

**OFFICE OF WATER  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
INTERNSHIP PROGRAM OPPORTUNITIES  
Washington, D.C.**

**Project # EPA Water 2005-40**

**Project Description:** The Office of Science and Technology (OST) is one of four offices within the U.S. Environmental Protection Agency's (EPA) Office of Water. OST applies science and technology to protect water quality. OST staff is multi-disciplinary and includes statisticians, biologists, chemists, engineers, economists, and others. The intern will be involved in projects that evaluate pollutants remaining in water discharges after treatment. In particular, the program is planning two studies on "Publicly Owned Treatment Works" (POTWs) for which data will be evaluated. Today, many municipalities operate POTWs to remove pollutants from water used in homes, small businesses, industries, and other facilities. The first study will evaluate the pollutant concentrations in biosolids which are the treated residuals from the final step in the wastewater treatment. The second study will evaluate the treatment processes and the removals of pollutants associated with different steps in the treatment processes.

**Specific Tasks:** The intern will be trained within the statistics program in OST's Technology and Statistics Branch. As a member of multi-disciplinary teams, the intern will provide statistical analyses of pollutant and other data collected from POTWs. In addition to these two studies, the intern also will be involved in providing statistical analyses of data collected from establishment surveys and physical samples of industrial wastewater. The project teams use these data to develop effluent guidelines which are national standards developed on an industry-by-industry basis, and are intended to represent the greatest pollutant reductions that are economically achievable for an industry.

**Expected Results:** The internship will provide excellent exposure to statistical analysis of environmental and chemical data. The intern will have the opportunity to learn and participate in designing data collection activities and surveys that will be performed on a one-time basis, which allows for creativity and unique approaches. Through this internship, the intern will have a better understanding of the application of statistics to environmental data and the role of statistics within regulatory and non-regulatory programs.

**Intern Qualifications and Skills:** The applicant must have received a master's degree in statistics or a closely related field within three years of the desired starting date or completion of all requirements for the degree should be expected prior to the starting date. Advanced coursework in statistical theory and expertise in SAS programming are desired. Experience with time series analysis, survey statistics, or environmental data also is desired. The intern must have the ability to perform independently and within a team structure. Excellent oral and written communication skills are essential.

**Stipend and Tenure:** The appointment will initially be full-time for a one year. It may be renewed for up to two additional years depending on funding and project needs. The annual stipend will range from \$45,000-\$48,000 depending on experience. The intern does not become an EPA employee.

The EPA contact person for this project is Marla Smith. Her e-mail is [smith.marla@epa.gov](mailto:smith.marla@epa.gov).

**The Internship Program for EPA Water is administered by the Oak Ridge Institute for Science and Education. *Please reference Project # EPA Water 2005-40 when calling or writing for information.* For additional information and application material contact: Internship Program – EPA Water, Attn: Betty Bowling, Science and Engineering Education – MS 36, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, Tennessee 37831 Phone: (865) 576-8503 Fax: (865) 241-5219 e-mail: [bowlingb@ornl.gov](mailto:bowlingb@ornl.gov).**

*Sam Bryant serves as the EPA Office of Water internship program coordinator. His e-mail address [Bryant.Samuel@epa.gov](mailto:Bryant.Samuel@epa.gov)*

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