Microbial Source Tracking

Microbial contamination affects a large number of water bodies in the US. Microbial source tracking is one of several names given to the process of identifying the particular source (e.g., human, cattle, bird) of fecal contamination in water. The underlying assumption of microbial source tracking is that some characteristic associated with feces from a particular source (“host species”) allows that type of feces to be identified. The speakers will discuss different methods for source tracking, how these methods compare to one another, and provide case studies and examples of how source tracking can be used.

About the Speakers

Dr. Kate Field is Associate Professor in the Department of Microbiology at Oregon State University. She is best known for introducing the methods of molecular microbial ecology (specifically, mining uncultivated microbial diversity) to solving the problem of fecal source tracking and for rapid Bacteriodales-based source tracking.

Dr. Troy Scott is currently the Scientific Director for the Source Molecular Corporation in Miami, Florida. His areas of research interest and expertise include the development of novel microbial source tracking methodologies as well as the development and improvement of methods used for the detection of pathogenic viruses and protozoa in the environment. Dr. Scott also maintains an active research program and is affiliated with the University of Florida and the University of Miami Rosenstiel School of Marine and Atmospheric Sciences Oceans and Human Health Center.