew Costales, Christopher Cavanagh, Dennis Gaines, Marion Pereira, Kristina Williams, U.S. Food and Drug Administration-CFSAN, Laurel, MD, USA

T4-05  
2:30 Histo-blood Group Antigen Expressing Bacteria May Help with Human Norovirus Survival before Causing Infection  
DAN LI, Adrien Breiman, Jacques le Pendu, Mieke Uyttendaele, Ghent University, Ghent, Belgium

T4-06  
2:45 Antibacterial Effect and Mechanism of High-intensity 405 nm Light Emitting Diode on *Bacillus cereus*, *Listeria monocytogenes*, and *Staphylococcus aureus* under Refrigerated Condition  
Min-Jeong Kim, Marta Mikš-Krajnik, Amit Kumar, Hyun-Jung Chung, HYUN-GYUN YUK, National University of Singapore, Singapore, Singapore

**3:00 Break – Refreshments available in the Exhibit Hall**

T4-07  
3:30 Modeling the Growth Rate of *Pseudomonas fluorescens* as a Function of Residual Dioxygen Concentrations in Food Packages  
Anne Lochardet, Marie-Laure Divanac'h, Dominique Thuault, FLORENCE POSTOLLEC, Olivier Couvert, Veronique Huchet, ADRIA UMT14.01 SPORE RISK, Quimper, France

T4-08  
3:45 *The Role of Pseudomonas aeruginosa* DesB on Host Cell Infection  
SEJEONG KIM, Yohan Yoon, Kyoung-Hee Choi, Sookmyung Women's University, Seoul, South Korea

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors



**YOU'RE INVITED**  
TO JOIN US FOR THE  
**YOUR FOOD QUALITY & SAFETY TEAM DESERVES AN AWARD.**

14<sup>TH</sup> ANNUAL  
**Food Quality & Safety**  
FARM TO FORK SAFETY  
**AWARD CEREMONY**

AT THE IAFP ANNUAL MEETING

**Sunday, July 26, 2015**  
Oregon Convention Center • Ballroom 252 • 6:15–7:30 pm PST

This prestigious award honors the dedication and achievement of a food quality and safety assurance team that has made exceptional contributions to food safety with a positive impact on business results.

[www.foodqualityandsafety.com/award.htm](http://www.foodqualityandsafety.com/award.htm)

S  
U  
N  
D  
A  
Y  
  
P  
M

- T4-09  
4:00 *Listeria monocytogenes* from the British Columbia Food Chain Show Evidence of Co-selection of Cadmium and Benzalkonium Chloride Resistance  
MICHAEL MILILLO, Jessica Chen, Kevin Allen, University of British Columbia, Vancouver, BC, Canada
- T4-10  
4:15 Effect of Probiotic on the Survival of Non-O157 Shiga Toxin-producing *E. coli* (STEC) Strains in African Fermented Weaning Food Products  
OLANREWAJU FAYEMI, John RN Taylor, Elna M Buys, University of Pretoria, Pretoria, South Africa
- T4-11  
4:30 Comparison of First-order and Weibull Modelling of the Thermal Inactivation Kinetics of *E. coli* O157:H7, Non-O157:H7 *E. coli* and *Salmonella enterica* in Fettuccine Alfredo  
MALCOND VALLADARES, Emefa Monu, P. Michael Davidson, Doris D'Souza, University of Tennessee-Knoxville, Knoxville, TN, USA
- T4-12  
4:45 Chemical, Physical and Morphological Properties of Bacterial Biofilms Affect Survival of Encased *Campylobacter jejuni* under Aerobic Stress  
JINSONG FENG, Xiaonan Lu, University of British Columbia, Vancouver, BC, Canada

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

### T5 Technical Session 5 – Non-microbial Food Safety; Sanitation; and Retail and Food Service Safety

*Oregon Convention Center, C125 – C126*

Convenors: Benjamin Chapman, Zhinong Yan

- T5-01  
1:30 A Comprehensive Needs Assessment of Retail Food Safety Practices of Farmers' Market Vendors in Pennsylvania  
JOSHUA SCHEINBERG, Rama Radhakrishna, Catherine Cutter, The Pennsylvania State University, Department of Food Science, University Park, PA, USA
- T5-02  
1:45 Current Practices at Farmers' Markets in Florida and Their Effect on Food Safety  
Celia Lynch, Amarat Simonne, Lisa House, SOOHYOUN AHN, University of Florida, Gainesville, FL, USA
- T5-03  
2:00 Investigation of Food Safety Practices and Standard Operating Procedures in North Carolina Food Pantries  
ASHLEY CHAIFETZ, Benjamin Chapman, University of North Carolina, Chapel Hill, NC, USA
- T5-04  
2:15 Effect of Abusive Storage Temperatures on the Survival and Growth of *Escherichia coli* O157:H7 in Leafy Green Vegetables Sold at Local Egyptian Markets  
ROWAIDA KHALIL, Faculty of Science, Alexandria University, Alexandria, Egypt
- T5-05  
2:30 Prevalence Survey for Norovirus and Hepatitis A Virus in Fresh Australian Leafy Greens and Berries at Retail  
VALERIA TOROK, Kate Hodgson, Jessica Tan, South Australian Research and Development Institute, Adelaide, Australia

- T5-06  
4:45 Influence of Maturity, Source, Handling and Processing on the Safety of Canned Ackees (*Blighia sapida*)  
ANDRÉ GORDON, Carole Lindsay, Technological Solutions Limited, Kingston, Jamaica

3:00 **Break – Refreshments available in the Exhibit Hall**

- T5-07  
3:30 Quantitative Analysis of Handwashing Signs and Poster Guidance  
DANE JENSEN, Donald Schaffner, Rutgers University, New Brunswick, NJ, USA
- T5-08  
3:45 Deep Cleans Reduce Persistence of *Listeria monocytogenes* in Retail Delis  
ANDREA RAY, Susan Hammons, Jingjin Wang, Haley Oliver, Purdue University, West Lafayette, IN, USA
- T5-09  
4:00 Managing Condensation on Overhead Surfaces Using Microcapillary Film  
STEVEN SWANSON, Kurt Halverson, Caleb Nelson, Dave Peterson, 3M, St. Paul, MN, USA
- T5-10  
4:15 The Hygienic Design of Manual Cleaning Equipment  
DEBRA SMITH, Vikan, Swindon, United Kingdom
- T5-11  
4:30 Screening and Prioritizing Conventional and Emerging Disinfection By-products Developed in Fresh and Fresh-cut Produce during Chlorine-based Disinfection  
WAN-NING LEE, Ching-Hua Huang, Georgia Institute of Technology, Atlanta, GA, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

5:15 p.m. – 6:15 p.m. **A Framework for Assessing the Effects of the Food System – The Case of Animal Welfare**

*Oregon Convention Center, B110-B112*

Organizer and Convenor: Katherine M.J. Swanson

Overview of the IOM's Framework for Assessing Effects of the Food System  
MARIA ORIA, The National Academies, Washington, D.C., USA

Case Study – Comparing Hen Housing Practices and Their Effects on Various Domains  
FRANK MITLOEHNER, University of California, Davis, Davis, CA, USA

Food Safety Implications and Considerations for Collaboration  
KATHERINE M.J. SWANSON, KMJ Swanson Food Safety, Inc., Mendota Heights, MN, USA

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

## EVENING OPTIONS

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

### Affiliate Meetings

- 5:15 p.m. – **Latin America Group Meeting**  
6:00 p.m. *Oregon Convention Center, C124*
- 5:15 p.m. – **Indian Association for Food Protection  
in North America**  
6:30 p.m. *Oregon Convention Center, C120 – C122*
- 5:15 p.m. – **China Association for Food Protection  
along with the Chinese Association for  
Food Protection in North America**  
6:45 p.m. *Oregon Convention Center, B117 – B119*
- 5:15 p.m. **The Progress of China Food  
Safety Law and Food Safety  
Standards**  
XIUMEI LIU, China National  
Center for Food Safety Risk  
Management, Beijing, China
- 6:00 p.m. **Business Meeting**
- 5:30 p.m. – **Africa Association for Food Protection**  
7:00 p.m. *Oregon Convention Center, C123*

---

6:00 p.m. **bioMérieux Symposium**  
*Portland Ballroom 251*

6:15 p.m. **Food Safety & Quality Award  
Presentation**  
*Portland Ballroom 252*



# JOIN IAFP TODAY.

**YOUR CAREER. YOUR FUTURE.  
YOUR ORGANIZATION.**

Join more than 4,000 food safety professionals who are committed to **Advancing Food Safety Worldwide®**.

**foodprotection.org**



International Association for  
**Food Protection®**

*Advancing Food Safety Worldwide®*

6200 Aurora Avenue, Suite 200W Des Moines, IA 50322 +1 515.276.3344 +1 800.369.6337

## MONDAY MORNING JULY 27

Posters will be on display 10:00 a.m. – 6:00 p.m.  
(See details beginning on page 79)

### S19 **The Never-ending Quest for Discriminatory Power: Updates on Molecular Analytics of Foodborne Pathogens**

*Oregon Convention Center, Oregon Ballroom 201*

**Organizers: Byron Chaves, Matthew Moore, David White**

**Convenors: Matthew Moore, David White**

8:30 The Evolution of the Gold Standard for Molecular Epidemiology  
JOHN BESSER, Centers for Disease Control and Prevention, Atlanta, GA, USA

8:50 Clustered Regularly Interspaced Short Palindromic Repeats, CRISPRs: Much More Than a Long Acronym  
EDWARD DUDLEY, The Pennsylvania State University, University Park, PA, USA

9:10 Molecular Subtyping and Serotyping of *Salmonella* by Genome Sequence Scanning  
ERIC BROWN, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

9:30 Panel Discussion  
DAVID WHITE, U.S. Food and Drug Administration, Silver Spring, MD, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

### S20 **I Want It All and I Want It Now: Metagenomics and Food Safety**

*Oregon Convention Center, Oregon Ballroom 201*

**Organizer and Convenor: John Besser**

*Sponsored by the IAFP Foundation*

10:30 Metagenomics for Detecting and Solving Outbreaks  
JOHN BESSER, Centers for Disease Control and Prevention, Atlanta, GA, USA

11:00 Metagenomic Assessment of the Tomato Phyllosphere and Prospects for Contamination Control  
ERIC BROWN, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

11:30 Paleomicrobiology: Revealing Fecal Microbiomes of Ancient Indigenous Cultures  
STEVEN MASSEY, University of Puerto Rico, San Juan, Puerto Rico

**12:00 Lunch available in the Exhibit Hall**

### S21 **The Worlds of Shiga Toxin-producing *E. coli* and Beef Continue to Collide: So What's Happening Lately?**

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers and Convenors: Linda Leake, Manpreet Singh**

8:30 The STEC CAP (Coordinated Agricultural Project) Model: Shiga-toxigenic *E. coli* in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach  
RANDALL PHEBUS, Kansas State University, Manhattan, KS, USA

9:00 Masterful Molecular Methods: New Technologies for Shiga Toxin-producing *E. coli* Testing in Beef  
MICK BOSILEVAC, U.S. Meat Animal Research Center, Meat Safety and Quality Research Unit, Clay Center, NE, USA

9:30 From Deep in the Heart of Texas: Interventions to Lessen the Risks of Shiga Toxin-producing *E. coli* Contamination in Beef  
GARY ACUFF, Texas A&M University, College Station, TX, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

