

John Wambaugh, Ph.D.

*National Center for Computational Toxicology,
U.S. Environmental Protection Agency*

John Wambaugh is a Physical Scientist with the United States Environmental Protection Agency's (EPA's) National Center for Computational Toxicology (NCCT). His areas of active research include high throughput methods for exposure, toxicokinetics, and toxicology; Bayesian statistics; and biostatistics. He co-leads the EPA Rapid Exposure and Dosimetry project (home of ExpoCast research) and is a member of the ToxCast research team. Dr. Wambaugh's research on these projects focuses on using in vitro laboratory measurements and computer simulations to predict human chemical effects and exposures. He is further interested in rigorously evaluating these predictions using statistical methodology.

Dr. Wambaugh received his Ph.D. in physics in 2006 from Duke University for work in experimental non-equilibrium statistical mechanics, in which he studied how large-scale behaviors can depend on small-scale differences. He started work with the NCCT in 2006 as a postdoctoral researcher with Woodrow Setzer (EPA/NCCT) and Hugh Barton (Pfizer, formerly EPA/NCCT) studying statistical analysis of biological models with an emphasis on Bayesian methods and integrating multiple data types. He transitioned to a principal investigator role at NCCT in 2008. Dr. Wambaugh received his B.S. (physics) from the University of Michigan, Ann Arbor; obtained a M.S. (physics) from Georgia Institute of Technology; and a M.S. (computer science) from Duke University.