

### **Allard**

Marc W. Allard received his Ph.D. in biology in 1990 from Harvard University (Cambridge, MA). Dr. Allard was the Louis Weintraub Associate Professor of Biology (and Genetics) at George Washington University (Washington, DC) for 14 years from 1994 to 2008. Dr. Allard joined the Office of Regulatory Science and the Division of Microbiology in November 2008 and he is using DNA sequence information from the genomes of food borne pathogens. Dr. Allard specializes in both phylogenetic analysis and bioinformatics methods, as well as the wet laboratory methods which generate this genetic information.

### **Allred**

Adam Allred got his Ph.D. in Computational Biology from Washington University in St. Louis. His dissertation was titled "Bioinformatics for High-throughput Virus Detection and Discovery." Prior to joining Clear Labs, Adam worked as a bioinformatician at Life Technologies and Thermo Fisher Scientific. At Clear Labs, Adam manages the bioinformatics team and contributes to assay development projects related to NGS-based detection of foodborne pathogens and SARS-CoV-2.

### **Carrillo**



Cathy Carrillo completed a Ph.D. in molecular biology at the University of Ottawa in 2000. She began working on food pathogen genomics in 2001, as a visiting fellow at the National Research Council (Canada). From 2006 to 2012, Cathy led the Campylobacter laboratory in Health Canada's food microbiology group, where she worked on the implementation of a Campylobacter genomics program. She began her current position at the Canadian Food Inspection Agency in January 2013, focusing on the application of whole-genome sequencing (WGS) technologies for the detection, identification and characterization of foodborne bacterial pathogens. In the past few years, Dr. Carrillo's laboratory has sequenced several thousand bacterial genomes, and this work has led to the implementation of methods for real-time WGS of bacterial pathogens isolated in CFIA's food-testing programs. Her current research interests include the development of tools for bacterial phenotype prediction based on WGS data (e.g. serotype, antimicrobial resistance), and the application of novel technologies (e.g. metagenomics) to improve methods for detection of bacterial pathogens in foods. Dr. Carrillo currently leads the sequencing component of the Shared Priorities Genomics Research and Development Initiative project on antimicrobial resistance (GRDI AMR).

## **Dudley**



Dr. Edward G Dudley received his B.S. in Microbiology from the Pennsylvania State University, and M.S. in Food Science and Ph.D in Bacteriology from the University of Wisconsin-Madison. After postdoctoral work with Dr. James Nataro at the University of Maryland-Baltimore, he joined the faculty at Penn State in 2007. His research program focuses on pathogens and takes two approaches. First, he is interested in the factors that drive the virulence of *Escherichia coli* O157:H7, including strain genetics and interactions with other members of the gut microflora. Second, he develops DNA sequence-based methods for tracking the spread of pathogens during foodborne outbreaks. He is also passionate about undergraduate and graduate education especially of individuals from traditionally underrepresented groups. He has led and co-led three USDA National Needs Fellowship grants, supporting Ph.D and M.S. students. He also leads a USDA project to run 8-week summer camps on genome sequencing for students from undergraduate-centric colleges and universities in Pennsylvania, and the University of Puerto-Rico. As Director of Penn State's *E. coli* Reference Center, a 50-year-old repository of >90,000 isolates, he leads an international effort to transition traditional serotyping methods into molecular ones, including categorizing new O types that are identified through whole genome sequencing. He is active in the broader microbiology community particularly through the American Society of Microbiology, where he is the past-Chair of the Food Microbiology Division, an Editor for the journal *Applied and Environmental Microbiology* (until 2025), and was a member of the General Meeting (now called Microbe) planning committee since from 2016-2019, including leading the Applied and Environmental Sciences track for the 2018 and 2019 meetings. In 2019, he was appointed an ASM Distinguished Lecturer, and a co-editor of the Evolution and Genomics domain for ASM's online journal *EcoSal Plus*.

## **Erickson**

Dr. David L. Erickson is an Associate Research Scientist at the Joint Institute for Food Safety and Applied Nutrition (JIFSAN), a division within the University of Maryland at College Park. Dr Erickson is an evolutionary biologist with expertise in molecular genetics, NGS data analysis and metagenomics. Ongoing research projects include development of improved methods to quantify and compare metagenomic community samples, as well as characterization of environmental stresses that modify rates of horizontally transferred anti-microbial resistance genes among bacterial species. Prior to working with JIFSAN, Dr

Erickson was co-founder of a biotechnology startup, DNA4 Technologies LLC, using NGS based metagenomics for the authentication and validation of commercial food and feed products. While at DNA4 Tech, Dr Erickson worked closely with scientific staff to develop novel metagenomics software as well as improved laboratory pipelines for evaluation of highly processed food products. Dr Erickson received training in NGS data analysis as an ORISE Fellow at the Center for Food Safety and Applied Nutrition (CFSAN) within the Food and Drug Administration. Previous to working in microbiology and food safety, Dr Erickson worked as a Biologist at the Smithsonian Institution's National Museum of Natural History, working in the field of genetics. Dr Erickson received his Ph.D. in Botany from the University of Georgia where he was funded under a NSF sponsored research training grant in Mechanisms of Plant Molecular Evolution.