### S22 **Changing the Dogma on Meat Shelf Life**

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers: Betsy Booren, Peter Taormina, Xianqin Yang,**

**Convenor: Catherine Cutter**

*Sponsored by the IAFP Foundation*

10:30 Shelf Life of Vacuum-packed Meat – New Data, New Ideas  
XIANQIN YANG, Agriculture and Agri-Food Canada, Lacombe, AB, Canada

11:00 Metagenomics Reveals Microbial Communities in Vacuum-packed Meats  
MARK TAMPLIN, University of Tasmania, Hobart, Australia

11:30 Supply Chains and Customers – Shelf-life Expectations  
IAN JENSON, Meat and Livestock Australia, North Sydney, Australia

**12:00 Lunch available in the Exhibit Hall**



Symposia



Roundtables



Technical

Blue Text – Developing Scientist Competitors

**S23 Using Foodborne Disease Surveillance Performance Measures to Improve the Timeliness and Effectiveness of Foodborne Disease Outbreak Investigations**

*Oregon Convention Center, Oregon Ballroom 203*

**Organizer and Convenor: Craig Hedberg**

*Sponsored by the IAFP Foundation*

8:30 Developing Metrics to Improve Outbreak Investigation  
CRAIG HEDBERG, University of Minnesota, Minneapolis, MN, USA

8:50 FoodCORE Metrics: Methods and Meaningful Results  
GWEN BIGGERSTAFF, Centers for Disease Control and Prevention, Atlanta, GA, USA

9:10 Use of the CIFOR Metrics and Target Ranges by the CO Integrated Food Safety Center of Excellence (COE)  
RACHEL JERVIS, Colorado Department of Public Health and Environment, Denver, CO, USA

9:30 Building the Evidence Base to Define Best Practices  
JOSH ROUNDS, Minnesota Department of Health, St. Paul, MN, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

**S24 The Puzzle of Microbial Traceability: Unraveling through Industrial and Regulatory Know-how**

*Oregon Convention Center, Oregon Ballroom 203*

**Organizers: Keith Lampel, Omar Oyarzabal, Hari Prakash Dwivedi**

**Convenors: Omar Oyarzabal, Hari Prakash Dwivedi**

10:30 Review the Process of Microbial Traceability  
PETER GERNER-SMIDT, Centers for Disease Control and Prevention, Atlanta, GA, USA

11:00 The Stories for Success and Failure of Microbial Traceability and Lesson Learned during the Outbreak Investigation  
SHERRI MCGARRY, U.S. Food and Drug Administration, College Park, MD, USA

11:30 The Success and Failure Stories of Microbial Traceability and Lessons Learned during the Industrial Product Contamination Investigations  
MICHAEL ROBACH, Cargill, Minneapolis, MN, USA

**12:00 Lunch available in the Exhibit Hall**

**S25 Importance of Codex, Regulations, Standardization, Validation, Certification, Verification and Accreditation in Global Trade**

*Oregon Convention Center, B110 – B112*

**Organizer: DeAnn Benesh**

**Convenors: DeAnn Benesh, Pamela Wilger**

*Sponsored by the IAFP Foundation*

8:30 CODEX: Translation of Codex Standards, Guides, Codes of Practice into Regulations  
EMILIO ESTEBAN, U.S. Department of Agriculture-FSIS-OPHS-EALS, Athens, GA, USA

9:00 Regulations: EC No 2073:2005 – Legislation on Microbial Criteria of Foodstuffs and Use of Standardized Methods  
PATRICE ARBAULT, BioAdvantage Consulting, Orlenas, France

9:30 Standardization: Establishment of Global Standards for Validation and Certification  
DANIELE SOHIER, ADRIA Développement, Quimper, France

**10:00 Break – Refreshments available in the Exhibit Hall**

10:30 Validation/Certification/Verification: Key Requirements for Method Certification and Use of Validated Methods  
ERIN CROWLEY, Q Laboratories, Inc. Cincinnati, OH, USA

11:00 Accreditation: Lab Use of Certified Methods, Proficiency Test Providers and Mutual Recognition of Global Accreditation Partners

ROY BETTS, Campden BRI, Gloucestershire, United Kingdom

11:30 Global Trade: Tying It All Together Using Real Life Examples to Demonstrate Value and Importance of ALL Topics in Global Trade

TIM JACKSON, Nestlé USA, Inc., Glendale, CA, USA

**12:00 Lunch available in the Exhibit Hall**

**RT7 The Evolving Patterns for Publishing Science**

*Oregon Convention Center, B113 – B114*

**Organizers: Donald Schaffner, Ewen Todd, Marcel Zwietering**

**Convenor: Ewen Todd**

8:30 Panelists:  
DONALD SCHAFFNER, Rutgers University, New Brunswick, NJ, USA

MARCEL ZWIETERING, Wageningen University, Wageningen, Netherlands

ANDERSON SANT'ANA, University of Campinas, Campinas, São Paulo, Brazil

DANE JENSEN, Rutgers University, New Brunswick, NJ, USA

AMANDA FERGUSON, Institute for Food Technologists, Chicago, IL, USA

LAUREN JACKSON, U.S. Food and Drug Administration-CFSAN, Bedford Park, IL, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

**RT8 Taking a Detour: Innovative Careers in Food Safety**

*Oregon Convention Center, B113 – B114*

**Organizers: Byron Chaves, Stephanie Pollard, Wendy White**

**Convenor: Byron Chaves**

10:30 Panelists:  
BARBARA MASTERS, Olsson Frank and Weeda, Shenandoah Junction, WV, USA

JOHN ALLAN, International Dairy Food Association, Washington, DC, D.C., USA

MICHELLE DANYLUK, University of Florida, Lake Alfred, FL, USA



Symposia



Roundtables



Technical

Blue Text – Developing Scientist Competitors

SERGIO NIETO-MONTENEGRO, Alimentos y Nutricion, Chihuahua, Mexico

JUSTIN DERINGTON, Food Safety Net Services, Ltd., San Antonio, TX, USA

**12:00 Lunch available in the Exhibit Hall**

**S26 Molecular Methods to Characterize Microbial Pathogens: Outside the Whole Genome Sequence World**

*Oregon Convention Center, B115 – B116*

**Organizers: Christopher Elkins, Keith Lampel**  
**Convenors: Christopher Elkins, Efi Papafragkou**

- 8:30 Utility of Microarrays to Detect and Identify Foodborne Pathogens  
TBD
- 8:50 Detection and Characterization of Foodborne Pathogens with Transcriptomics and Proteomics Approaches  
MARTIN WIEDMANN, Cornell University, Ithaca, NY, USA
- 9:10 Application of Phages for the Detection of Foodborne Pathogens  
STEPHANE EVOY, University of Alberta, Alberta, Canada
- 9:30 One Day to One Hour: How Quickly Can Foodborne Pathogens be Detected?  
ARUN BHUNIA, Purdue University, West Lafayette, IN, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

**S27 Novel Frontiers in Microbiology – Recent Advances in Non-DNA based Rapid Microbial Detection and Identification Methods**

*Oregon Convention Center, B115 – B116*

**Organizers and Convenors: Arun Bhunia, Amit Morey**  
*Sponsored by the IAFP Foundation*

- 10:30 On-plate Bacterial Colony Identification Using a Laser Light Scattering Sensor, BARDOT  
ARUN BHUNIA, Purdue University, West Lafayette, IN, USA
- 10:50 Use of Laser-based Technology for Pathogen Identification  
DAVID HAAVIG, Micro Imaging Technology, San Clemente, CA, USA
- 11:10 Rapid Detection of Foodborne Pathogens Using a Liquid Crystal-based Technology  
CURTIS STUMPF, Crystal Diagnostics Ltd., Rootstown, OH, USA
- 11:30 Bioluminescence-based Detection of *E. coli* O157:H7 during Selective Enrichment  
BRUCE APPLGATE, Purdue University, West Lafayette, IN, USA

**12:00 Lunch available in the Exhibit Hall**

**S28 Identifying, Prioritizing, and Managing Chemical Hazards: The United States National Residue Program for Meat, Poultry, and Egg Products**

*Oregon Convention Center, B117 – B119*

**Organizers: Kerry Dearfield, Patty Bennett**  
**Convenor: Kerry Dearfield**

- 8:30 An Overview of the Recent and Ongoing Changes Made to the NRP – A Multi-analytic Approach to Analyzing Regulatory Samples and Next Steps for NRP Relative to Chemical Hazard Identification, Prioritization and Management of Chemical Hazards  
KERRY DEARFIELD, U.S. Department of Agriculture-FSIS, Washington, D.C., USA
- 9:00 FSIS Laboratory Technical Changes Made to Improve Testing for Known/Unknown Chemical Hazards  
LOUIS BLUHM, U.S. Department of Agriculture-FSIS, Athens, GA, USA
- 9:30 NRP: Ongoing Collaboration and Successes  
SCOTT GOLTRY, North American Meat Institute, Washington, D.C., USA

**10:00 Break – Refreshments available in the Exhibit Hall**

- 10:30 EPA Prioritization Scheme for Pesticide Analysis within the NRP  
DAVID HRDY, EPA, Crystal City, VA, USA
- 11:00 FDA Drug Residue Compliance Program  
AMBER McCOLE, U.S. Food and Drug Administration, Rockville, MD, USA
- 11:30 How Does Academia Identify and Prioritize Emerging and Re-emerging Chemical Hazards of Concern in Food  
CHARLES SANTERRE, Purdue University, West Lafayette, IN, USA

**12:00 Lunch available in the Exhibit Hall**

**S29 Controlling Bacterial Pathogens in Low-water Activity Foods and Spices**

*Oregon Convention Center, C120 – C122*

**Organizers: Michael Doyle, Joshua Gurtler, Jeffrey Kornacki**

**Convenors: Joshua Gurtler, Jeffrey Kornacki**  
*Sponsored by the IAFP Foundation*

- 8:30 Challenges in the Control of Foodborne Pathogens in Low-water Activity Foods and Spices  
SOFIA SANTILLANA FARAKOS, U.S. Food and Drug Administration, Silver Spring, MD, USA
- 9:00 Foodborne Pathogens and Spices: An Overview  
SUSANNE KELLER, U.S. Food and Drug Administration-NCFST, Bedford Park, IL, USA
- 9:30 The Microbiological Safety of Chocolate and Confectionary Products  
DAVID BEAN, Federation University, Ballarat, Australia

**10:00 Break – Refreshments available in the Exhibit Hall**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

10:30 Prevalence, Level and Distribution of *Salmonella* in Spices Imported into the U.S  
JANE VAN DOREN, U.S. Food and Drug Administration-CFSAN-OFDCER, College Park, MD, USA

11:00 Bacterial Inactivation Intervention Treatments for Spices  
WAYNE BENNET, McCormick and Company, Sparks, MD, USA

11:30 Processing Plant Investigations: Practical Approaches to Determining Sources of Persistent Bacterial Strains in the Low-water Activity Food Environment  
JEFFREY KORNACKI, Kornacki Microbiology Solutions, Inc., McFarland, WI, USA

**12:00 Lunch available in the Exhibit Hall**

**T6 Technical Session 6 – Communication Outreach and Education**

*Oregon Convention Center, C123*

**Convenors: Ellen Evans, Mieke Uyttendaele**

T6-01 Understanding Differences in Recent U.S. Cost of Foodborne Illness Estimates  
8:30 SANDRA HOFFMANN, U.S. Department of Agriculture-ARS, Washington, D.C., USA

