

Faculty and/or Postgraduate Research Participation Program
U.S. Environmental Protection Agency
National Center for Environmental Assessment
Arlington, Virginia

Project #: EPA-NCEA 2008-02

A research project training opportunity for faculty and/or postgraduates is currently available at the U.S. Environmental Protection Agency (EPA) National Center for Environmental Assessment (NCEA) in Arlington, Virginia.

Project Description: This project is with the Integrated Risk Information System (IRIS) Program which is part of the Immediate Office of the NCEA Director. The IRIS Program develops health assessments for chemicals of concern to EPA and provides a nationally and internationally used data base of toxicity information that is utilized in risk assessments, site-specific environmental decisions, and rulemaking. The IRIS Program is highly visible and scientifically complex. The IRIS Program involves the production of detailed, scientific assessments that undergo a series of internal and external reviews prior to being loaded on the IRIS data base (<http://www.epa.gov/iris/index.html>). The IRIS staff, which reports to the IRIS Program Manager, is responsible for the development of new and revised health assessments for IRIS, daily operation of the IRIS Program, oversight and maintenance of the information in the IRIS data base, liaison with other parts of NCEA, the rest of EPA, and the larger scientific community involved in the development and review of IRIS documents, and outreach to the IRIS user community and general public. This training program will provide the selected scientist with the knowledge, skills, and abilities needed to perform human health risk assessments with impact at the global scale.

Specific Tasks: The selected individual will be trained in tasks related to IRIS health assessments. This might include the scientific analysis and development of multiple, concurrent health assessments for IRIS in accordance with a set of priorities and a schedule, response to peer review and EPA consensus review comments, interaction with other scientists to identify and resolve scientific issues in a timely manner, and completion of final IRIS summaries and support documents for the data base. The selected individual will also learn through interactions with other individuals and teams on cross-cutting scientific issues that arise in the IRIS Program. With guidance from the mentor, the participant may be involved in the following training activities.

- Reviewing and analyzing biological and/or toxicological data supporting the qualitative and quantitative estimates of health effects from various chemical substances.
- Developing analyses into logical, credible health assessment documents for IRIS that reflect current scientific principles and risk assessment methodologies. Daily activities may involve interpretation of toxicological and epidemiological data and data on chemical residues and their potential fate/metabolism in the human biological system. Often relationships are unclear or confounded by other variables, thus making their analysis difficult or controversial. The participant will learn how to synthesize and communicate various kinds of scientific information in health assessment documents.

- Arranging peer review for his/her assessment documents, and responding to peer review comments by scientists in NCEA, other parts of EPA, and external reviewers.
- Along with EPA team of staff, identifying and researching cross-cutting scientific issues that arise in the IRIS data base, such as application of methodologies, presentation of scientific findings, and procedures for calculations.
- Devising scientific approaches and guidance for the IRIS program, and interacting with other scientists in EPA to improve risk assessment methodologies and their implementation.

The participant will be mentored by an IRIS team member. The participant will have latitude in exercising independent initiative and judgment in the research commensurate with the level of training. EPA will review completed documents for quality, soundness of scientific conclusions, and adherence to EPA risk assessment guidelines. IRIS guidance documents can be found at: <http://www.epa.gov/iris/backgr-d.htm> .

Qualifications and Skills: Applicants must be either university faculty members or have received a postdoctoral degree within five years of the desired starting date. Other applicants, including established scientists interested in new training activities, will be considered on a case-by-case basis. Applicants must possess toxicological and/or biological knowledge, background in risk assessment, and communication and project management skills. Projects usually involve knowledge of one or more health science disciplines (e.g., neurotoxicology, developmental toxicology, microbiology), selecting the approaches and methods to use, application of complex models, and interpretation of data.

The program is open to all qualified individuals without regard to race, sex, religion, color, age, physical or mental disability, national origin, or status as a Vietnam era or disabled veteran. U.S. citizenship or lawful permanent resident status is preferred (but can also hold an appropriate visa status, however, an H1B visa is not appropriate).

The appointment is for full-time for one year and may be renewed for up to two additional years upon recommendation of NCEA and subject to availability of funds. The participant will receive a monthly stipend. The participant must show proof of health and medical insurance. **The participant does not become an EPA employee.**

The Research Participation Program for NCEA is administered by the Oak Ridge Institute for Science and Education. ***Please reference Project #EPA-NCEA 2008-02 when calling or writing for information.*** For additional information and application materials contact: Research Participation Program/NCEA-RTP, Attn: Betty Bowling, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, Tennessee 37831-0117, Phone: (865) 576-8503 FAX: (865) 241-5219 e-mail: betty.bowling@ornl.gov.

An application can be found at www.ornl.gov/orise/edu/EPA/app-gugrgpd.pdf