

Myriam Medina-Vera, Supervisory Physical Scientist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division

[Mailing Address](#)

medina-vera.myraim@epa.gov

Area of Expertise: I started my career performing research in the area of Photochemistry of PAHs on Particulate Matter. After a few years at EPA, I started working on ecological risk assessment including the development of quantitative risk assessment tools to prioritize research and management actions. I developed methods development for multimedia samples (e.g. water, sediment, fish tissue) and new applications for Pyrolysis- GC/MS techniques and thermal distillation of PAHs from sediment samples. While performing ecological research, I also had the opportunity to work on the integration of GIS information, coverage development, and models to plan research. I worked in the area of endocrine disrupter chemicals. At this time, my efforts are focused on methods development for the analysis of relevant chemicals affecting human life through different exposure routes. I lead the methods development efforts supporting human exposure research. The team is currently developing methods to determine aggregate and cumulative exposures.

Select Publications:

Misenheimer, J; Nelson, C; Huertas, E; Medina-Vera, M; Bradham, K; Analysis of arsenic and lead bioaccessibility and plant bioconcentration factors from three Puerto Rican urban community gardens; Environmental Science: Processes and Impacts- submitted

Zartarian, VG, Schultz, B, Barzyk, T, Smuts, M, Hammond, D, Medina-Vera, M, Geller, A. 2011. The Environmental Protection Agency's Community-Focused Exposure and Risk Screening Tool (C-FERST) and Its Potential Used for Environmental Justice Efforts. American Journal of Public Health 101: S286-S294

Medina-Vera M, Van Emon J, Melnyk L, Bradham K, Harper S, Morgan J. 2010. An Overview of Measurement Method Tools Available to Communities for Conducting Exposure and Cumulative Risk Assessments. Journal of Exposure Science and Environmental Epidemiology 20, 359-370.

Harper, S., Rogers, K, Van Emon, J, Medina-Vera, M. 2007. Report: Lead Paint Test Kits Workshop, October 19-20, 2006 Summary Report. EPA/600/R-10/066.

Bradham K, Highsmith R, Sheldon L, Friedman W, Pinzer E, Ashley P, Stout D, Harper S, Vesper S, Jones P, Ashley P, Medina-Vera M, Fortmann R, Croghan C, Cox D. 2006. American Healthy Homes Survey: A National Study of Residential Related Hazards. Epidemiology, 17(6): S433-S433.

M. Medina-Vera, G. Ferrell, L. Wright, L. Zintek, J. Gundersen, M. Morgan. 2006. "Development and evaluation of analytical methods for alkylphenol and alkylphenol derivatives

(ethoxylates and carboxylates) with EDC properties". Report, Annual Performance Measure 578, USEPA.

View more research publications by [Myriam Medina-Vera](#).

Education:

- B.S. in Chemistry & Mathematics (dual major), 1984, University of Puerto Rico
- Ph.D. in Analytical Chemistry, 1991, University of Puerto Rico

Professional Experience:

- Branch Chief, U.S. EPA, HEASD/MDAB, Research Triangle Park, NC, 1/2000-Present.
- Acting Deputy Director, U.S. EPA, HEASD, Research Triangle Park, NC 07/2011-09/2012
- Chemist. U.S. EPA, HEASD/EMMB, Research Triangle Park, NC, 9/91-12/99.
- Research Assistant, University of Puerto Rico, 8/87-7/91.
- Instructor-General Chemistry for Nursing Students Teacher. Metropolitan University, Rio Piedras, PR, 1989.
- Instructor-General Chemistry for Non-majors Teacher. Sacred Heart University, Santurce, PR, 1987.