

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

Computational 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