T6-02 An Environmental Scan of Food Safety Educational Initiatives Targeted at Consumers in the United States  
8:45 NICOLE ARNOLD, Shelley Feist, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T6-03 Identifying Food Safety Education Needs for Ontario’s (Canada) Youth: An Analysis of Key Informant Interviews  
9:00 KEN DIPLOCK, Shannon Majowicz, Andria Jones-Bitton, Scott Leatherdale, David Hammond, Andrew Papadopoulos, Steve Rebellato, Joel Dubin, University of Waterloo, School of Public Health and Health Systems, Waterloo, ON, Canada

T6-04 The Healthy Baby, Healthy Me Food Safety Education Program for Pregnant Women: Results of an Education Intervention  
9:15 LYDIA MEDEIROS, Patricia Kendall, Jeffrey LeJeune, The Ohio State University, Columbus, OH, USA

T6-05 Cognitive, Behavioral and Microbial Analysis of Older Adult Consumers’ Domestic Risk Factors Associated with Listeriosis  
9:30 ELLEN EVANS, Elizabeth Redmond, Adrian Peters, Cardiff Metropolitan University, Cardiff, United Kingdom

T6-06 Evaluation of a National Pilot Produce Safety Train-the Trainer Workshop and Curriculum  
9:45 GRETCHEN WALL, Elizabeth Bihn, Cornell University, Ithaca, NY, USA

**10:00 Break – Refreshments available in the Exhibit Hall**

T6-07 Evaluation of a Multi-day Good Agricultural Practices Training and Farm Food Safety Plan Writing Workshop  
10:30 ELIZABETH BIHN, Gretchen Wall, Elizabeth Newbold, Todd Schmit, Cornell University, Geneva, NY, USA

T6-08 The Efficacy of a Food Safety Intervention When Implemented by Health Department Sanitarians in Response to Violations Recognized during Inspection  
10:45 MARK DWORKIN, Jing Chiang, University of Illinois at Chicago School of Public Health, Chicago, IL, USA

T6-09 Thinking Outside the Box: Traditional and Non-traditional Recommendations to Improve Consumer Food-handling Behavior  
11:00 PATRICIA BORRUSO, Amy Lando, Sharmi Das, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

T6-10 Working Knowledge and Communication Practices of Public Health Officials in Response to Norovirus Outbreaks in Schools  
11:15 KATIE OVERBEY, Natalie Seymour, Elizabeth Bradshaw, Lee-Ann Jaykus, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T6-11 Evaluating the Evidence-base of Outbreak Management and Clean-up Guidelines Available to Schools Experiencing Norovirus Outbreaks  
11:30 NATALIE SEYMOUR, Elizabeth Bradshaw, Katie Overbey, Lee-Ann Jaykus, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

**12:00 Lunch available in the Exhibit Hall**

**T7 Technical Session 7 – Produce #1**

*Oregon Convention Center, C124*

**Convenors: Tong-Jen Fu, Angela Valdez**

T7-01 Produce Outbreaks, United States, 1998–2013  
8:30 SARAH BENNETT, Samir Sodha, Tracy Ayers, L. Hannah Gould, Robert Tauxe, Centers for Disease Control and Prevention, Atlanta, GA, USA

T7-02 Persistence and Internalization of *Listeria monocytogenes* in Romaine Lettuce  
8:45 Archana Shenoy, Haley Oliver, AMANDA DEERING, Purdue University, West Lafayette, IN, USA

T7-03 Persistence and Internalization of *Salmonella* on/in Organic Spinach Sprout: Exploring the Contamination Route  
9:00 GOVINDARAJ DEV KUMAR, Sadhana Ravishankar, Jitu Patel, University of Arizona, Tucson, AZ, USA

T7-04 On farm Evaluation of the Prevalence of Human Enteric Bacterial Pathogens during the Production of Melons in California and Arizona  
9:15 TREVOR SUSLOW, Adrian Sbodio, Janneth Pinzon, Gabriela Lopez-Velasco, Renee Leong, Polly Wei, Lindsay Derby, Govindraj Kumar, Sadhana Ravishankar, Lee Ann Richmond, University of California, Davis, CA, USA

T7-05 Effect of Postharvest Practices on Cantaloupe Colonization by *Listeria monocytogenes*  
9:30 DUMITRU MACARISIN, Yi Chen, Antonio J. De Jesús, Irene Tchagou, Peter Evans, U.S. Food and Drug Administration, College Park, MD, USA



Symposia



Roundtables



Technicals

Blue Text – Developing Scientist Competitors

- T7-06 9:45 Baseline Assessment of the Prevalence of *Salmonella* and *Listeria* on Cantaloupe and in Select Melon Production Environments in Arizona  
GOVINDARAJ DEV KUMAR, Janneth Pinzon-Avila, Trevor Suslow, Sadhana Ravishankar, University of Arizona, Tucson, AZ, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- T7-07 10:30 Effect of Thermal and Non-thermal Treatments on Bacterial Populations on Melon Rind Surfaces  
DIKE UKUKU, Sudarsan Mukhopadhyay, Modesto Olanya, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA
- T7-08 10:45 Evaluating the Effect of Cover Crops on the Survival and Growth Dynamics of Foodborne Bacterial Indicators in Soil and on Cantaloupes Grown Organically  
NEIUNA REED-JONES, Sasha Marine, Kathryne Everts, Shirley Micallef, University of Maryland, College Park, College Park, MD, USA
- T7-09 11:00 Practical Validation of Surface Pasteurization of Cantaloupe  
CHELSEA KAMINSKI, Adrian Sbodio, Renee Leong, Trevor Suslow, University of California, Davis, CA, USA
- T7-10 11:15 A Meta-analysis of the Effect of Sanitizing Treatments on *Escherichia coli* O157:H7 Counts in Fresh Produce  
Vasco Cadavez, URSULA GONZALES-BARRON, Leonardo do Prado Silva, Anderson de Souza Sant'Ana, School of Agriculture, Polytechnic Institute of Braganza, Braganza, Portugal
- T7-11 11:30 Post-harvest Reduction of Coliphage MS2 from Romaine Lettuce during Simulated Commercial Processing with and without a Chlorine-based Sanitizer  
SAMANTHA WENGERT, Tiong Gim Aw, Elliot Ryser, Joan Rose, Michigan State University, East Lansing, MI, USA
- T7-12 11:45 Prevalence and Diversity of *Salmonella enterica* spp. in Irrigation Water, Poultry Litter and Amended Soils on the Eastern Shore of Virginia  
GANYU GU, Jie Zheng, Laura Strawn, Mark Reiter, Steven Rideout, Virginia Tech, Painter, VA, USA
- 12:00 Lunch available in the Exhibit Hall**
- T8 Technical Session 8 – Antimicrobials**  
*Oregon Convention Center, C125 – C126*  
**Convenors: Manan Sharma, Renee Boyer**
- T8-01 8:30 Reduction of Aichi Virus by Sodium Metasilicate and Calcium Hypochlorite in Suspension  
ANDRES ARREAZA, Doris D'Souza, University of Tennessee-Knoxville, Knoxville, TN, USA
- T8-02 8:45 Cocktails of Plant-produced Colicins for Efficient Control of Major Pathogenic Strains of *Escherichia coli*  
Simone Hahn, Steve Schulz, Anett Stephan, Franziska Jarczowski, CHAD STAHL, Anatoli Giritch, Yuri Gleba, North Carolina State University, Raleigh, NC, USA
- T8-03 9:00 Antimicrobial and Synergistic Potential of t-cinnamaldehyde Nano-emulsion Combined with Commercially Available Antimicrobials against Methicillin-resistant *Staphylococcus aureus*  
KANJIKA BHARGAVA, Varun Tahlan, Yifan Zhang, University of Central Oklahoma, Edmond, OK, USA
- T8-04 9:15 Grape Seed Extract against Human Noroviral Surrogates in Model Food Systems and Simulated Gastric Conditions  
SNEHAL JOSHI, Doris D'Souza, University of Tennessee-Knoxville, Knoxville, TN, USA
- T8-05 9:30 Application of Antimicrobial Agents via Commercial Spray Cabinet to Inactivate *Salmonella* on Skinless Chicken Meat  
JABARI HAWKINS, Bob Vimini, Jurgen Schwarz, Phil Nichols, Salina Parveen, University of Maryland Eastern Shore, Princess Anne, MD, USA
- T8-06 9:45 Modeling the Survival of Unstressed, Acid, Cold, and Starvation Stress Adapted *Listeria monocytogenes* in Ham Extract with Hops Beta Acids (HBA) and Sensory Evaluation of HBA on Ready-to-Eat Meat Products  
CANGLIANG SHEN, Li Wang, West Virginia University, Morgantown, WV, USA
- 10:00 Break – Refreshments available in the Exhibit Hall**
- T8-07 10:30 Inhibition of Biofilm-forming Shiga-Toxigenic *Escherichia coli* Using Bacteriophages Isolated from Beef Cattle Environment  
PUSHPINDER KAUR LITT, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA
- T8-08 10:45 Rechargeable Antimicrobial Coatings for Food Processing Equipment  
Luis Bastarrachea, JULIE GODDARD, University of Massachusetts, Amherst, Amherst, MA, USA
- T8-09 11:00 Inhibitory Effects of Phytochemicals on Quorum Sensing, Biofilm Formation and *in vivo* Virulence of Foodborne Pathogens  
JAMUNA BAI ASWATHANARAYAN, Ravishankar Rai Vittal, University of Mysore, Mysore, India
- T8-10 11:15 Gaseous Chlorine Dioxide and Biocontrol Microbes for Control of *Salmonella enterica* on Tomatoes  
O. MODESTO OLANYA, Bassam A. Annous, USDA-ARS-ERRC, Wyndmoor, PA, USA
- T8-11 11:30 Inhibitory Activity of Plant-derived Antimicrobials against *Lactobacillus brevis* on Organic Leafy Greens  
RADHIKA KAKANI, Sadhana Ravishankar, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA
- T8-12 11:45 Microbial Safety of Cold Cuts and Fate of *Listeria monocytogenes* ATCC 7466 in Chicken Cold Cuts Prepared with Antimicrobials  
OLUWATOSIN ADEMOLA IJABADENIYI, Olivia Meaghan Powys, Durban University of Technology, Department of Biotechnology and Food Technology, Durban, South Africa
- 12:00 Lunch available in the Exhibit Hall**



Symposia



Roundtables



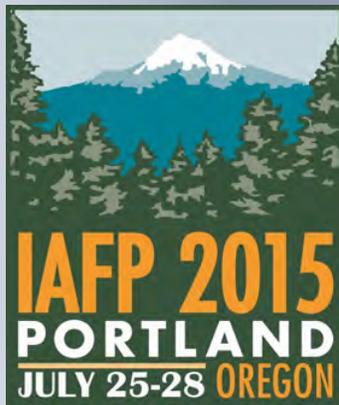
Technical

Blue Text – Developing Scientist Competitors

IAFP extends our  
appreciation to

**MIARS**  
**chocolate**

**IAFP 2015**  
**Leadership Sponsor**



*Thank you  
very much!*

## MONDAY AFTERNOON JULY 27

Posters will be on display 10:00 a.m. – 6:00 p.m.  
(See details beginning on page 79)

