

Imran Shah, Computational Systems Biologist, in EPA's National Center for Computational Toxicology

[Mailing Address](#)

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Area of Expertise: Dr. Imran Shah is a computational systems biologist in EPA's National Center for Computational Toxicology (NCCT). Dr. Shah provides NCCT leadership in innovative computational approaches to rapidly evaluate health implications for thousands of environmental stressors. His research focuses on predicting chemical-induced toxicity from complex large-scale molecular data sets using novel machine learning and systems biology methods.

Select Publications:

Shah, I, G. Patlewicz, J. Liu, R. S Judson, and R.S. Thomas. "[GenRA: Systematically Evaluating Read-across Prediction and Performance Using a Local Validity Approach Characterized by Chemical Structure and Bioactivity Information](#)." Regulatory Toxicology and Pharmacology. In press. [Exit](#)

Shah, I., W. Setzer, J. Jack, K. Houck, R. Judson, T. Knudsen, J. Liu, M. Martin, D. Reif, A.M. Richard, R.S. Thomas, K. Crofton, D.J. Dix, R.J. Kavlock. [Using ToxCast data to reconstruct dynamic cell state trajectories and estimate toxicological points of departure](#). Environmental Health Perspectives. June 2016. [Exit](#)

J. F. Wambaugh, B. A. Wetmore, R. Pearce, C. Strobe, R. Goldsmith, J. P. Sluka, A. Sedykh, A. Tropsha, S. Bosgra, I. Shah, R. Judson, R. S. Thomas, and R. Woodrow Setzer, "[Toxicokinetic Triage for Environmental Chemicals](#)," Toxicol. Sci., vol. 147, no. 1, pp. 55–67, Sep. 2015. [Exit](#)

J. Liu, K. Mansouri, R. S. Judson, M. T. Martin, H. Hong, M. Chen, X. Xu, R. S. Thomas, and I. Shah, "[Predicting hepatotoxicity using ToxCast in vitro bioactivity and chemical structure](#)," Chem. Res. Toxicol., vol. 28, no. 4, pp. 738–751, Apr. 2015. [Exit](#)

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Education:

- B.Sc., Imperial College of Science, Technology and Medicine, London, UK; 1989
- M.S., George Mason University, Fairfax, VA; 1993
- Ph.D., George Mason University, Fairfax, VA; 1999

Professional Experience:

- EPA, Pathfinder Innovation Project (PIP) Award, 2015
- EPA, Science and Technical Achievement Award, 2013
- EPA, Chemical Safety for Sustainability, Bronze Medal for Commendable Service, 2011
- Best poster in session, International Conference on Systems Biology, 2010

Additional Publications:

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