

Keith Houck, Physical Scientist, in EPA's National Center for Computational Toxicology

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Area of Expertise: Prior to joining the EPA, Dr. Houck worked in the biotechnology and pharmaceutical fields where he applied molecular and cellular biology skills towards identification of drug candidates for Sphinx Pharmaceuticals and Eli Lilly & Co. He leads efforts within the EPA's Chemical Safety for Sustainability Program is researching new, more efficient, ways to address managing the safety of chemicals, particularly in assessing chemicals for potential risk to human health and the environment.

Select Publications:

Kligerman AD, Young RR, Stankowski LF Jr, Pant K, Lawlor T, Aardema MJ, Houck KA. (2015) [An evaluation of 25 selected ToxCast chemicals in medium-throughput assays to detect genotoxicity](#). Environ Mol Mutagen. 2014 Dec 23. doi: 10.1002/em.21934. [Epub ahead of print] [Exit](#)

Godwin H, Nameth C, Avery D, Bergeson LL, Bernard D, Beryt E, Boyes W, Brown S, Clippinger AJ, Cohen Y, Doa M, Hendren CO, Holden P, Houck K, Kane AB, Klaessig F, Kodas T, Landsiedel R, Lynch I, Malloy T, Miller MB, Muller J, Oberdorster G, Petersen EJ, Pleus RC, Sayre P, Stone V, Sullivan KM, Tentschert J, Wallis P, and Nel AE. [Nanomaterial Categorization for Assessing Risk Potential to Facilitate Regulatory Decision-Making](#). ACS Nano. 2015 Mar 20. [Epub ahead of print] [Exit](#)

Hsu C-W, Zhao J, Huang R, Hsieh J-H, Hamm J, Chang X, Houck K, Xia M. [Quantitative High-Throughput Profiling of Environmental Chemicals and Drugs that Modulate Farnesoid X Receptor](#). Scientific Reports 4, 6437. doi: 10.1038/srep06437. [Exit](#)

Rotroff D, Martin M, Dix, D, Filer D, Houck K, Knudsen T, Sipes N, Reif D, Xia M, Huang R, Judson R. (2014) [Predictive Endocrine Testing in the 21st Century Using In Vitro Assays of Estrogen Receptor Signaling Responses](#). Environ. Sci. Tech. 48:8706-8716. [Exit](#)

Judson R, Houck K, Martin M, Knudsen T, Thomas RS, Sipes N, Shah I, Wambaugh J, Crofton K. (2014) [In Vitro and Modeling Approaches to Risk Assessment from the U.S. Environmental Protection Agency ToxCast Program](#). Basic Clin Pharmacol Toxicol. 115:69-76 [Exit](#)

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Education:

- B.S., Guilford College, Greensboro, NC; Biology, 1980
- M.S., University of North Carolina, Chapel Hill; Chemistry, 1982
- Ph.D., Duke University, Durham, NC; Pathology/Toxicology, 1989
- Post-doc, Genentech, Inc.; Molecular and Cellular Biology, 1992

Professional Experience:

- Editorial Board, Journal of Biomolecular Screening, 2010-present

- Exceptional/Outstanding ORD Technical Assistance to the Regions of Program Offices: Assistance with Multiple SAP Reviews for OSCP, 2014
- White House invitation for the Champions of Change award ceremony for efforts to provide public access to innovative science, 2013
- U.S. EPA Level I Scientific and Technological Achievement Award: Advancing Chemical Safety Assessment via the Development of Predictive Reproductive and Developmental Toxicity Models, 2013

Additional Publications:

[National Center for Biotechnology Information](#) [Exit](#)