**12:15 p.m. – IAFP Business Meeting**  
**1:00 p.m. Oregon Convention Center, B110 – B112**

### S30 Chasing “Zero”: How Likely to Reach Success?

*Oregon Convention Center, Oregon Ballroom 201*

**Organizers: Keith Lampel, Pamela Wilger, George Wilson**

**Convenor: Pamela Wilger**

- 1:30 Risk Assessment as It Relates to Achieving Zero  
ROBERT BUCHANAN, University of Maryland, College Park, MD, USA
- 1:50 The Limitations of Testing While Chasing Zero  
PAMELA WILGER, Cargill, Wayzata, MN, USA
- 2:10 Produce Commodities as a Paradigm  
DAVID GOMBAS, United Fresh Produce Association, Washington, D.C., USA
- 2:30 Public Perspective on Chasing Zero  
TBD

**3:00 Break – Refreshments available in the Exhibit Hall**

### S31 I Found a Positive, Now What Do I Do?

*Oregon Convention Center, Oregon Ballroom 201*

**Organizers: Richard Brouillette, Zhinong Yan**

**Convenor: Zhinong Yan**

- 3:30 Pathogen Monitoring Program as a Preventive Tool for FSMA Requirement  
DOUGLAS MARSHALL, Eurofins Scientific, Inc., Fort Collins, CO, USA
- 4:00 Responding to a Finished Product Positive Result  
RICHARD BROUILLETTE, Commercial Food Sanitation, Harahan, LA, USA
- 4:30 Responding to Environmental Pathogen Swabs in RTE Process Areas  
EDITH WILKIN, Leprino Foods, Denver, CO, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

### S32 Today’s Food Safety and Risk Communication Environment: Solutions-based Strategies to Improve Public Understanding

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers: Anthony Flood, Ellen Thomas, Lily Yang**

**Convenors: Anthony Flood, Lily Yang**

- 1:30 Today’s Food Environment  
ROBERT GRAVANI, Cornell University, Ithaca, NY, USA
- 2:00 The Psychology of Food  
WILLIAM HALLMAN, Rutgers University, New Brunswick, NJ, USA
- 2:30 Lessons Learned from the Food Industry  
CHAD WEIDA, Abbott Nutrition, Columbus, OH, USA
- 3:00 Break – Refreshments available in the Exhibit Hall**
- 3:30 The Media’s Role in Providing Fair, Balanced and Accurate Information to the Public  
DEBORAH BLUM, University of Wisconsin-Madison, Madison, WI, USA
- 4:00 Best Practices (Not Just Social Media) to Reach Target Audiences  
MATT RAYMOND, International Food Information Council and Foundation, Washington, D.C., USA
- 4:30 Consumer Relations of Food and Health among Non-white Consumers  
AURORA SAULO, University of Hawaii at Manoa, Honolulu, HI, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

### S33 Filling the Food Safety Void in Small and Very Small Food Companies

*Oregon Convention Center, B110 – B112*

**Organizers and Convenors: Amit Morey, Dina Scott**

- 1:30 Hurdles Faced by the Food Entrepreneurs in Implementing Food Safety  
MANPREET SINGH, Purdue University, West Lafayette, IN, USA
- 1:50 Why Have This Conversation? – Using Small and Very Small Companies  
DINA SCOTT, Darden Restaurant, Kennesaw, GA, USA
- 2:10 Improving Food Safety at Small and Very Small Businesses  
BENJAMIN CHAPMAN, North Carolina State University, Raleigh, NC, USA
- 2:30 Food Safety and the Farmer’s Market  
JUDY HARRISON, University of Georgia, Athens, GA, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

M  
O  
N  
D  
A  
Y  
  
P  
M

**S34 Validation of Multi-hurdle Lethality Treatments for Specialty/Niche Meat and Poultry Products Produced by Small Establishments**

*Oregon Convention Center, B110 – B112*

**Organizer and Convenor: Meryl Silverman**

*Sponsored by the USDA-FSIA*

- 3:30 FSIS Perspective on Validating Processes for Niche Meat Products  
MERYL SILVERMAN, U.S. Department of Agriculture-FSIS, Washington, D.C., USA
- 4:00 A Microbiological Laboratory Perspective on Validating Processes for Niche Meat Products  
MOHAMMAD KOOHMARAIE, IEH Laboratories & Consulting Group, Lake Forest Park, WA, USA
- 4:30 Research and Extension to Support Processors in Validating Processes for Niche Meat Products  
BARBARA INGHAM, University of Wisconsin-Madison, Madison, WI, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S35 Benefits of an International Standardization for Challenge Tests for Fair Food Trade**

*Oregon Convention Center, B113 – B114*

**Organizers: Yuhuan Chen, Florence Postollec, Daniele Sohier**

**Convenors: Patrice Arbault, Paw Dalgaard**

*Sponsored by the IAFP Foundation*

- 1:30 Global Harmonization to Assess Microbial Behavior for Fair Food Trade Practices: Towards an ISO Standard  
DANIELE SOHIER, ADRIA Développement, Quimper, France
- 1:50 Regulatory Perspectives on Challenge Testing and Its Role in Validation of Preventive Controls  
JENNY SCOTT, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA
- 2:10 How to Meet Food Safety and Quality Criteria during Food Manufacture and Storage  
RHONDA FRASER, Fonterra Research and Development Centre, Palmerston North, New Zealand
- 2:30 Challenges of Challenging Non-thermally Preserved Foods: An Industry Perspective  
ALEJANDRO AMEZQUITA, Unilever, Sharnbrook, United Kingdom

**3:00 Break – Refreshments available in the Exhibit Hall**

**S36 What’s on Your Plate or What’s That in Your Suitcase: What Exactly is Coming in from Our Imports?**

*Oregon Convention Center, B113 – B114*

**Organizers: Keith Lampel, Pamela Wilger, George Wilson**

**Convenor: Pamela Wilger,**

- 3:30 The Global Village: A Changing World  
MICHAEL ROBACH, Cargill, Minneapolis, MN, USA
- 4:00 Foods: A Cacophony of Ingredients  
JOAN PINCUS, McCormick and Company, Sparks, MD, USA
- 4:30 Global Food Commodities – Who are the International Hitchhikers?  
GILLIAN KELLEHER, Wegmans Food Markets, Inc., Rochester, NY, USA

**S37 Sustainable Sanitation and the Use of “Green” Technologies to Protect the Public Health**

*Oregon Convention Center, B115 – B116*

**Organizers: Dale Grinstead, Robert Hagberg, Yale Lary**

**Convenors: Mark Drake, Dale Grinstead, Yale Lary**

- 1:30 EPA’s Design for the Environment (DfE) Meets Food Processing – Opportunities for Greener Facilities  
NANCY LINDE, NSF International, Ann Arbor, MI, USA
- 2:00 Balancing Environmental Stewardship and Food Safety  
FRANK YIANNIS, Walmart, Bentonville, AR, USA
- 2:30 How to Evaluate New “Green” Sanitation Technologies  
DANIEL DAGGETT, Sealed Air, Sturtevant, WI, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

**S38 Microbiological Air Quality Considerations in the Processing Environment**

*Oregon Convention Center, B115 – B116*

**Organizers: Jeffrey Kornacki, Yale Lary**

**Convenor: Yan Zhinong**

- 3:30 A Microbiologist’s Perspective on the Importance of Air Quality  
JEFF KORNACKI, Kornacki Microbiology Solutions, Inc., Madison, WI, USA
- 4:00 Airborne Contamination – Causes, Solutions and Criteria  
DAVID BLOMQUIST, Ecolab Inc., St. Paul, MN, USA
- 4:30 Designing and Maintaining Air Handling Units for Hygiene  
DAVID SWINEHART, Controlled Environment Equipment, Waukesha, WI, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

**S39 Application of Predictive Risk, Threat, and Vulnerability Tools for Food Safety and Defense**

*Oregon Convention Center, B117 – B119*

**Organizers and Convenors: Brian Hawkins, Anthony Pavic**

- 1:30 Application of Intelligent Adversary Concepts to Analyze Food Supply Chains Risks  
ALAN ERERA, Georgia Tech, Atlanta, GA, USA
- 1:45 Application of Predictive Risk Tools in Responding to a Potential Foodborne Illness Outbreak  
ANTHONY PAVIC, Birling Avian Laboratories, Bringelly, Australia
- 2:00 Application of Predictive Threat and Vulnerability Tools to the Challenge of Economically Motivated Adulteration  
JOSEPH SCIMECA, Cargill, Wayzata, MN, USA
- 2:15 Predictive Modeling Tools for Food Defense from a Government Perspective  
JESSICA COX, Department of Homeland Security, Aberdeen, MD, USA
- 2:30 Predictive Modeling Tools for Food Defense from an Industry Perspective  
CLINT FAIRO, ADM, Decatur, IL, USA
- 2:45 Validation of Predictive Shelf-life Modeling Tools Applied to Fresh Poultry Meat  
ASHLEY KUBATKO, Battelle Memorial Institute, Columbus, OH, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

**S40 Steps toward the Practical Use of Microbial Models for Food Safety Assessments by the Food Industry**

*Oregon Convention Center, B117 – B119*

**Organizers: Paw Dalgaard, Cheng-An Hwang, Richard Whiting**

**Convenors: Alejandro Amezcua, Richard Whiting**

- 3:30 Microbial Models and Their Practical Application in Food Safety and Quality Assessments – An Industry Perspective  
DENNIS SEMAN, Kraft Foods, Madison, WI, USA
- 4:00 Input from Academia to Application of Predictive Food Microbiology Models by Industry and Authorities – A European Perspective  
PAW DALGAARD, Technical University of Denmark, Kongens Lyngby, Denmark
- 4:30 The Pros and Cons of Microbial Models in Decision-making: A Regulator’s Perspective  
JEFFREY FARBER, University of Guelph, Guelph, ON, Canada

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S41 Viruses in Shellfish: Filtering Expertise toward a New Foundation for Risk Reduction Policies and Practices**

*Oregon Convention Center, C120 – C122*

**Organizer: William Burkhardt**

**Convenors: Enrico Buenaventura, Jane Van Doren**

- 1:30 U.S.-Canada Joint Risk Assessment on Norovirus in Bivalve Molluscan Shellfish  
WILLIAM BURKHARDT, Enrico Buenaventura, U.S. Food and Drug Administration, Dauphin Island, AL, USA
- 2:00 European Union Reference Laboratory for Monitoring Bacteriological and Viral Contamination of Bivalve Molluscs  
DAVID LEES, Centre for Environment, Fisheries and Aquaculture Science (Cefas), Weymouth, United Kingdom
- 2:30 Prevalence and Levels of Norovirus in Shellfish in Europe: Data are Still Rare!  
SOIZICK LE GUYADER, IFREMER, Nantes, France
- 3:00 Break – Refreshments available in the Exhibit Hall**
- 3:30 Modes of Norovirus Transmission  
MARION CASTLE, Ministry of Primary Industries, Wellington, New Zealand
- 4:00 Using Porcine Gastric Mucin-magnetic Bead Assay to Distinguish between Infectious and Non-infectious Norovirus in Wastewater and Shellfish  
DAVID KINGSLEY, U.S. Department of Agriculture-ARS, Dover, DE, USA
- 4:30 Challenges in Developing Quantitative Risk Assessments for Norovirus in Shellfish  
LEE-ANN JAYKUS, North Carolina State University, Raleigh, NC, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**S42 Everything But *Salmonella* – Other Microbiological Hazards in Low-water Activity Foods**

