

## Mitch Kostich, Research Biologist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division

[Mailing Address](#)

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**Area of Expertise:** Computational and statistical analysis of large datasets addressing environmental questions involving aquatic stressor exposures to humans or other life. Characterization of exposures to unknown contaminants using data from emerging technologies, such as DNA microarrays, next-generation sequencing, and time-of-flight mass spectrometry. Prioritization of large numbers of potential contaminants based on screening-level estimates of risk. Combining data across different domains of knowledge, meta-analysis, decision (rational choice) theory, resampling methods, classification and regression involving many correlated variables but few samples.

### Select Publications:

Batt AL, Kincaid TM, Kostich MS, Lazorchak JM, & Olsen AR. (2015). Evaluating the extent of pharmaceuticals in surface waters of the United States using a national-scale rivers and streams assessment survey. *Environmental Toxicology and Chemistry*.

Kostich M, & Länge R. (2015). Ecotoxicology, Environmental Risk Assessment and Potential Impact on Human Health. *Pharmaceuticals in the Environment: Volume 41*, 180.

Kostich MS, Batt AL, & Lazorchak JM. (2014). Concentrations of prioritized pharmaceuticals in effluents from 50 large wastewater treatment plants in the US and implications for risk estimation. *Environmental pollution*, 184, 354.

Biales AD, Kostich M, Burgess RM, Ho KT, Bencic DC, Flick RL, Portis LM, Pelletier MC, Perron MM & Reiss M. (2013). Linkage of genomic biomarkers to whole organism end points in a toxicity identification evaluation (TIE). *Environmental science & technology*, 47(3), 1306.

Kostich M, Flick R, & Martinson J. (2013). Comparing predicted estrogen concentrations with measurements in US waters. *Environmental pollution*, 178, 271.

Fritz KM, Wenerick WR, & Kostich MS. (2013). A validation study of a rapid field-based rating system for discriminating among flow permanence classes of headwater streams in South Carolina. *Environmental management*, 52(5), 1286-1298.

View more research publications by [Mitch Kostich](#).

### Education:

- Ph.D. in Biology, Johns Hopkins University
- B.A. in Natural Sciences, Johns Hopkins University

## **Professional Experience:**

### Honors and Awards:

- USEPA/ORD Scientific and Technological Achievement Award (level 2) (2012)
- USEPA/ORD Scientific and Technological Achievement Award (level 2) (2012)
- USEPA/OW Achievement in Science and Technology (2009)
- Society of Toxicology (Risk Assessment Section) Top 11 publications list (2009)
- USEPA Trudy Speciner Award for Environmental Protection (2008)