

# GLOBAL WATER AND FOOD SAFETY SUMMIT

The Hotel at the University of Maryland  
November 19-21, 2019

## AGENDA

### DAY 1

Tuesday, November 19, 2019

**07:30 – 08:30 AM** Registration and Breakfast

**08:30 – 09:00 AM** Opening

*Dr. Jianghong Meng, Director, JIFSAN, University of Maryland*  
*Dr. Eric Brown, Director of the Division of Microbiology, CFSAN*  
*Dr. Steven Musser, Deputy Director, CFSAN*

### KEYNOTE SPEAKER

**09:00 – 09:45 AM** Water and Risk: Thinking Broadly in a Shrinking World

*Dr. Jay L. Garland*  
*Senior Scientist – Office of Research & Development*  
*United States Environmental Protection Agency*  
*Cincinnati, Ohio*

### PLENARY SESSION 1 (Moderator: Dr. Eric Brown)

**ONE HEALTH AND THE IMPORTANCE OF AN INTEGRATED APPROACH TO FOOD SAFETY MICROBIOLOGY THAT INCLUDES ENVIRONMENTAL WATERS, FOODS, & CLINICAL SOURCES**

**09:45 – 10:15 AM** Advancing Food Safety: Integration of Environmental Monitoring and Genomics

*Dr. Rebecca Bell, Division of Microbiology, FDA-CFSAN, College Park, Maryland*

**10:15 – 10:45 AM    Microbial Safety of Fresh Produce – the Role of Surface Waters and Weather**

*Renata Ivanek Miojevic, Cornell University, Ithaca, New York*

**10:45 – 11:15 AM    COFFEE BREAK/ NETWORKING**

**11:15 – 11:45 AM    The Value of Integrated Approaches to Food Safety Microbiology: Examples and Lessons Learned**

*Dr. Lee-Ann Jaykus, Distinguished Professor of Food Science, North Carolina State University, Raleigh, North Carolina*

**11:45 – 12:15 PM    Global One Health and the Role of –OMICS in Strengthening Integrated Capacity to Address Food – and Water-Borne Diseases**

*Dr. Wondwossen Gebreyes, Hazel C. Youngberg Distinguished Professor, Executive Director, Global One Health initiative (GOHi), Ohio State University, Columbia, Ohio*

**12:15 –12:45 PM    DISCUSSION ROUNDTABLE #1** (Speakers above, Dr. Julie Kase, (FDA), Dr. Susan Leonard (FDA), Dr. Michael Mahovic (FDA)), Dr. Shirley Micallef

**12:45 – 02:00 PM    LUNCH**

***PLENARY SESSION 2 (Dr. Rebecca Bell)***

***THE SCIENCE OF ENVIRONMENTAL WATER SAMPLING AND SURVEILLANCE: WHERE WE STAND AS A COMMUNITY***

**02:00 – 02:30 PM    Water Quality Standards: How We Got Here and Where We Are**  
*Dr. Sam Myoda, IEH Laboratories & Consulting Group, Lake Forest Park, Washington*

**02:30 – 03:00 PM    Genomic Approaches to Reconstruct the Landscape of Microbial Contamination in Aquatic Systems**  
*Dr. Jaime Martinez-Urtaza, Centre for Environment, Fisheries and Aquaculture Science, United Kingdom*

**03:00 – 03:30 PM    COFFEE BREAK/ NETWORKING**

**03:30 – 04:00 PM    Refining Sampling and Analysis Approaches to Advanced Understanding of the Microbiological Risks of Agricultural Water Reuse**

*Dr. Amy Sapkota, Professor of Public Health, University of Maryland, College Park, Maryland*

- 04:00 – 04:30 PM**     **Prevalence of Salmonella and Listeria monocytogenes in Public Access Waters and Sediments in Central Coastal California Agricultural Region**  
*Dr. Lisa Gorski, WRRC, U.S. Department of Agriculture-Agricultural Research Service, Albany, California*
- 04:30 – 05:00 PM**     **CDC's Recent Experiences Conducting Environmental Investigations of Produce-Associated Disease Outbreaks**  
*Dr. Vincent Hill, Center for Disease Control, Water Unit, Atlanta, Georgia*
- 05:00 – 05:30 PM**     **DISCUSSION ROUNDTABLE #2** (Speakers above, plus Dr. Karen Jarvis (FDA) and Dr. Kelli Hiatt (FDA))
- 05:30 PM**                 **RECEPTION**

## **DAY 2**

*Wednesday, November 20, 2019*

**PLENARY SESSION #3 (Moderator: Dr. Errol Strain)**

### ***MICROBIOLOGY AT THE INTERFACE OF ENVIRONMENTAL SAMPLING AND GENOMIC ANALYSIS: LEVERAGING THE POWER OF WHOLE GENOME SEQUENCING FOR STUDYING ENVIRONMENTAL ENTERIC PATHOGENS***