*Oregon Convention Center, C123*

**Organizers: Michelle Danyluk, Edith Wilkin**

**Convenors: Michelle Danyluk, Patrick Logan**

- 1:30 Microbiological Hazards Beyond *Salmonella* in Low-water Activity Foods  
EDITH WILKIN, Leprino Foods, Denver, CO, USA
- 2:00 Monitoring the Production Environment for Your Target Pathogens – A Practical Approach for Low-water Activity Foods  
LISA LUCORE, Kellogg Company, Battle Creek, MI, USA
- 2:30 Microbiological Hazards Historically Associated with Low-moisture Foods: Causes and Remediation  
SUSANNE KELLER, U.S. Food and Drug Administration, Bedford Park, IL, USA

**3:00 Break – Refreshments available in the Exhibit Hall**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

M  
O  
N  
D  
A  
Y  
  
P  
M

**S43 In-process High Moisture Foods: *Staphylococcus aureus* and *Bacillus cereus* Food Safety Concerns**

*Oregon Convention Center, C123*

**Organizer: Lorilyn Ledenbach**

**Convenor: Balasubrahmanyam Kottapalli**

- 3:30 Determining the Risk of *S. aureus* and *B. cereus* Growth in Dairy Slurries  
ERIN HEADLEY, Schreiber Foods, Inc., Green Bay, WI, USA
- 4:00 Regulatory Considerations for Determining the Food Safety of High Moisture Foods  
LORALYN LEDENBACH, Kraft Foods, Glenview, IL, USA
- 4:30 *S. aureus/B. cereus* Growth in Dough/Batter Systems  
BALASUBRAHMANYAM KOTTAPALLI, ConAgra Foods, Omaha, NE, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**T9 Technical Session 9 – Produce #2**

*Oregon Convention Center, C124*

**Convenors: Joshua Gurtler, Trevor Suslow**

- T9-01 1:30 Time Since Irrigation and Rain Events is Significantly Associated with an Increased Prevalence of *Listeria monocytogenes* in Spinach Fields in New York State  
DANIEL WELLER, Martin Wiedmann, Laura Strawn, Cornell University, Ithaca, NY, USA
- T9-02 1:45 Use of Geographic Information Systems to Predict the Risk of *Listeria monocytogenes* Contamination in Produce Fields  
Daniel Weller, Suvash Shiwakoti, Peter Bergholz, Martin Wiedmann, LAURA STRAWN, Virginia Tech, Painter, VA, USA
- T9-03 2:00 Spatial and Temporal Factors Affecting Prevalence of *Salmonella* and STEC in Wild Birds and Rodents in Proximity to CAFOs and Vegetable Fields in the Southwest Desert  
PAULA KAHN-RIVADENEIRA, Carrington Knox, Peiman Aminabadi, Anne Justice-Allen, Michele T. Jay-Russell, University of Arizona, Yuma, AZ, USA
- T9-04 2:15 Differential Expression of *E. coli* O157:H7 Virulence Genes in Model Ready-to-Eat Produce Microenvironment during Temperature Drop and Refrigeration  
PRATIK BANERJEE, Nicole Kennedy, Nabanita Mukherjee, The University of Memphis, Memphis, TN, USA
- T9-05 2:30 Variation in Gene Expression and Chlorine Resistance among Enterohemorrhagic *E. coli* on Pre-harvest Lettuce  
Deepti Tyagi, Julie Sherwood, Sherry Roof, Martin Wiedmann, TERESA BERGHOLZ, North Dakota State University, Fargo, ND, USA
- T9-06 2:45 Wash-line Effectiveness in Reducing Surviving *Salmonella* from Field-inoculated Navel Oranges and Preventing Cross-contamination in a Pilot Postharvest System  
Adrian Sbodio, Joseph Smilanick, Jeremy Roland, Renee Leong, Chelsea Kaminski, TREVOR SUSLOW, University of California, Davis, CA, USA
- 3:00 Break – Refreshments available in the Exhibit Hall**
- T9-07 3:30 The Efficacy of a New Fresh Produce Wash (*First Step+10*) at Inactivating Foodborne Pathogens in Rinse Water as Well as on Cut Apples, Cherry Tomatoes, Cantaloupe Rind, and Spinach  
JOSHUA GURTLE, Xiaoling Dong, Stephen Santos, Rensun Lee, Rebecca Bailey, U.S. Department of Agriculture-ARS, Wyndmoor, PA, USA
- T9-08 3:45 Field Assessment of Pathogen Surrogate Survival on Navel Oranges Following a ‘Contaminated’ Irrigation Event  
ADRIAN SBODIO, Dawit Diribsa, Polly Wei, Janneth Pinzon, Jeremy Roland, Renee Leong, Lindsay Derby, Trevor Suslow, University of California, Davis, CA, USA
- T9-09 4:00 Efficacy of Alcohol-based and Soap-based Hand Hygiene Interventions on Farmworker Hands Soiled during Harvest  
Norma Heredia, SANTOS GARCIA, Anna Aceituno, Faith Bartz, Jorge Davila-Aviña, Fabiola Venegas, Domonique Watson, David Shumaker, Jim Grubb, James Arbogast, Juan Leon, Universidad Autonoma de Nuevo Leon, San Nicolas, Mexico
- T9-10 4:15 Microbial Water Quality for Frost Protection: Implications for Strawberry Safety and Quality  
RAYNA CARTER, Mara Massel, Edgar Franco Abad, Joe Hampton, Christopher Gunter, Penelope Perkins-Veazie, Eduardo Gutiérrez-Rodríguez, North Carolina State University, Raleigh, NC, USA
- T9-11 4:30 Dynamic Models to Predict the Fates of *Staphylococcus aureus* and Pathogenic *Escherichia coli* in High Risk Vegetables  
JIMYEONG HA, Hyun Jung Kim, Junghoon Pyun, Yukyung Choi, Jiyeon Jung, Yohan Yoon, Sookmyung Women’s University, Seoul, South Korea
- T9-12 4:45 Attachment Ability of Shiga Toxin-producing *Escherichia coli* to Alfalfa, Lettuce, Tomato and Fenugreek Seeds  
YUE CUI, Ronald Walcott, Jinru Chen, University of Georgia, Griffin, GA, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**T10 Technical Session 10 – Meat, Poultry and Eggs**

*Oregon Convention Center, C125 – C126*

**Convenors: Ruth Petran, Arthur Hinton**

- T10-01 1:30 Evaluation of Microbial Populations in Chicken Ceca Raised on Pasture Flock Fed with Commercial Prebiotics via Sequencing (Illumina MiSeq)  
SI HONG PARK, Franck Carbonero, Steven Ricke, University of Arkansas, Fayetteville, AR, USA

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

- T10-02 **Multidrug Resistant Clones of *Salmonella* Infantis from Broiler Chickens**  
ECE BULUT, Sinem Acar, Bora Durul, Sacide Aydin, Sertan Cengiz, Yesim Soyer, Middle East Technical University, Ankara, Turkey
- T10-03 ***Salmonella* Presence and Numbers on Skin Parts of Turkey Carcasses**  
YE PENG, Walid Alali, Xiangyu Deng, Mark Harrison, University of Georgia, Department of Food Science and Technology, Griffin, GA, USA
- T10-04 **Biofilm Formation and Antimicrobial Resistance among Most Prevalent Poultry-associated *Salmonella* Serotypes (MPPSTs) Isolated from the US Poultry and Poultry Products**  
DEVENDRA H. SHAH, Narayan C. Paul, Rocio Crespo, Washington State University, Pullman, WA, USA
- T10-05 **How Belgian Broiler Slaughterhouses Can Improve Their Ability to Control the Level of *Campylobacter* Carcass Contamination under Routine Processing – Risk Factor Identification**  
Tomasz Seliwiorstow, Dirk Berkvens, Julie Baré, Inge Van Damme, MIEKE UYTENDAELE, Lieven De Zutter, Ghent University, Ghent, Belgium
- T10-06 **Domestic Handling of Chicken Carcasses: Quantification of *Campylobacter* Species Cross-contamination**  
ANNA ROCCATO, Mieke Uyttendaele, Lisa Barco, Veronica Cibin, Federica Barrucci, Ilaria Patuzzi, Antonia Ricci, Istituto Zooprofilattico Sperimentale delle Venezie (IZSVE), Padova, Italy
- 3:00 Break – Refreshments available in the Exhibit Hall**
- T10-07 **Searching for Suitable Indicator Viruses of Fecal Contamination for Pork Carcass Processing**  
TINEKE JONES, Victoria Muehlhauser, Agriculture and Agri-Food Canada, Lacombe, AB, Canada
- T10-08 **Prevalence, Antibioqram and Biofilm Formation of *Campylobacter coli* and *Listeria monocytogenes* from Pork Carcasses in Selected Slaughter Slabs in Oyo State, Nigeria**  
Foluso Akindoyo, OLAYEMI K. BOLATITO, Victoria O. Adetunji, University of Ibadan, Department of Veterinary Public Health and Preventive Medicine, Ibadan, Nigeria
- T10-09 **Determination of Sources of *Escherichia coli* on Beef by Multiple-locus Variable-number Tandem Repeat Analysis**  
XIANQIN YANG, Frances Tran, Mohamed Youssef, Colin Gill, Agriculture and Agri-Food Canada, Lacombe, AB, Canada
- T10-10 **Analysis of RTE Test Results as a Function of *Listeria monocytogenes* (Lm) Sanitation Control Alternative**  
STEPHEN MAMBER, Kristina Barlow, Philip Bronstein, Carrie Leathers, Evelyne Mbandi, Timothy Mohr, U.S. Department of Agriculture, Food Safety and Inspection Service, ODIFP-DAIS, Washington, D.C., USA

- T10-11 **Characterization of *E. coli* O157:H7 Strains Isolated from “High Event Period” Beef Trim Contamination**  
RONG WANG, U.S. Department of Agriculture, Clay Center, NE, USA
- T10-12 **Prevalence of *Salmonella* Species in Oregon’s Exempt Poultry Processing Operations**  
Whitney Nielsen, Dakota Trufant, Lauren Gwin, JOY WAITE-CUSIC, Oregon State University, Corvallis, OR, USA

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**5:15 p.m. – 6:00 p.m. – Food Safety Preventive Controls Alliance  
Oregon Convention Center, B110-B112**

**Organizer and Convenor: Kathy Gombas**

- Welcome  
ROBERT BRACKETT, Illinois Institute of Technology, Bedford Park, IL, USA
- Editorial Update  
KATHERINE M.J. SWANSON, KMJ Swanson Food Safety, Inc., Mendota Heights, MN, USA
- Continuation Update  
KATHY GOMBAS, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

**EVENING OPTIONS**

**5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception**

**Affiliate Meetings**

- 5:15 p.m. – 6:30 p.m. – Korea Association of Food Protection**  
*Oregon Convention Center, C120 – C122*
- 5:30 p.m. – 6:30 p.m. – Southeast Asia Association for Food Protection**  
*Oregon Convention Center, C123*

