

**Heather N. Watson, Ph.D.**  
**Scientist**

**Professional Profile**

Dr. Heather N. Watson is a Scientist in Exponent's Statistical and Data Sciences practice. She specializes in biostatistics and has experience in clinical trials and spatial statistics. Her research includes the application of statistical methods to local clustering of disease, focused clustering of disease near a putative hazard, and disease mapping utilizing Bayesian hierarchical modeling. In addition, Dr. Watson has worked in the development and review of clinical cancer trials pertaining to Phase I to Phase IV trials. She has experience in experimental design, determining appropriate statistical methods, and statistical analysis, including methods such as survival analysis, data mining, and regression.

Before joining Exponent, Dr. Watson attended New York University and served as a graduate assistant in the Division of Biostatistics at New York University, School of Medicine. Her background is in biology and mathematics. She collaborated with medical investigators to plan and/or to analyze clinical or genetic studies. Also, Dr. Watson educated medical and graduate students in biostatistics.

**Academic Credentials and Professional Honors**

Ph.D., Environmental Health Science (concentration in Biostatistics), New York University,  
2008

B.A., Mathematics and Biology, Claremont McKenna College, 2002

## **Publications**

Yim J, Zhu L-C, Chiriboga L, Watson HN, Goldberg JD, Moreira AL. Histologic features are important prognostic indicators in early stages lung adenocarcinomas. *Mod Pathol* 2007; 20:233.

## **Book Chapters**

Goldberg JD, Watson HN, Friedman, HP. Meta-analysis in clinical risk assessment. *Encyclopedia of Quantitative Risk Assessment*. Melnick E, Everitt BS (eds), John Wiley & Sons, Ltd., Chichester, UK, 2008.

## **Presentations**

Watson H, Goldberg JD. Extensions of spatial statistical methods to incorporate spatial dependency and time constraints with application to breast cancer incidence in New York State. Presentation, New York University, School of Medicine, Department of Environmental Health, New York, NY, 2008.

Watson H, Goldberg JD, Liu M. Spatial analysis of breast cancer incidence in Rockland County, New York County, and Western Queens County. Presentation, Joint Statistical Meeting, Salt Lake City, UT, 2007.

Watson H, Goldberg JD, Liu M. Spatial statistical methods for small-area health data with application to the association of breast cancer incidence and local power plant emissions. Presentation, Joint Statistical Meeting, Seattle, WA, 2006.

## **Professional Affiliations**

- American Statistical Association
- Institute of Mathematical Statistics