### **Herrick**

Dr. James B. Herrick is an associate professor of biology at James Madison University in Harrisonburg, Virginia, U.S.A. He earned B.S. and M.S. degrees in ecology from Brigham Young University and a Ph.D. in microbiology from Cornell University. At Cornell he studied the molecular detection of bacteria and plasmid-borne gene transfer in contaminated surface and groundwaters. Dr. Herrick did his postdoctoral research at Los Alamos National Laboratory studying genes involved in the bioremediation of toxic waste in aquifers.

Dr. Herrick is interested in the occurrence and genetic interactions of human pathogenic bacteria in natural environments such as freshwaters and soils. He also uses genomic techniques to investigate gene transfer and mobile genetic elements in bacterial populations both native and introduced to natural environments. He teaches courses in the pathogenomics of environmental bacteria and in the evolution and ecology of infectious disease.

### **Hoon**



Kelly Hoon has over 20 years of experience in the genomics field spanning many roles in both clinical laboratories and commercial organizations. Her responsibilities have included diagnostics assay development, technical product training, academic-commercial collaborations, technology evaluation, and market development.

Kelly currently serves as Executive Sales Specialist in Microbiology and Infectious Disease at Illumina, Inc. and focuses on strategic initiatives, working with key collaborators and consulting in various partnerships. Since joining Illumina in September 2013, she has focused on pairing market needs to commercial development as it relates to pathogen detection, ecology and evolution.

### **Khaksar**

As Chief Scientific Officer for Clear Labs, Ramin Khaksar leads the vision and strategy for talented teams of dedicated scientists who make life healthier through the application of genomics and intelligent analytics. He brings extensive experience from the industry, government and academia. Previously, he was CEO of Dapco, a Biotech R&D company and served as Sr Advisor to the Ministry of Health. Ramin was Associate Professor and Chair of Food Science at SBMU. He has published over 80 papers in peer-reviewed journals. He also is adjunct professor at Rutgers University.

### **McCormick**



Kelly J. McCormick has worked at the intersection of public health, agriculture, and trade for over 15 years. Since 2015, she has represented FDA in various interagency and international strategic partnership initiatives, such as the Asia Pacific Economic Cooperation and the World Trade Organization's Standards and Trade Development Facility. She also liaises with sister agencies to implement food safety capacity building programs as well as awareness efforts for the FDA's Food Safety Modernization Act, such as the Food Safety Network - a tri-agency agreement with USDA/Foreign Agricultural Service (FAS) and the U.S. Agency for International Development. Additionally, she serves as co-lead for the International Sub-Committee for the Food Safety Preventive Controls Alliance.

Just prior to joining FDA, Ms. McCormick briefly conducted research related to intentional adulteration of the food supply with the National Center for Food Protection and Defense, a Department of Homeland Security Center of Excellence in St. Paul, Minnesota. Before that, she spent the better part of a decade as an International Trade Specialist with the USDA/FAS's Office of Capacity Building and Development in Washington, D.C., where she developed and managed programs designed to promote trade through food safety, food security, and food defense capacity building and technical assistance; and later focused on strategic planning and special projects for global food safety and food defense programs. Additionally, Ms. McCormick served in the U.S. Peace Corps in Burkina Faso, West Africa, as a Public Health Extension Agent.

## **Southern**



Kristal Southern, DVM, MPH, PMP – Dr. Kristal Southern is a veterinarian and public health specialist at the U.S. Department of Agriculture Food Safety and Inspection Service (FSIS). She received her Doctor of Veterinary Medicine from Tuskegee University, completed a Master's in Public Health Informatics at the University of Illinois at Chicago, and is a certified project manager. With more than 20 years at FSIS, Dr. Southern has experience working in the FSIS microbiology and pathology laboratories, conducting food safety outreach and education, managing consumer complaints and outbreak investigations, and implementing innovative solutions for public health problems. Her current work includes providing leadership in communicating and coordinating whole genome sequencing projects at FSIS. She also maintains her clinical skills in a veterinary hospital treating dogs and cats.

## **Stevens**



Eric L. Stevens, PhD, is an International Policy Analyst in the Office of the Center Director at the Center for Food Safety and Applied Nutrition. He received his Ph.D. in Human Genetics and Molecular Biology from The Johns Hopkins School of Medicine. Eric joined FDA in 2014 as a Commissioner's Fellow, learning about the work of each FDA Center. He travels extensively to both domestic and international locations to engage other federal and international stakeholders in matters related to food safety and science. Additionally, Dr. Stevens is the Codex Alimentarius manager for CFSAN and helps coordinate FDA's participation with the US Codex Office and at Codex Committee Meetings.