**6:00 p.m. – 7:00 p.m. – President’s Reception (by invitation)**  
*Oregon Convention Center – Oregon Ballroom 203-204*

**7:00 p.m. – 9:00 p.m. – Student Mixer**  
*Oregon Convention Center, C124*



Symposia



Roundtables



Technicals

Blue Text – Developing Scientist Competitors



Food safety and a slice of Dubai

25-28 October 2015  
Dubai International Convention and Exhibition Centre



Organized by



In association with



For more information and registration, visit our website : [www.foodsafetydubai.com](http://www.foodsafetydubai.com)

## TUESDAY MORNING JULY 28

Posters will be on display 9:00 a.m. – 3:00 p.m.  
(See details beginning on page 93)

### S44 How Do I Validate That? Assuring Credibility of Process Controls for Pathogen Reduction

*Oregon Convention Center, Oregon Ballroom 201*

**Organizer: Delia Murphy**

**Convenors: Tim Jackson, Philip Elliott**

*Sponsored by ILSI North America Technical Committee on Food Microbiology*

8:30 Validation Studies – An Overview

NANCY BONTEMPO, Mondelez International, East Hanover, NJ, USA

9:00 Validation Targets – Setting Limits with Limited Data

DONALD SCHAFFNER, Rutgers University, New Brunswick, NJ, USA

9:30 Validation Targets – Surrogate Selection

MONICA PONDER, Virginia Tech, Blacksburg, VA, USA

**10:00 Break – Refreshments will be available in the Poster Session Area**

10:30 Control Point Validation

TIM JACKSON, Nestlé North America, Glendale, CA, USA

11:00 Assessing Credibility – Establishing the Expert Process Authority

WILFREDO OCASIO, The National Food Lab, Livermore, CA, USA

11:30 Regulatory Credibility

DONALD ZINK, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

**12:00 Networking Lunch available in Hall A**

### S45 Foodborne Pathogens in Apples, Stone Fruits, Avocados, Mangos, Papaya... A New Trend or Sporadic Incidence?

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers: Dumitru Macarasin, Yi Chen**

**Convenor: Yi Chen**

*Sponsored by the IAFP Foundation*

8:30 Characterization, Internalization and Colonization of *Listeria monocytogenes* in Apple, Stone Fruit and Avocado

YI CHEN, Dumitru Macarasin, U.S. Food and Drug Administration, College Park, MD, USA

9:00 How Did That Get There? A Case Study of *Salmonella* on Tropical Tree Fruit in South Florida

MICHELLE DANYLUK, University of Florida, Lake Alfred, FL, USA

9:20 Occurrence, Outbreaks, Contributing Factors, and Growth Potential of Human Pathogens in Commercial and Non-commercial (endemic) Tree Fruits  
ANDERSON DE SOUZA SANT'ANA, University of São Paulo, São Paulo, Brazil

9:40 Incidence, Growth, Internalization and Outbreaks of *Salmonella* spp. and *Listeria monocytogenes*, in Low Acid Fruits Such as Papaya and Mangos  
ANA LUCIA PENTEADO, Embrapa Meio Ambiente, Campinas, Brazil

**10:00 Break – Refreshments available in the Poster Session Area**

### S46 Approaches to the Management of Viruses in the Food Industry

*Oregon Convention Center, Oregon Ballroom 202*

**Organizers: Stephen Grove, David Kingsley**

**Convenors: Stephen Grove, Sarita Raengradub Wheeler**

*Sponsored by the IAFP Foundation*

10:30 Managing Risk of Viruses in Food Production

NIGEL COOK, The Food and Environment Research Agency, York, United Kingdom

11:00 Managing Risk of Viruses in the Grocery and Retail Environment

RUTH PETRAN, Ecolab Inc., Eagan, MN, USA

11:30 Role of Testing in the Management of Viruses

FABIENNE LOISY-HAMON, Ceeram, La Chapelle Sur Erdre, France

**12:00 Networking Lunch available in Hall A**

### S47 Infodemiology: Let's Turn Big Data into Knowledge for Decision Making

*Oregon Convention Center, B110 – B112*

**Organizers: Martin Weidman, Frank Yiannas**

**Convenor: Amy Kircher**

8:30 Practical Application: Social Media's Role in Customer Affairs

TARA CLARK, Jeanne Jones, ConAgra Foods, Omaha, NE, USA

8:50 Game Changer: How Big Data is Protecting the Food System

AMY KIRCHER, University of Minnesota, St. Paul, MN, USA

9:10 Policy Challenges of Fitting New Data and Models into Old Decision Frameworks

HUBERT DELUYKER, European Food Safety Authority, Parma, Italy

9:30 An Interactive Panel: What Questions Does Big Data Raise for You?

MARTIN WIEDMANN, Cornell University, Ithaca, NY, USA

**10:00 Break – Refreshments available in the Poster Session Area**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

- S48 Nibbles, Bits, and Bytes: Leveraging Big Data and Analytics to Inform Food Safety Risk Analysis**  
*Oregon Convention Center, B110 – B112*  
**Organizer and Convenor: Barbara Kowalczyk**  
*Sponsored by the IAFP Foundation*
- 10:30 Moving Beyond Excel: The Potential of Big Data Analytics  
BARBARA KOWALCYK, RTI International, Research Triangle Park, NC, USA
- 11:00 Using Yelp Reviews to Identify Unreported Cases of Foodborne Illness in New York City  
VASUDHA REDDY, New York City Department of Health and Mental Hygiene, New York, NY, USA
- 11:30 Predictable Patterns of Winter Vomiting: Using Time Series Regression Models and Big Data to Estimate the U.S. Norovirus Disease Burden  
ARON HALL, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 12:00 Networking Lunch available in Hall A**
- S49 Metals Exposures in Foods**  
*Oregon Convention Center, B113 – B114*  
**Organizer: Alison Kretser**  
**Convenors: Alison Kretser, Mansi Krishan**  
*Sponsored by the ILSI North America Technical Committee on Food and Chemical Safety*
- 8:30 Introduction to Metals in Foods  
JORGE G. MUÑIZ ORTIZ, U.S. Department of Agriculture, Food Safety and Inspection Service, Washington, D.C., USA
- 9:00 Heavy Metal Screening Tool  
LEILA BARRAJ, Exponent, Washington, D.C., USA
- 9:30 Utility of Metals Exposure Screening Tool: When the Rubber Meets the Road  
JI-EUN LEE, Kellogg Company, Battle Creek, MI, USA
- 10:00 Break – Refreshments available in the Poster Session Area**
- S50 Bacteriophages for Food Safety: Advances in Prevention and Detection**  
*Oregon Convention Center, B113 – B114*  
**Organizers: Amanda Kinchla, Sam Nugen**  
**Convenors: Amanda Kinchla, Andrea Lo**
- 10:30 Introduction to Phages and Their Application in Beef Production  
JASON GILL, Texas A&M University, College Station, TX, USA
- 10:50 Assessment of Phage as a Sanitizer Dip for Produce Washing  
AMANDA KINCHLA, University of Massachusetts, Amherst, Amherst, MA, USA
- 11:10 A Bacteriophage-based Nanosensor for Food and Agriculture  
SAM NUGEN, University of Massachusetts, Amherst, Amherst, MA, USA
- 11:30 Phages for *Listeria* Detection  
MICHAEL KOERIS, Sample6, Boston, MA, USA
- 12:00 Networking Lunch available in Hall A**
- S51 Global Lab Capacity Building – Training for Ensuring Food Safety**  
*Oregon Convention Center, B115 – B116*  
**Organizers: Leslie Thompson, Wendy Warren, Pamela Wilger, George Wilson**  
**Convenors: Leslie Thompson, Pamela Wilger**
- 8:30 The Critical Role of Global Lab Capacity Building for the Implementation of FSMA (Food Safety Modernization Act)  
PALMER ORLANDI, U.S. Food and Drug Administration, Washington, D.C.
- 8:50 The Global Food Safety Partnership and Other International Capacity Development Initiatives  
LESLIE BOURQUIN, Michigan State University, East Lansing, MI
- 9:10 Challenges in the Laboratory within the Developing World; Technology, Training, Government Regulations  
JANIE DUBOIS, University of Maryland, College Park, MD
- 9:30 Industry's Role In Laboratory Training within the Developing World  
PAMELA WILGER, Cargill, Wayzata, MN
- 10:00 Break – Refreshments available in the Poster Session Area**
- S52 Environmental Monitoring: A Preventative Control Requiring the Closed Loop Method of Food Safety Education**  
*Oregon Convention Center, B115 – B116*  
**Organizer: Tara Guthrie**  
**Convenors: Pamela Wilger, Laura Nelson**
- 10:30 Back to Basics: Designing a Comprehensive Environmental Monitoring Program  
JOHN BUTTS, Land O Frost, Lansing, IL, USA
- 11:00 Best Behavior: Engaging Employees to Fuel a Culture of Food Safety  
HOLLY MOCKUS, Alchemy Systems, Austin, TX, USA
- 11:30 Two-way Communication: Empowering Employees to Mitigate Contamination Risks  
MIRIAM EISENBERG, EcoSure, a Division of Ecolab, Lincolnshire, IL, USA
- 12:00 Networking Lunch available in Hall A**

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

- S53 Nanotechnology from Farm to Table: Implications to Food Safety and Human Health**  
*Oregon Convention Center, B117 – B119*  
**Organizers: Sangeeta Khare, Keith Lampel**  
**Convenor: Sangeeta Khare**  
*Sponsored by the IAFP Foundation*
- 8:30 Opportunities and Concerns: Nanomaterial Incorporation in Consumer Products  
SANGEETA KHARE, U.S. Food and Drug Administration, Jefferson, AR, USA
- 8:55 Nanotechnology-based Approach for the Inactivation of Foodborne Microorganisms  
GEORGIOS PYRGIOTAKIS, T.H. Chan Harvard School of Public Health, Boston, MA, USA
- 9:20 Nanomaterials as New Regulators of Crop Growth  
MARIA KHODAKOVSKA, University of Arkansas at Little Rock, Little Rock, AR, USA
- 9:40 Nanotechnology: Considerations for Food Ingredients  
TERESA CROCE, U.S. Food and Drug Administration, Laurel, MD, USA
- 10:00 Break – Refreshments available in the Poster Session Area**
- S54 Delivery Systems for Introduction of Natural Antimicrobials into Foods: Need, Formulation, Applications and Current Trends**  
*Oregon Convention Center, B117 – B119*  
**Organizers and Convenors: Kanika Bhargava, Vijay Juneja**  
*Sponsored by the IAFP Foundation*
- 10:30 Challenges of Using Natural Antimicrobials in Foods  
P. MICHAEL DAVIDSON, University of Tennessee-Knoxville, Knoxville, TN, USA
- 11:00 Formulation and Characterization of Antimicrobial Nanoemulsions  
KANIKA BHARGAVA, University of Central Oklahoma, Edmond, OK, USA
- 11:30 Applications of Natural Antimicrobial Delivery System: Industrial Perspective  
JASDEEP SAINI, WTI, Inc., Jefferson, GA, USA
- S55 Recent Developments in Food Fraud Prevention**  
*Oregon Convention Center, C120 – C122*  
**Organizer and Convenor: Karen Everstine**
- 8:30 Guidance for Conducting Food Fraud Vulnerability Assessments  
SHAUN KENNEDY, University of Minnesota, St. Paul, USA
- 8:50 Standoff Raman Detection of Food Fraud-related Adulterants  
ANUP SHARMA, Alabama A&M University, Huntsville, AL, USA
- 9:10 A Study of Fish Species Fraud at Minnesota Food Facilities  
KAREN EVERSTINE, University of Minnesota, Minneapolis, MN, USA
- 9:30 New Analytical Methods for Adulteration of Skim Milk Powder  
JEFFREY MOORE, United States Pharmacopeia, Rockville, MD, USA
- 10:00 Break – Refreshments available in the Poster Session Area**
- S56 The True Prevalence of Food Fraud in Our Global Supply Chain**  
*Oregon Convention Center, C120 – C122*  
**Organizer and Convenor: Wendy White**
- 10:30 The Prevalence of Food Fraud Around the Globe – The View from the Trenches: Investigations and Prevention Strategies  
MITCHELL WEINBERG, INSCATECH Corporation, New York, NY, USA
- 11:00 FDA's Office of Criminal Investigations' Perspective of Food Fraud  
GEORGE HUGHES, U.S. Food and Drug Administration, Rockville, MD, USA
- 11:30 Intentional Adulteration and Management of the Raw Material Supply Chain – When is Trust Sufficient and Where Do We Stop?  
ANDREW CLARKE, Maple Leaf Foods, Etobicoke, ON, Canada
- 12:00 Networking Lunch available in Hall A**
- S57 Clostridium botulinum: A Recurrent Emerging Foodborne Pathogen**  
*Oregon Convention Center, C123*  
**Organizers: Frank Devlighere, Jeanne-Marie Membré, Mike Peck**  
**Convenors: Frank Devlighere, Michael W. Peck**  
*Sponsored by the IAFP Foundation*
- 8:30 Controlling *Clostridium botulinum*: A Recurrent Emerging Foodborne Pathogen  
MICHAEL W. PECK, Institute of Food Research, Norwich, United Kingdom
- 9:00 Reduction of Nitrite Levels in Processed Meat Products – Potential Application of Fermentates to Inhibit the Growth of *C. botulinum*  
SIMBARASHE SAMAPUNDO, Frank Devlighere, University of Ghent, Ghent, Belgium
- 9:30 Risk Assessment of Proteolytic *C. botulinum* in Canned Foie Gras  
JEANNE-MARIE MEMBRÉ, INRA, Nantes, France
- 10:00 Break – Refreshments available in the Poster Session Area**



