

# Water Research Webinar Series

A bimonthly webinar series focused on EPA's water research

## Science to Support and Implement Microbial Water Quality Criteria

Wednesday, February 26, 2020 from 2:00 to 3:00 pm

Registration: <https://register.gotowebinar.com/register/1379401513416302595>



A certificate of attendance will be provided for attending this webinar

An important goal of the Clean Water Act is to protect and restore waters for recreational use. In response, EPA routinely publishes and/or updates recommended Ambient Water Quality Criteria (AWQC). Research conducted by EPA Office of Research and development supports this effort by strengthening the scientific basis of existing methods and developing new procedures, tools, and health effects assessments.

This webinar will provide an overview of EPA's fresh and marine waters research related to 1) human health risks associated with fecal indicator and pathogen measurements, 2) fecal indicator and pathogen method development and characterization to support AWQC applications through laboratory and field testing/case studies, and 3) predictive modeling for fecal indicators and pathogens to support AWQC development through laboratory and field studies.

EPA's research activities related to the development and implementation of quantitative human-associated microbial source tracking technologies, including the public release of draft EPA Methods 1696/1697 and the development of virus-based crAssphage methods, will also be discussed.

### Presenters:

#### **Kevin Oshima, Ph.D.** (Contact: [oshima.kevin@epa.gov](mailto:oshima.kevin@epa.gov))

Dr. Oshima is the Director of the Watershed and Ecosystem Characterization Division with EPA's Office of Research and Development (ORD), Center for Environmental Measurements and Modeling (CEMM). He also served as a Branch Chief in ORD for over ten years. Prior to joining EPA, Dr. Oshima was a professor at New Mexico State in environmental virology, a staff scientist for Pall Corporation, and he conducted fish virology research with the U.S. Fish and Wildlife Service. Dr. Oshima's research background has focused on public health water microbiology methods. Since joining ORD, he has been particularly active in research that supports AWQC.

#### **Orin C. Shanks, Ph.D.** (Contact: [shanks.orin@epa.gov](mailto:shanks.orin@epa.gov))

Dr. Shanks is a senior research scientist with EPA's Office of Research and Development, Center for Environmental Measurements and Modeling. His primary research is the development, validation, and implementation of molecular technologies for environmental water quality management. Over the years, he has investigated the identification of host-associated genetic markers of fecal pollution, fate and transport of nucleic acids, utility of molecular methods for water quality monitoring, and has developed quantitative real-time polymerase chain reaction (PCR) methods. Dr. Shanks received his undergraduate and master's degrees from the University of Wyoming and his Ph.D. from Oregon State University.

