**John Wambaugh, Physical Scientist, in EPA's National Center for Computational Toxicology**

Mailing Address

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**Area of Expertise:** Dr. Wambaugh's areas of active research include high throughput methods for exposure, toxicokinetics, and toxicology; Bayesian statistics; and biostatistics. He co-leads the EPA ExpoCast project and is a member of the ToxCast team. John's research on these projects focuses on predicting human chemical effects and exposures using in vitro laboratory measurements and computer simulations, and rigorously evaluating these predictions using statistical methodology.

**Select Publications:**

Rager, J.E., Strynar, M.J., Liang, S., McMahen, R.L., Richard, A.M., Grulke, C.M., Wambaugh, J.F., Isaacs, K.K., Judson, R., Williams, A.J., Sobus, J.R. "Linking high resolution mass spectrometry data with exposure and toxicity forecasts to advance high-throughput environmental monitoring" Environment International, 88, 269-280 (2016). Exit

Deal, S. Wambaugh, J., Judson, R., Mosher, S., Radio, N., Houck, K., Padilla, S., "Development of a Quantitative Morphological Assessment of Toxicant-Treated Zebrafish Larvae Using Brightfield Imaging and High Content Analysis" Journal of Applied Toxicology, in press Exit

Egeghy, P.P., Sheldon, L.S., Isaacs, K.K., Ozkaynak, H., Goldsmith, M.-R., Wambaugh, J.F., Judson, R.S., Buckley, T.J. "Computational Exposure Science: An Emerging Discipline to Support 21st-Century Risk Assessment" Environmental Health Perspectives, in press Exit

Wambaugh, J.F., Wetmore, B.A., Pearce, R., Strope, C., Goldsmith, R., Sluka, J.P., Sedykh, A., Tropsha, A., Bosgra, S., Shah, I., Judson, R., Thomas, R.S., Setzer, R.W., "Toxicokinetic Triage for Environmental Chemicals" Toxicological Sciences, 147, 55-67 (2015). Exit

View more research publications by John Wambaugh.

**Education:**

- B.S., University of Michigan, Ann Arbor, MI; Physics, 1999
- M.S., Georgia Institute of Technology, Atlanta, GA; Physics, 2001
- M.S., Duke University, Durham, NC; Computer Science, 2005
- Ph.D., Duke University, Durham, NC; Physics, 2006
- Post-Doc, National Center for Computational Toxicology, Durham, NC; Statistical Analysis of Biological Models, 2008

**Professional Experience:**

- Risk Assessment Specialty Section of the Society of Toxicology Top Ten Abstracts: Rager, et al. "Linking High Resolution Mass Spectrometry Data with Exposure and Toxicity Forecasts to Advance High-Throughput Environmental Monitoring, 2016
- Honorable Mention, Best Paper in Biological Modeling, Biological Modeling Specialty Section of the Society of Toxicology: Wetmore et al., "Incorporating High-Throughput

Exposure Predictions with Dosimetry-Adjusted In Vitro Bioactivity to Inform Chemical Toxicity Testing", 2016

- U.S. E.P.A. Scientific and Technological Achievement Award for "High Throughput Heuristics for Prioritizing Human Exposure to Environmental Chemicals", 2015
- U.S. E.P.A. Bronze Medal for National Research Program Team for "Chemicals Safety for Sustainability", 2015

**Additional Publications:**

National Center for Biotechnology Information Exit