**S58 Influence of Climatic Conditions and Climate Change on the Microbial Safety of Food***Oregon Convention Center, C123***Organizer and Convenor: Hudaa Neetoo***Sponsored by the IAFP Foundation*

10:30 Effect of Climate Change on Microbial Foodborne Diseases  
ISABEL WALLS, National Institute of Food and Agriculture, USDA, Washington, D.C., USA

11:00 Climatic Influence on the Pre-harvest Microbial Contamination of Food Crops  
CHENG LIU, Wageningen University, Wageningen, Netherlands

11:30 Future Perspectives and Research Needs for 'Climate-safe' Agri-food Production  
RENATA IVANEK, Texas A&M University, College Station, TX, USA

**T11 Technical Session 11 – Epidemiology***Oregon Convention Center, C124***Convenors: Aron Hall, Jeffrey LeJuene**

T11-01 Trends in Foodborne Illness in the United States; 1996–2013  
8:30 MARK POWELL, U.S. Department of Agriculture-ORACBA, Washington, D.C., USA

T11-02 Global and Regional Incidence and Mortality of Diarrheal Diseases Commonly Transmitted through Food: Estimates from the WHO Foodborne Epidemiology Reference Group  
8:45 SARA PIRES, Aron Hall, Christa Fischer-Walker, Claudio Lanata, Brecht Devleesschauwer, Ana Sofia Duarte, Martyn Kirk, Robert E Black, Frederick Angulo, National Food Institute, Soborg, Denmark

T11-03 Potential Transmission and Persistence of Antimicrobial Resistance (AMR) *Salmonella* after Application of Swine Manure in the Environment  
9:00 Siddhartha Thakur, SUCHAWAN PORNUSUKAROM, North Carolina State University, Raleigh, NC, USA

T11-04 Isolation and Characterization of *Escherichia coli* from Swine at the Farm, Lairage and Slaughter  
9:15 PAULA FEDORKA-CRAY, Timothy Frana, Catherine Logue, Natalia da Silva, John Beary, Annette O'Connor, North Carolina State University, Raleigh, NC, USA

T11-05 Outbreak of *E. coli* O157:H7 Infections in Alberta, Canada, Caused by Exposure to Contaminated Pork Products  
9:30 APRIL HEXEMER, Public Health Agency of Canada, Guelph, ON, Canada

T11-06 Prevalence and Antimicrobial Resistance of *Salmonella* during Conventional and Organic Processing of Antibiotic-free Broilers  
9:45

MATTHEW BAILEY, Jagpinder Brar, Sydney Corkran, Paul Ebner, Haley Oliver, Arun Bhunia, Manpreet Singh, Purdue University, West Lafayette, IN, USA

**10:00 Break – Refreshments available in the Poster Session Area**

T11-07 Characterizing the Risks Associated with Consumption of Raw Meat and Poultry Products  
10:30 SCOTT SEYS, Bonnie Kissler, Latasha Allen, Meryl Silverman, Janet McGinn, U.S. Department of Agriculture-FSIS, Minneapolis, MN, USA

T11-08 Quantification of Six Major Non-O157 *Escherichia coli* Serogroups in Feces of Feedlot Cattle by Spiral Plating and Quantitative Real-time PCR Methods  
10:45 PRAGATHI BELAGOLA SHRIDHAR, Lance Noll, Ellen Kim, Charley Cull, Diana Dewsbury, Xiaorong Shi, Natalia Cernicchiaro, David Renter, Jianfa Bai, TG Nagaraja, Kansas State University, Manhattan, KS, USA

T11-09 Prevalence of *Listeria monocytogenes* in Slaughterhouses and Genetic Analysis among the Isolates Using Molecular Typing Methods  
11:00 Sejeong Kim, Jimyeong Ha, Soomin Lee, Hye-Min Oh, Heui-Jin Kim, Yunsang Cho, Hee Soo Lee, Jang Won Yoon, YOHAN YOON, Sookmyung Women's University, Seoul, South Korea

T11-10 Prevalence of *Campylobacter* in Integrated Mixed Crop-livestock Farms and Its Survival Ability in Post-harvest Products  
11:15 SERAJUS SALAHEEN, Mengfei Peng, Debabrata Biswas, University of Maryland, College Park, MD, USA

T11-11 Prevalence and Diversity of *Listeria* Species and *Listeria monocytogenes* in an Urban and Agricultural Source Watershed  
11:30 Emma Stea, Laura Purdue, Rob Jamieson, Chris Yost, LISBETH TRUELSTRUP HANSEN, Dalhousie University, Halifax, NS, Canada

T11-12 Phenotypic and Genotypic Characterization of *Salmonella enterica* serovar Enteritidis Isolates Associated with a Mousse Cake-related Outbreak of Gastroenteritis in Ningbo, China  
11:45 Xiujuan Zhou, Shoukui He, Qifa Song, Xiaofei Zhuang, Yanyan Wang, Xiaozhen Huang, Chunlei Shi, XIANMING SHI, Shanghai Jiao Tong University, Shanghai, China

**12:00 Networking Lunch available in Hall A**
 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

**T12 Technical Session 12 – Seafood and Meat, Poultry and Eggs***Oregon Convention Center, C125 – C126***Convenors: Ian Jenson, Jessica Jones**

- T12-01  
8:30 Could the Chilling Process be Optimized to Decrease *Campylobacter* on Broiler Carcasses?  
KATELL RIVOAL, Typhaine Poezevara, Ségolène Quesne, Valentine Ballan, Marianne Chemaly, ANSES, Laboratory of Ploufragan-Plouzané, Ploufragan, France
- T12-02  
8:45 Survival of *Salmonella* on Raw Poultry Exposed to 10% Lemon Juice and Vinegar Washes  
Natalie Launchi, SHAUNA HENLEY, Jennifer Quinlan, University of Maryland Extension, Baltimore County, Cockeysville, MD, USA
- T12-03  
9:00 Preliminary Evaluation of Commercial Antimicrobials to Inhibit Growth of *Salmonella* on Chicken Liver  
GERARDO CASCO, Christine Alvarado, Texas A&M University, College Station, TX, USA
- T12-04  
9:15 Ability of Cecal Cultures to Inhibit Growth of *Salmonella* Typhimurium during Aerobic Incubation  
ARTHUR HINTON, Gary Gamble, Kimberly Ingram, Ronald Holser, U.S. Department of Agriculture-ARS, Athens, GA, USA
- T12-05  
9:30 Effect of Salt Concentrations on the High Pressure Inactivation of *Listeria monocytogenes*  
S. BALAMURUGAN, Rafath Ahmed, Anli Gao, Tatiana Koutchma, Philip Strange, Agriculture and Agri-Food Canada, Guelph, ON, Canada
- T12-06  
9:45 Thermal Inactivation of *Salmonella* Species in Pork Burger Patties  
PHILLIP GURMAN, Tom Ross, Richard Jarrett, Andreas Kiermeier, South Australian Research and Development Institute, Adelaide, Australia

**10:00 Break – Refreshments available in the Poster Session Area**

- T12-07  
10:30 Thermal Inactivation Kinetics of *Listeria monocytogenes* and *Vibrio parahaemolyticus* in Buffer and Mussels  
EMEFA MONU, Malcond Valladares, Doris D'Souza, P. Michael Davidson, Auburn University, Auburn, AL, USA

- T12-08  
10:45 Thermal Inactivation of Hepatitis A Virus in Homogenized Clams (*Mercenaria mercenaria*)  
HAYRIYE BOZKURT CEKMER, Doris D'Souza, P. Michael Davidson, University of Tennessee-Knoxville, Knoxville, TN, USA

- T12-09  
11:00 Reducing *Vibrio parahaemolyticus* in Oysters Using Natural and Environment Friendly Phyto-chemicals  
VARUNKUMAR BHATTARAM, Abhinav Upadhyay, Kumar Venkitanarayanan, University of Connecticut, Storrs, CT, USA

- T12-10  
11:15 Microbiological Quality of Imported and Domestic Seafood  
SALAH ELBASHIR, Salina Parveen, John Bowers, Tom Rippen, Jurgen Schwarz, Michael Jahncke, University of Maryland Eastern Shore, Princess Anne, MD, USA

- T12-11  
11:30 *Vibrio parahaemolyticus* Levels in Atlantic Coast Shellfish  
JESSICA JONES, Thomas Kinsey, Joshua Kling, Kristin DeRosia-Banick, Debra Barnes, Thomas Shields, Robert Schuster, U.S. Food and Drug Administration, Dauphin Island, AL, USA

**12:00 Networking Lunch available in Hall A** Symposia Roundtables Technicals

Blue Text – Developing Scientist Competitors

# U.S. Regulatory Perspective on Food Safety



**Al Almanza**

Deputy Under Secretary for Food Safety  
U.S. Department of Agriculture



**Mike Taylor**

Deputy Commissioner for Foods and Veterinary Medicine  
U.S. Food and Drug Administration

**Tuesday, July 28**  
**12:15 p.m. – 1:15 p.m.**

*Oregon Convention Center, Oregon Ballroom 201*

## TUESDAY AFTERNOON JULY 28

Posters will be on display 9:00 a.m. – 3:00 p.m.  
(See details beginning on page 93)

