# Kevin Oshima, Associate Director for Science, Exposure Methods & Measurements Division, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division Mailing Address

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**Area of Expertise:** Examples of research areas include the development of rapid molecular methods to detect fecal indicator bacteria and bacterial pathogens, studies on the fate and transport of fecal indicators and pathogens in environmental waters, development of detection methods for microbial contaminant candidate list for drinking water and the development of saliva-based methods to detect the exposure of waterborne pathogens in humans. Research has also focused on the use of animal models to characterize the virulence of waterborne pathogens. Oshima has been involved in the development of rapid molecular methods for detecting molds in indoor environments and in studies examining the linkages between mold and asthma.

### Select Publications:

- Paar, J., M. Doolittle, M. Varma, S. Siefring, K. Oshima, AND Rich Haugland. Development and evaluation of a culture-independent method for source determination of fecal wastes in surface and storm waters using reverse transcriptase-PCR detection of FRNA coliphage genogroup gene sequences. JOURNAL OF MICROBIOLOGICAL METHODS. Elsevier Science Ltd, New York, NY, 112(2):28-35, (2015).
- Augustine, S., K. Simmons, T. Eason, S. Griffin, C. Curioso, L. Wymer, Shay Fout, A. Grimm, K. Oshima, AND A. Dufour. Statistical approaches to developing a multiplex immunoassay for determining human exposure to environmental pathogens. JOURNAL OF IMMUNOLOGICAL METHODS. Elsevier Science Ltd, New York, NY, 425(10):1-9, (2015).
- SHANKS, O. C., MANO SIVAGANESAN, L. PEED, C. A. KELTY, A. D. Blackwood, M. R. Greene, R. T. Noble, R. N. Bushon, E. A. Stelzer, J. Kinzelman, T. Anan'eva, C. Sinigalliano, D. Wanless, J. Griffith, Y. Cao, S. Weisberg, V. J. Harwood, C. Staley, K. OSHIMA, M. VARMA, AND R. A. HAUGLAND. Interlaboratory Comparison of Real-time PCR Protocols for Quantification of General Fecal Indicator Bacteria.
  ENVIRONMENTAL SCIENCE AND TECHNOLOGY. ACS Publications, Washington, DC, 46(2):945-953, (2012).

View more research publications by Kevin Oshima.

#### Education:

- Ph.D.Fisheries Science, University of Washington, 1991
- M.S. Fisheries Science, University of University of Washington, 1987

• B.S. Fisheries Science, University of Washington, 1983

## **Professional Experience:**

- Supervisory Biologist, USEPA, ORD, NERL-MCEARD, Cincinnati, OH 2005-present
- Associate Professor Biology, New Mexico State University, Las Cruces, NM 1996
- 2005 Staff Scientist/Visiting Scientist at the Centers for Disease Control and Prevention, Pall Corporation, Atlanta, GA 1992-1996.