CAFPA-ASM Washington DC Branch Fall Meeting
November 16, 2017

Venue: FDA-CFSAN Wiley Building, College Park, MD

Agenda

11:30 – 12:15  Registration and Lunch (provided)
12:15 - 12:30  Welcome (ASM and CAFPA)
12:30 – 1:05  Kali E. Kniel, Ph.D.
Professor, Microbial Food Safety, Animal and Food Sciences
College of Agriculture & Natural Resources
University of Delaware, Newark, DE
“We’re all in this together: A One Health Approach to Food Safety”.

1:05 – 1:40  Adam Mumford, Ph.D.
U.S. Geological Survey, Reston, VA
“Impacts of Unconventional Oil and Gas Wastewater on the Structure and Function of Microbial Communities”

1:40 – 2:15  Eric Brown, Ph.D.
Director, Division of Microbiology, FDACFSAN, College Park, MD
Fellow of the American Academy of Microbiology
“Integrating Modern Genomic Science into Practical Microbiology: The Case for Food Safety”

2:15 – 3:00  Poster session and Coffee Break

3:00 – 3:45  Keynote Address: Jay Grimes, Ph.D.
Professor, Division of Coastal Sciences, Marine Microbial Ecology,
University of Southern Mississippi, Gulf Coast Research Laboratory,
Ocean Springs, MS
ASM Distinguished Lecturer
Fellow of the American Academy of Microbiology
“Bacteria Hanging Out with Dolphins and Sargassum”

3:45 – 4:00  Concluding Remarks (ASM and CAFPA)
Posters as of 11/10/2017

1. Evidence of Phenotypic Plasticity in \textit{Salmonella} in Presence of Pelargonic Acid
   Govindaraj Dev Kumar\textsuperscript{1}, Dumitru Macarisin\textsuperscript{2}, and Shirley Micallef\textsuperscript{1}
   \textsuperscript{1}University of Maryland, College Park, MD
   \textsuperscript{2}Food and Drug Administration, Silver Spring, MD

2. Shift in Microbial Communities in Fresh Produce Processing Environments Before and After Routine Sanitization
   Ganyu Gu\textsuperscript{1,2}, Andrea Ottesen\textsuperscript{3}, Samantha Bolten\textsuperscript{1}, Lan Wang\textsuperscript{4}, Padmini Ramachandran\textsuperscript{3}, Elizabeth Reed\textsuperscript{3}, Steve Rideout\textsuperscript{2}, Yaguang Luo\textsuperscript{1}, Eric Brown\textsuperscript{3}, and Xiangwu Nou\textsuperscript{1}
   \textsuperscript{1}Environmental Microbiology and Food Safety Laboratory, US Department of Agriculture Agricultural Research Service, Beltsville, MD
   \textsuperscript{2}Eastern Shore Agricultural Research and Extension Center, Virginia Tech, Painter, VA
   \textsuperscript{3}Center for Food Safety and Applied Nutrition, US Food and Drug Administration, College Park, MD
   \textsuperscript{4}Shenyang Agricultural University, Shenyang, China

3. Assessment of Potluck Panic, an On-line Game for Post-secondary Food Safety Education
   Adrienne E.H. Shearer\textsuperscript{1}, Dallas G. Hoover\textsuperscript{1}, David Abraham\textsuperscript{2}, Pamela Martinez\textsuperscript{2}, Jeanne Gleason\textsuperscript{2}, Barbara Chamberlin\textsuperscript{2}, Jeffrey R. Klein\textsuperscript{3}, Joan Buttram\textsuperscript{3}, Sue Snider\textsuperscript{1}, and Kalmia E. Kniel\textsuperscript{1}
   \textsuperscript{1}Department of Animal and Food Sciences, University of Delaware, Newark, DE
   \textsuperscript{2}New Mexico State University, Las Cruces, NM
   \textsuperscript{3}Delaware Education Research and Development Center, University of Delaware, Newark, DE

4. Evaluation of \textit{Listeria monocytogenes} Survival and Infectivity in Non-traditional Agricultural Waters
   Samantha Gartley\textsuperscript{1}, Brienna Anderson\textsuperscript{1}, Shani Craighead\textsuperscript{1}, Adam Vanore\textsuperscript{1}, Manan Sharma\textsuperscript{2}, and Kalmia E. Kniel\textsuperscript{1}
   \textsuperscript{1}Department of Animal and Food Sciences, University of Delaware, Newark, DE
   \textsuperscript{2}US Department of Agriculture Agricultural Research Service, Beltsville, MD