- 08:30 – 09:00 AM**     **Crowd-Sourcing Environmental Pathogenomics: Enteric Pathogens and Resistance Plasmids Isolated from Stream Sediments in the Shenandoah Valley of Virginia**  
*Dr. James Herrick, James Madison University, Harrisonburg, Virginia*
- 09:00 – 09:30 AM**     **Application of WGS for Studying Environmental Enteric Pathogens: Investigating Outbreaks of Shiga-Toxin-producing *E. coli***  
*Dr. Claire Jenkins, Gastrointestinal Bacteria Reference Unit, Public Health, England*
- 09:30 – 10:00 AM**     **Genomic Surveillance of Salmonella spp. Circulating in Surface Water Used in Agriculture**  
*Dr. Enrique Delgado, FMVC, UNAM, Mexico*

- 10:00 – 10:30 AM**     **Dynamic Salmonella Serovar Populations in a River Watershed**  
Dr. Nikki Shariat, University of Georgia, Athens, Georgia
- 10:30 – 11:00 AM**     **COFFEE BREAK/NETWORKING**
- 11:00 – 11:30 AM**     **Salmonella Diversity and Distribution in Irrigation Ponds, Irrigation Systems, and Produce on Farms in Southern Georgia**  
Dr. Michele Jay-Russell, University of California-Davis, Davis, California
- 11:30 – 12:00 PM**     **Listeria monocytogenes Prevalence and Population Diversity in Surface Waters**  
*Dr. Dumitru Macarisin, Food and Drug Administration, College Park, Maryland*
- 12:00 – 12:30 PM**     **Water Quality Monitoring Efforts to Inform Risk-Based Stakeholder Decision Making**  
*Dr. Channah Rock, Professor of Water Science, University of Arizona, Tucson, Arizona*
- 12:30 – 01:00 PM**     **DISCUSSION ROUNDTABLE #3** (Speakers above, plus Dr. Errol Strain (FDA), Dr. Christopher Grim (FDA/CFSAN), Dr. Yi Chen (FDA))
- 01:00 – 02:30 PM**     **LUNCH**
- 02:30 – 02:45 PM**     **BREAKOUT SESSION (Eric Brown - Introductory Remarks and Charges)**
- 02:45 – 05:15 PM**     **BREAKOUT DISCUSSIONS**
- ~Workgroup #1: Water Sampling Methods for Enteric Pathogens (Chair: Dr. Rebecca Bell; Co-chair: Dr. Socrates Trujillo; Secretary: Ms. Christina Ferreira)
- ~Workgroup #2: Analytical Methods Improvements and Genomics (Chair: Dr. Jie Zheng; Co-chair: Dr. Julie Kase; Secretary: Ms. Elizabeth Reed)
- ~Workgroup #3: Global Opportunities and Challenges Surrounding Water Sampling (Chair: Dr. Eric Brown; Co-chair: Dr. Joergen Schlundt; Secretary: Ms. Tina Pfefer)
- 5:15 PM**                     **DINNER ON YOUR OWN**

**DAY 3 (Half-Day)**

*Thursday, November 21, 2019*

**PLENARY SESSION 4: (Moderator: Dr. Ruth Timme)**

**GLOBAL PERSPECTIVES ON THE SAMPIING OF WATER: CHALLENGES AND OPPORTUNITIES FOR A WORLDWIDE EFFORT**

- 08:15 – 08:45 AM**    **All for One and One for All: The True Potential of Whole Genome Sequencing**  
*Dr. Marc Allard, Food and Drug Administration, College Park, Maryland*
- 08:45 – 09:15 AM**    **One Water One Health**  
*Dr. Sasha Koo-Oshima, FAO Water and Soil Division, Africa*
- 09:15 – 09:45 AM**    **Salmonella in Surface Waters in Agricultural Areas of Central Chile**  
*Dr. Aiko Adell, Universidad Andrés Bello, Chile*
- 09:45 – 10:15 AM**    **COFFEE BREAK/ NETWORKING**
- 10:15 – 10:45 AM**    *Dr. Mohammad Aminul Islam, Paul G. Allen School of Global Animal Health, Washington State University, Allen Center, Pullman, Washington & International Centre for Diarrhoeal Disease Research, Bangladesh*
- 10:45 – 11:15 AM**    **This for That: How Whole Genome Sequences will Enable International Connections of Food, Water and Human Microbiology – One Health Through New Methodology**  
*Dr. Joergen Schlundt, Professor NTU, Singapore, Director of the GMI, Singapore*
- 11:15 – 11:45 AM**    **DISCUSSION ROUNDTABLE #4** (*Speakers above, plus Dr. Marc Allard (FDA), Dr. Eric Brown (FDA), Dr. Jianghong Meng (UMD)*)
- 11:45 – 12:15 PM**    **BREAK OUT SESSION SUMMARIES AND CHAIR REPORTS/NEXT STEPS**
- 12:15 – 12:30 PM**    Closing remarks  
*Dr. Jianghong Meng and Dr. Eric Brown*