Nicolle S. Tulve, Research Physical Scientist, in EPA's National Exposure Research Laboratory

Systems Exposure Division Mailing Address

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Area of Expertise: Nicolle's research activities focus on understanding young children's exposures to chemical (e.g., consumer product active ingredients) and non-chemical (e.g., noise, greenspace, quality of the environment) stressors found in their everyday environments (home, daycare, school, community) and the influence these stressors have on their health and well-being. This research explores the interrelationships between chemical and non-chemical stressors in impacting children's health and well-being and emphasizes better understanding children's total (built, natural, social) environments in order to reduce exposures, improve health and well-being, and minimize risk. Generating and understanding exposure factors are essential to this research. This research is conducted through analysis of extant data and information, laboratory work, and field activities.

Select Publications:

- Tulve NS, Stefaniak AB, Vance ME, Rogers K, Mwilu S, LeBouf RF, Schwegler-Berry D, Willis R, Thomas TA, Marr LC. 2015. Characterization of silver nanoparticles in selected consumer products and its relevance for predicting children's potential exposures. International Journal of Hygiene and Environmental Health. 218(3):345-357.
- Tulve NS, Egeghy PP, Fortmann RC, Xue J, Evans J, Whitaker DA, Croghan CW. 2011.

 Methodologies for estimating cumulative human exposures to current-use pyrethroid pesticides. Journal of Exposure Science and Environmental Epidemiology. 21(3):317-327.
- Tulve NS, Egeghy PP, Fortmann RC, Whitaker DA, Nishioka MG, Naeher LP, Hilliard A. 2008. Multimedia measurements and activity patterns in an observational pilot study of nine young children. Journal of Exposure Science and Environmental Epidemiology. 18(1):31-44.

View more research publications by Nicolle Tulve.

Education:

- USEPA, Post-Doctoral Fellow, ORD/NERL, RTP, NC, 2000
- Ph.D., Environmental Engineering, Clarkson University, 1999
- M.S., Environmental Health and Toxicology, School of Public Health, SUNY Albany, 1994
- B.S., Biology, Oswego State University, 1992

Professional Experience:

- Lead for the Assessing Environmental Health Disparities in Vulnerable Groups Project within the Sustainable and Healthy Communities (SHC) National Research Program, US EPA, ORD, RTP, NC 2014-present
- Lead for the Enhancing Children's Health Project within SHC, USEPA, ORD, RTP, NC 2011-2014
- Lead for the Children's Exposure Research Task within SHC, USEPA, ORD, RTP, NC 2011-present
- Team Lead for the Children's Exposure Measurement Research Program (NERL), USEPA, ORD, NERL, HEASD, RTP, NC 2007-2011
- Research Physical Scientist, USEPA, ORD, NERL, HEASD, EMAB, RTP, NC 2009present
- Acting Associate Director for Human Health, USEPA, ORD, NERL, HEASD, RTP, NC 2008-2009
- Research Physical Scientist, USEPA, ORD, NERL, HEASD, EMAB, RTP, NC 2000-2008
- Research Scientist (detail), USEPA, OPP, HED, Washington, DC 6/2002-10/2002
- Research Physical Scientist, USEPA, ORD, NERL, Post-Doctoral Fellow, RTP, NC 1999-2000

Honors and Awards:

 2013 US EPA National Honor Award, Health Sciences, Nanopesticide Assessment and Regulatory Team

For advancing science by completing the first risk assessment for a nanomaterial and the regulatory decisions and subsequent study evaluations based on that assessment

- 2012 ORD Honor Award, SHEDS-Multimedia Human Exposure Modeling Team
 For developing a state-of-the-science tool to predict human population exposures for critical lifestages to inform risk-based decision making
- 2011 Level III STAA Award
 - 1) Multimedia measurements and activity patterns in an observational pilot study of nine young children by Tulve *et al.*, 2008 (Journal of Exposure Science and Environmental Epidemiology, 18(1):31-44)
 - 2) Organophosphorus and pyrethroid insecticide urinary metabolite concentrations in young children living in a southeastern United States city by Naeher *et al.*, 2010 (The Science of the Total Environment, 408(5):1145-1153)
 - Methodologies for estimating cumulative human exposures to pyrethroid pesticides by Tulve et al., 2011 (Journal of Exposure Science and Environmental Epidemiology, 21(3):317-327)
- 2010 Level I STAA Award
 - 1) A Meta-Analysis of Children's Hand-to-Mouth Frequency Data for Estimating Non-Dietary Ingestion Exposure by Xue *et al.*, 2007 (Risk Analysis, 27(2):411-420)
 - 2) A Meta-Analysis of Children's Object-to-Mouth Frequency Data for Estimating Non-Dietary Ingestion Exposure by Xue *et al.*, 2010 (Journal of Exposure Science and Environmental Epidemiology, 20(6):536-545)