5. Gut Microbiome Analysis as a Tool to Assess Contaminant Bioavailability
   Yesha Shrestha\textsuperscript{1}, Denise M. Akob\textsuperscript{1}, and Marie-Noele Croteau\textsuperscript{2}
   \textsuperscript{1}US Geological Survey, Reston, VA
   \textsuperscript{2}US Geological Survey, Menlo Park, CA

6. Microbial Functional Potential in Waters Associated with Natural CO\textsubscript{2} Accumulations in the Southwest United States
   Robert Andrews\textsuperscript{1}, Denise Akob\textsuperscript{1}, Jenna Shelton\textsuperscript{1}, Christina DeVera\textsuperscript{1}, and Sean Brennan\textsuperscript{1}
   \textsuperscript{1}US Geological Survey, Reston, VA

7. Reduction of \textit{Escherichia coli} by UVC treatment in water samples of varying quality
   Robert Sherman-Wood\textsuperscript{1} and Rohan Tikekar\textsuperscript{1}
   \textsuperscript{1}University of Maryland, College Park, MD

8. Using Simulation Modeling to Enhance Quantitative Food Safety Learning
   Ruth A. Oni\textsuperscript{1} and Robert L. Buchanan\textsuperscript{1,2}
   \textsuperscript{1}Nutrition & Food Science Department, University of Maryland, College Park, MD
   \textsuperscript{2}Center for Food Safety and Security Systems, University of Maryland, College Park, MD

9. Environmental Determinants of \textit{Vibrio parahaemolyticus} bacteria in the Chesapeake Bay
   Benjamin Davis\textsuperscript{1}, John Jacobs\textsuperscript{3}, Meghan Davis\textsuperscript{2}, and Frank Curriero\textsuperscript{1}
   \textsuperscript{1}Department of Epidemiology,
   \textsuperscript{2}Department of Environmental Health & Engineering; Johns Hopkins University,
   \textsuperscript{3}National Oceanic and Atmospheric Association
10. Modeling the effects of infection status and hygiene practices on *Mycobacterium avium* subspecies *paratuberculosis* contamination in bulk tank milk
Surabhi Rani¹, and Abani K. Pradhan¹²
¹Department of Nutrition and Food Science,
²Center for Food Safety and Security Systems, University of Maryland, College Park, MD 20742

11. The Use of an Atmospheric Cold Plasma Jet to Inactivate *Cryptosporidium parvum* oocysts on Cilantro
Shani Craighead¹, Sarah Hertrich², Adrienne Shearer¹, Glenn Boyd², Joseph Sites², Brendan Niemira² and Kalmia E. Kniel¹
¹Department of Animal and Food Sciences University of Delaware, Newark, DE 19716, USA
²USDA Agricultural Research Service- Eastern Regional Research Center, 600 East Mermaid Lane, Wyndmoor PA 19038

12. Using various Environmental Conditions and Oxygen Scavengers to Replicate Anaerobic Recovery of *Shigella*
Oluwaseun Agbaje¹, Zahra Aligabi², Robert, Duvall¹, Cary, Pirone-Davies¹, and Rachel Binet¹
¹Center for Food Safety and Applied Nutrition, US Food and Drug Administration, College Park, MD
²Joint Institute for Food Safety and Applied Nutrition, University of Maryland, College Park, MD

13. On-site Detection and Characterization of *Salmonella* from Environmental Samples
Tamar Dickerson¹, Joseph Russell¹, Elizabeth Reed², Christina Ferreira², Joseph Baugher², Guojie Cao², Rachel Pfuntner⁴, Laura Truitt⁴, Laura K. Strawn⁴, Steven L. Rideout⁴, Rebecca Bell², Marc Allard², Eric Brown², and Jonathan Jacobs¹
¹MRIGlobal, Division of Global Health Surveillance & Diagnostics, Gaithersburg, MD 20878
²Office of Regulatory Science, Center for Food Safety & Applied Nutrition, U.S. Food & Drug Administration, College Park, MD 20740
³Office of Analytics and Outreach, Center for Food Safety & Applied Nutrition, U.S. Food & Drug Administration, College Park, MD 20740
⁴Food Science and Technology Department, Virginia Tech - Eastern Shore Agricultural Research & Extension Center, Painter, VA 23420

14. Bacteriocin from *Lactobacillus parafarraginis* KU495926 Exhibits Broad Spectrum Activity Against Multidrug-Resistant Clinical Bacterial Isolates
Rachelle S. Allen-McFarlane¹, Garima Bansal¹, Adrian D. Allen², and Broderick E. Eribo³
¹Departments of Biology Howard University, Washington D.C.
²Comprehensive Sciences, Howard University, Washington D.C.