### 12:15 p.m. – 1:15 p.m. **U.S. Regulatory Perspective on Food Safety**

Al Almanza, U.S. Department of Agriculture and Mike Taylor, U.S. Food and Drug Administration  
*Oregon Convention Center, Oregon Ballroom 201*

### S59 **Survival of the Fittest: Controlling *Listeria* at Retail** *Oregon Convention Center, Oregon Ballroom 201*

**Organizer and Convenor: Kristina Barlow**

*Sponsored by the IAFP Foundation and USDA/FSIS*

- 1:30 FSIS Retail *Listeria* Guidelines  
KRISTINA BARLOW, U.S. Department of Agriculture-FSIS, Washington, D.C., USA
- 1:45 Food Code Controls for *Listeria*  
KEVIN SMITH, U.S. Food and Drug Administration, Washington, D.C., USA
- 2:00 Identified Risk Factors in Foodborne Disease Investigations  
KRISTIN DELEA, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 2:30 *Listeria* Action Plan for Retail Delis  
HILARY THESMAR, Food Marketing Institute, Arlington, VA, USA
- 3:00 *Listeria monocytogenes* Control – A Local Perspective  
DAVENE SARROCCO-SMITH, Lake County General Health District, Painesville, OH, USA

### 3:30 **Break – Refreshments available in Oregon Ballroom Foyer**

#### **Listeria Special Session**

*Oregon Convention Center, Oregon Ballroom 202*

**Organizer: Kathleen Glass**

**Convenor: Rachel Klos**

- 1:30 Epidemiological Investigation of Listeriosis Outbreaks Associated with Ice Cream and Caramel Apples  
ROBERT TAUXE, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 1:50 Apple Facility Investigation  
TBD, U.S. Food and Drug Administration
- 2:10 Conditions Which Permit Growth of *Listeria monocytogenes* in Caramel Apples  
KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA
- 2:30 Enumeration of *Listeria monocytogenes* in Ice Cream Samples Linked to a Recent Multi-state Outbreak  
YI CHEN, U.S. Food and Drug Administration, College Park, MD, USA
- 2:50 Practical *Listeria* Control Guidance for the Dairy Industry  
EDITH WILKINS, Leprino Foods, Denver, CO, USA

### 3:30 **Break – Refreshments available in Oregon Ballroom Foyer**

### S60 **Biofilm Update 2015: Where We Can Find Them, and How We Control Them**

*Oregon Convention Center, B110 – B112*

**Organizer: Dale Grinstead**

**Convenors: Dale Grinstead, Anna Starobin**

- 1:30 The Role of Biofilms in Retail Settings  
HALEY OLIVER, Purdue University, West Lafayette, IN, USA
- 2:00 Biofilm Control in Food Environments  
PETER BODNARUK, Tyson Foods, Chicago, IL, USA
- 2:30 Lab Techniques for Studying Biofilm  
DIANE WALKER, Montana State University – Bozeman, Bozeman, MT, USA
- 3:00 Regulatory Update of Biofilm Control Products  
STEPHEN TOMASINO, EPA, Fort Meade, MD, USA

### 3:30 **Break – Refreshments available in Oregon Ballroom Foyer**

### S61 **Challenges to Allergen Detection and Method Selection**

*Oregon Convention Center, B113 – B114*

**Organizers: Anthony Flood, Tong-Jen Fu**

**Convenors: Anthony Flood, Tong-Jen Fu**

- 1:30 Detection of Allergens in Processed Food: Challenges and Potential Solutions  
TONG-JEN FU, U.S. Food and Drug Administration, Bedford Park, IL, USA
- 2:00 Allergen Cleaning Validation: Challenges and Benefits  
TRACIE SHEEHAN, ARYZTA, LLC, West Columbia, SC, USA
- 2:30 Allergen Detection and Method Selection Considerations in a Food Production Environment  
BRENT KOBIELUSH, General Mills, Inc., Minneapolis, MN, USA
- 3:00 Food Allergen Detection and Management – Importance of Enhanced Capacity Building Initiatives  
SAMUEL GODEFROY, World Bank Group, Washington, D.C., USA

### 3:30 **Break – Refreshments available in the Oregon Ballroom Foyer**

### S62 **A Bridge between Research and Regulatory Science: Research Prioritization and Outcome Measures**

*Oregon Convention Center, B115– B116*

**Organizers and Convenors: Mary Torrence, David White**

- 1:30 Food Safety at CDC: A Vision for the Future  
CHRISTOPHER BRADEN, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 2:00 Challenges to Bringing Research and Regulatory Science Together: What is Success?  
MARY TORRENCE, U.S. Food and Drug Administration-CFSAN, College Park, MD, USA

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

T  
U  
E  
S  
D  
A  
Y  
  
P  
M

- 2:30 Strategic Planning and Vision for FDA's Foods and Veterinary Medicine Program  
DAVID WHITE, U.S. Food and Drug Administration, Silver Spring, MD, USA
- 3:00 Food Safety at USDA- FSIS: A Vision for the Future  
DAVID GOLDMAN, U.S. Department of Agriculture-FSIS, Washington, D.C., USA
- 3:30 Break – Refreshments available in Oregon Ballroom Foyer**
- S63 Mobile Food Establishments; Beyond the Brick and Mortar**  
*Oregon Convention Center, B117 – B119*  
**Organizer and Convenor: Jennifer Lahnoudi**  
*Sponsored by the IAFP Foundation*
- 1:30 A Cartography for Success: Mapping the Strategies and Challenges of Portland's Mobile Food Carts  
JEFF MARTIN, Multnomah County Health Department, Portland, OR, USA
- 2:00 Mobile Food Trucks: California EHS-Net Study on Risk Factors and Inspection Challenges  
BRENDA FAW, California EHS-Net Food Safety Program, Sacramento, CA, USA
- 2:30 Building a Mobile Brand  
MICHELLE WOLLENZIEN, Quality Concepts, San Antonio, TX, USA
- 3:00 Mobile Food Vehicle Design for Food Safety  
JESSICA JONES, Chick-fil-A, Inc., Atlanta, GA, USA
- 3:30 Break – Refreshments available in Oregon Ballroom Foyer**
- S64 Challenges in Dairy Spoilage – From Sporeformers to Yeast and Molds**  
*Oregon Convention Center, C120 – C122*  
**Organizers: Alejandro Mazzotta, Martin Wiedmann**  
**Convenors: Michele Gorman, Nicole Martin, Jarret Stopforth**  
*Sponsored by the IAFP Foundation*
- 1:30 Dairy Spoilage from Yeast and Molds to Lactic Acid Bacteria  
REID IVY, Kraft Foods, Glenview, IL, USA
- 2:00 Root-cause Analysis of Sporeformers in Dairy Products – Raw Milk or In-plant Sources  
NICOLE MARTIN, Cornell University, Ithaca, NY, USA
- 2:30 Molecular-based Indicators – Science, Magic, or Voodoo  
MANSOUR SAMADPOUR, IEH Laboratories & Consulting Group, Lake Forest Park, WA, USA
- 3:00 Environmental Sampling Programs to Assure Dairy Quality and Safety: How to Balance Use of Index, Indicator, and Pathogen and Spoilage Organism Tests  
MICHELE GORMAN, Chobani, LLC, Norwich, NY, USA

- 3:30 Refreshments will be available in the Oregon Ballroom Foyer**
- S65 Foreign Supplier Verification Programs: Challenges and Opportunities**  
*Oregon Convention Center, C123*  
**Organizers: Tong-Jen Fu, Purnendu Vasavada, Hyun-Gyun Yuk**  
**Convenors: Rhoma Johnson, Hyun-Gyun Yuk**  
*Sponsored by the IAFP Foundation*
- 1:30 Overview of the FSMA Rule on Foreign Supplier Verification Programs  
ANDREW STEPHENS, U.S. Food and Drug Administration, Silver Spring, MD, USA
- 2:00 Foreign Supplier Verification – Establishing a Robust Program  
JOSEPH SCIMECA, Cargill, Wayzata, MN, USA
- 2:30 Impact of FSMA Foreign Supplier Verification Requirements on Chinese Manufacturers Exporting to the U.S.  
YABIN SUN, Liaoning Entry-Exit Inspection and Quarantine Bureau, Dalian, China
- 3:00 Impact of FSMA Foreign Supplier Verification Requirements on Food Exporters in Thailand  
POJJANEE PANIANGVAIT, Thai President Foods, PLC., Bangkok, Thailand
- 3:30 Refreshments will be available in the Oregon Ballroom Foyer**
- S66 Challenges to Modernization for Safe and Secure Food in the Middle East**  
*Oregon Convention Center, C124*  
**Organizers: Atef Idriss, Bobby Krishna, Ewen Todd**  
**Convenors: Judy Greig, Ewen Todd**  
**Introduction: Ewen Todd**  
*Sponsored by the IAFP Foundation*
- 1:35 The Need for Rapid Capacity Building for Safe and Secure Food in the Middle East  
ATEF IDRIS, MEFOSA, Beirut, Lebanon
- 1:50 Redefining Food Safety Objectives in the Middle East – Dubai's Initiatives  
BOBBY KRISHNA, Dubai Municipality, Dubai, United Arab Emirates
- 2:05 An Accepted Reality: Sewage-irrigated Leafy Greens in the Middle East  
EWEN TODD, American University of Beirut, Lebanon and Ewen Todd Consulting, Okemos, MI, USA
- 2:20 Compliance with Safety Standards in the Middle East – The Mars Experience  
ZEINA KASSAIFY, Mars Chocolate – Middle East, Turkey and Africa, Dubai, United Arab Emirates

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors

- 2:35 Food Safety and Food Security: How to Achieve Food Security through Food Safety in the Middle East?  
WALID ALALI, Qatar National Research Fund of Qatar Foundation, Doha, Qatar
- 2:50 Enhancing the Safety of Imports from the Middle East through FSMA  
JENNY SCOTT, U.S. Food and Drug Administration, College Park, MD, USA
- 3:05 Discussion
- 3:30 Refreshments will be available in the Oregon Ballroom Foyer**

**LL1 Learning Lab: An Interactive Experience\***  
*Oregon Convention Center, C125 - C126*  
**Organizers: Jeffrey Farber, Pina Fratamico, Kalmia Kniel, Omar Oyarzabal**  
**Convenors: Kalmia Kniel, Omar Oyarzabal**

- 1:30 p.m. – 2:15 p.m. – Food Safety Jeopardy
- 2:30 p.m. – 3:15 p.m. – Hazard, Risk and Outcome  
\*Space is limited to the first 100 attendees
- 3:30 Refreshments will be available in the Oregon Ballroom Foyer**

## TUESDAY AFTERNOON

- 4:00 p.m. – 4:45 p.m.** **John H. Silliker Lecture\*\***  
*Oregon Convention Center, Oregon Ballroom 201*
- Challenging the Conventional**  
*Francis (Frank) F. Busta, Ph.D.*  
*Director Emeritus of the National Center for Food Protection and Defense (NCFPD)*
- \*\*Bio and Abstract on page 64–65

## EVENING OPTIONS

- 6:00 p.m. – 7:00 p.m.** **Reception**  
*Oregon Ballroom Foyer*
- 7:00 p.m. – 9:30 p.m.** **IAFP Awards Banquet**  
*Oregon Ballroom*

 Symposia

 Roundtables

 Technicals

Blue Text – Developing Scientist Competitors