

NCEA POST-DOCTORAL PROJECT DESCRIPTION

Project Number:	NCEA-DC-QRMG2-090208
Division:	NCEA-Washington Division
Branch:	Quantitative Risk Methods Group
Geographical Location of position:	Arlington, VA
Project Area:	<p>Quantitative Uncertainty Analysis</p> <p>This position is located in the Quantitative Risk Methods Group in the Washington Division of EPA's National Center for Environmental Assessment (NCEA), a part of the Office of Research and Development (ORD). The Quantitative Risk Methods Group develops and applies quantitative risk assessment methods and tools to support public health decisions, assesses risks from key environmental pollutants and polluted sites, and provides expert advice and training to EPA and others involved in environmental protection. The Group includes mathematical, biological, and environmental scientists from several disciplines, with an emphasis on quantitative analysis and mathematical modeling.</p>
Brief Description of Project¹:	<p>The successful applicant will help NCEA explore quantitative approaches to characterizing uncertainties in hazard and dose-response assessment. A successful applicant will be familiar with techniques in uncertainty analysis, with probability theory, Bayesian approaches, and decision analysis science. They should be interested in evaluating practical applications to characterizing, analyzing, and communicating uncertainty in hazard assessment and dose-response modeling.</p> <p>The project may involve working on several interdisciplinary projects or teams. A strong candidate would be familiar with core concepts in toxicology, epidemiology and/or biochemistry and be able to easily converse with scientists in those disciplines in order to be sure approaches are sensitive to the underlying biological sciences.</p> <p>The overall objectives of the work are to advance the field of quantitative risk assessment with particular focus on hazard and dose-response estimation, and to ensure that EPA has scientifically sound quantitative information for its actions.</p>
Major Scientific Area(s) of Emphasis:	Human Health Risk Assessment

Projected duration of appointment (2 or 3 years):	Three years
Educational requirements²:	Ph.D. or other doctorate with a strong quantitative background in operations research, decision analysis, or mathematical statistics.
Specialized training and/or experience preferred:	Strong knowledge of statistics and modeling techniques used to provide quantitative assessments of uncertainty
Relocation Expense Authorized?	Relocation expenses will not be paid.