

## **Richard K. Kwok**

Richard K. Kwok, a research epidemiologist, has a strong background in environmental health studies, from study design and statistical methods, to data collection and data analysis. Prior to joining RTI International, Dr. Kwok worked at the U.S. Environmental Protection Agency (EPA), assisting in the design, conduct, and data analysis for various field studies, including the Particulate Matter (PM) Panel Studies in Baltimore, MD; arsenic exposure studies in the Puget Sound, WA; and drinking water arsenic exposure studies in Fallon, NV, and Inner Mongolia, China. His experience at the U.S. EPA and also at RTI has provided Dr. Kwok with significant experience in study design, field data collection, and data analysis. In addition to his general methodological skills, Dr. Kwok has substantive expertise in cardiovascular, reproductive, cancer, occupational, and environmental epidemiology, with a special emphasis on children's health. Additionally, he has experience working with geographic information systems and spatial statistics, cancer registries, and socioeconomic status issues associated with the U.S. Census. He is an experienced quality assurance auditor and serves in a variety of capacities for several professional epidemiology organizations. Dr. Kwok also serves as a reviewer for several journals in the fields of epidemiology and environmental health. He teaches environmental epidemiology as an adjunct assistant professor to masters and doctoral-level students at the Nicholas School of the Environment at Duke University and is the past-president of the Epidemiology Section of the Alumni Association of the School of Public Health at the University of North Carolina at Chapel Hill. Dr. Kwok recently completed a research sabbatical at the Murdoch Children's Research Institute in Melbourne, Australia, helping to organize an international consortium examining the genetic and environmental causes of childhood cancer.

### **Education**

PhD, Epidemiology, University of North Carolina, Chapel Hill, NC, 2003.

MSPH, Epidemiology, University of North Carolina, Chapel Hill, NC, 1999.

BSPH, Environmental Science, University of North Carolina, Chapel Hill, NC, 1997.

### **Professional Experience**

2003 to date

RTI International, Research Triangle Park, NC.

Research Epidemiologist 3 (2005 to date). Manages projects with budgets in excess of \$1,000,000 with over 10 core personnel. Continues to write research grants and proposals while exploring strategic business opportunities with collaborators both within and outside RTI. Organizes and maintains environmental health seminar series to bring in external speakers to RTI. Leads business development opportunities related to federal environmental health agencies.

Research Epidemiologist 2 (2003 to 2005). Designed and analyzed epidemiological studies. Also developed accompanying data collection questionnaires and forms for these studies and helped to write interim and final project reports. Wrote research grants and proposals. Conducted marketing and other business development efforts.

2004 to date

Duke University, Durham, NC.

Adjunct Assistant Professor (2006 to date). Continues to teach an environmental epidemiology course to student at the Nichols School for the Environment and Earth Sciences and provides advice to masters and doctoral-level students regarding research projects and career opportunities.

Visiting Assistant Professor (2004 to 2006). Designed and co-taught an environmental epidemiology course to students at the Nicholas School for the Environment and Earth Sciences. Provided advice to masters and doctoral-level students for potential research projects and career opportunities.

2007 to date

Murdoch Children's Research Institute (MCRI), Royal Children's Hospital, Parkville, Australia; and Department of Pediatrics, The University of Melbourne, Melbourne, Australia.

Honorary Research Fellow (2008 to date). Continued collaboration with investigators and researchers.

Visiting Researcher. (joint appointment, 2007) Worked onsite with investigators at the MCRI and University of Melbourne to plan and implement the International Childhood Cancer Cohort Consortium (I4C). Met with collaborators around the world to visit their facilities and obtain their protocols and questionnaires. Operationalized the collaboration through the drafting of policies and procedures for research investigations. Assisted in the implementation of a study on the environmental exposures associated with gene translocations in childhood leukemia cases.

1998 to 2003

U.S. Environmental Protection Agency, Research Triangle Park, NC.

Environmental Health Scientist, National Health and Environmental Effects Research Laboratory. Worked for the Epidemiology and Biomarkers Branch of the Human Studies Division in the design, data collection, and analysis of data from U.S. Environmental Protection Agency health studies in Fallon, NV (2002); Seattle, WA (2001); Inner Mongolia, China (2001, 2000); and Baltimore, MD (1998).

- Designed and conducted a research study investigating the health effects of drinking water arsenic associated with serial blood pressure changes during pregnancy of a population in Inner Mongolia, China.

- Collaborated in the design and conduct of a mortality study in Inner Mongolia, China.
- Designed and implemented field protocols for endotoxin exposure assessment in Baltimore, MD (1998) and the Coachella Valley, CA (1999).
- Performed QA and QC procedures and database management of human health data.
- Performed statistical analyses of environmental and human health data using SAS (Statistical Analysis Systems, Cary, NC) and Geographical Information System (GIS) software.

1993 to 2000

University of North Carolina, Chapel Hill, NC.

Teaching Assistant, Department of Epidemiology (1998 to 2000). Developed and taught the introduction to SAS class for first year students in the department. Taught data management and data analysis skills to 30 students. Presented the principles of epidemiology to 50 students through lectures and discussions. Collaborated with faculty and staff for an interactive classroom and Web-based learning experience.

Research Associate, Department of Radiology (1993 to 2000). Worked for the Carolina Mammography Registry performing quantitative analysis and data management of patient data focusing on breast cancer and women's health. Research projects included estrogen and progesterone receptors in interval and screen detected breast cancers; SES and breast cancer incidence and mortality rates using GIS technology and U.S. Census data; and efficacy of breast cancer detection using different radiological techniques.