

## Valerie Garcia, Branch Chief, in EPA's National Exposure Research Laboratory

Systems Exposure Division

[Mailing Address](#)

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**Area of Expertise:** Garcia has over 15 years in leading and managing environmental programs. In addition, she conducts multi-disciplinary research to integrate environmental models and data to address ecosystems and human health issues. This research includes developing multi-variable models to examine associations between environmental exposures and health, indices for tracking environmental conditions, and spatial approaches for conducting network analyses, predicting environmental contamination, and investigating health risks.

### Select Publications:

Garcia, V.C., E. Cooter, J. Crooks, B. Hinckley, M. Murphy, X. Xing (2017), Examining the impacts of increased corn production on groundwater quality using a coupled modelling system, *Science of The Total Environment* 586: 16-24, <http://dx.doi.org/10.1016/j.scitotenv.2017.02.009>.

Peele, J., R. Haueber, V. Garcia, L. Neas, T. Russell, (2013), Impact of nitrogen and climate change interactions on ambient air pollution and human health, *Biogeochemistry*, DOI: 10.1007/s10533-012-9782-4, 114:121-134.

Lin, S., R. Jones, C. Pantea, H. Ozkaynak, S. T. Rao, S. Hwang & V. C. Garcia (2013) Impact of NOx emissions reduction policy on hospitalizations for respiratory disease in New York State. *Journal of Exposure Science and Environmental Epidemiology* 23(1):73-80

Garcia, V., V. Isakov, and T. Watkins (2011), Case study: Advances in modelling exposure, *Journal of the Institution of Environmental Scientist*, 20(1).

Garcia, V. C., E. Gego, S. Lin, C. Pantea, K. Rappazzo, A. Wootten, and S. T. Rao (2011), An evaluation of transported pollution and respiratory-related hospital admissions in the state of New York, *Atmospheric Pollution Research* (2), 9-15.

Garcia, V.C., K. Foley, E. Gego, D. Holland (2010). A Comparison of Statistical Techniques for Combining Modeled and Observed Concentrations to Create High-Resolution Ozone Air Quality Surfaces, EM: Air and Waste Management Association, 60:586-595.

View research publications by [Valerie Garcia](#).

**Education:**

- B.S., Information Systems, University of San Francisco, 1990
- M.S., Forestry, North Carolina State University, 2004
- Ph.D., Forestry, North Carolina State University, 2010

**Professional Experience**

- 2008–present: Branch Chief/Team Lead, US Environmental Protection Agency/Office of Research and Development/National Exposure Research Laboratory, Research Triangle Park, NC.
- 2005-2008: Deputy Director, National Oceanic and Atmospheric Administration, Oceanic and Atmospheric Research, Air Research Laboratory, Atmospheric Sciences Modeling Division, RTP, NC.
- 2001-2005: Lead Assistant Lab Director, US Environmental Protection Agency.
- 2000-2001: Special Assistant, Environmental Scientist. US Environmental Protection Agency.

**Awards and Honors**

- US EPA Silver Medal for work with the Center for Disease Control, Public Health Air Quality Surveillance Evaluation program (2008)
- Laboratory Excellence Award for development of advanced modeling tool to characterize near-road exposure (2015)
- Impact Award for NOx Budget Trading Program Accountability Team (2011)
- 8 Bronze Medal Awards