Janet Burke Norris, Research Physical Scientist, in EPA's National Exposure Research Laboratory

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Area of Expertise:
Janet's research focuses on the development, application, and evaluation of exposure models for air pollutants. Recent research activities include applications of the Stochastic Human Exposure and Dose Simulation (SHEDS) model using output from air quality models and models that combine monitoring data with air quality model data to improve the spatial and temporal resolution of exposure estimates, and to estimate exposures for use in analyses of the health effects of air pollution.

Education:
- Ph.D., Environmental Health, University of Michigan, 1998
- M.S., Environmental Health, University of Michigan, 1994
- B.S., Biology, Boston College, 1986

Professional Experience:
- Research Physical Scientist, USEPA, ORD, NERL-HEASD, Exposure Modeling Research Branch, Research Triangle Park, NC 2001-present
- Environmental Health Scientist (Post-doctoral), USEPA, ORD, NERL, Research Triangle Park, NC 1998-2001
- Graduate Research Assistant, University of Michigan Air Quality Lab, University of Michigan School of Public Health, Ann Arbor, MI 1992-1998
- Data Supervisor, Dept. of Environmental Science and Engineering, Harvard School of Public Health, Boston, MA 1989-1992
- Biomedical Data Coordinator, Dana-Farber Cancer Institute, Boston, MA 1986-1989

Publications:
Baxter, L., Burke, J., Lunden, M., Turpin, B., Rich, D., Thevenet-Morrison, K., Hodas, N., Özkaynak, H. (2012) Influence of human activity patterns, particle composition, and residential air exchange rates on modeled distributions of PM2.5 exposure compared to central-site monitoring data. Journal of Exposure Analysis and Environmental Epidemiology, doi:10.1038/jes.2012.118.

Vette, A., Burke, J., Norris, G., Landis, M., Batterman, S., Breen, M., Isakov, V., Gilmour, I., Lewis, T., Kamal, A., Hammond, D., Vedantham, R., Bereznicki, S., Tian, N., Croghan, C. (2012) The Near-Road Exposures and Effects of Urban Air Pollutants Study (NEXUS): Study Design and Methods. Science of the Total Environment, http://dx.doi.org/doi:10.1016/j.scitotenv.2012.10.072.

Duvall, R., Norris, G., Burke, J., Olson. D., Vedantham, R., Williams, R. (2012) Determining spatial variability in PM2.5 source impacts across Detroit, MI. Atmospheric Environment, 47: 491-498.

Berrocal, V. J., Gelfand, A. E., Holland, D. M., Burke, J. and Miranda, M. L. (2011) On the use of a PM2.5 exposure simulator to explain birth weight. Environmetrics, 22: 553–571.

Xue, J., McCurdy, T., Burke, J.. Bhaduri, B., Liu, C., Nutaro, J., Patterson, L. (2010) Analyses of school commuting data for exposure modeling purposes. Journal of Exposure Analysis and Environmental Epidemiology, 20, 69-78.

Georgopoulos, P., Isukapalli, S., Burke, J., Napelenok, S., Palma, T., Langstaff, J., Majeed, M., He, S., Byun, D., Cohen, M., Vautard, R. (2009) Air quality modeling needs for exposure assessment from the source-to-outcome perspective. EM, Oct. 2009, 26-35.

Published & Presented Research (1999-Present)