



Seeking post Master's applicants for a University of Wisconsin-Madison – U.S. Environmental Protection Agency Fellowship with a focus on PFAS toxicology

Application Deadline: 22 May 2022

The University of Wisconsin-Madison's Aquatic Sciences Center, home to the Wisconsin Sea Grant and Water Resources Institutes, in partnership with the U.S. Environmental Protection Agency's Great Lakes Toxicology and Ecology Division seek post Master's candidates interested in tackling scientific challenges related to water resources management and human health. Together, these programs will support a Fellow to provide technical expertise to advance ecological research while receiving valuable support from EPA scientists who will serve as mentors. This Fellow will be placed at the US EPA Office of Research and Development lab in Duluth, MN, and will be working directly with Dr. Matthew Etterson in addition to researchers from across Wisconsin and the region.

We seek a Fellow with a background in ornithology, ecotoxicology, risk assessment, biology, or related fields in the biological and natural sciences to join an interdisciplinary team of US EPA scientists to conduct research focused on understanding risks that per- and polyfluorinated alkyl substances (PFAS) in the environment pose to birds nesting at the terrestrial/water interface. PFAS are a complex class of thousands of chemicals of potential concern in terms both human health and ecological effects. Some PFAS have proven to be both very persistent and widely distributed in the environment; however, only a select few PFAS (e.g., perfluorooctanesulfonate [PFOS]; perfluorooctanoic acid [PFOA]) have been well-studied, to date.

One of the difficulties in performing PFAS risk assessments for birds is the lack of validated bioaccumulation models to predict PFAS residues in avian tissues from PFAS concentrations in soil, sediment, and water. Consequently, there is a need to develop predictive models of bioaccumulation of these compounds using high quality empirical data on PFAS concentrations in the environment and prey of nestling birds. Together with other EPA scientists, the fellow will conduct research that aims to develop exposure/bioaccumulation models to couple with effects monitoring of avian reproductive success at established sites in Duluth, MN. Emphasis will be placed on the development of predictive tools and models, conceptually organized around the adverse outcome pathway framework, that allow EPA and tribal, state, and local stakeholders to predict effects of PFAS to insectivorous birds based on measured environmental concentrations.

The selected fellow will be integrated into a transdisciplinary research team and engaged in multiple aspects of project planning, communication and coordination, research implementation, and analysis. The fellow will be afforded an opportunity to interact with internationally recognized leaders, both within and outside EPA and UW-Madison. The research participant will contribute to and/or publish original research. It is expected that this training opportunity will provide an early career scientist with knowledge, skills, and abilities needed to apply new technologies and associated data to regulatory decision-making at the local, national, and/or international scale.

We welcome applications from underrepresented candidates and anyone passionate about using science to better serve society. UW-Madison is an Equal Employment, Equal Access Employer committed to increasing the diversity of our workforce. Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background—people who as students, faculty, and staff serve Wisconsin and the world.

Additional information

More detail on the fellowship is below. If you have any questions, please contact: Jennifer Hauxwell at jennifer.hauxwell@aqu.wisc.edu.

Eligibility

Any student or postgraduate who will have graduated in the past five years with a Master's degree in an applicable field (see above) and who is eligible to work in the US is eligible to apply. Fellows must have completed all degree requirements before starting the fellowship. We welcome international candidates who are eligible to work in the United States; we are unable to sponsor visas for this position.

Stipend and Expenses

Annual stipend will be \$40,000, with additional benefits (see - <http://www.ohr.wisc.edu/benefits/new-emp/grad.aspx>). Fellows will be allotted up to \$2,000 to cover fellowship-related travel and can include conferences. Additional travel associated with the fellowship may be covered by the host agency at the agency's discretion.

Application Requirements

Application packages should be sent to jennifer.hauxwell@aqua.wisc.edu at the University of Wisconsin Sea Grant Institute and should include:

1. A personal statement that describes your background and abilities, your expectations from the fellowship experience and how this experience fits with your career goals (2 pages or fewer)
2. Curriculum vitae with relevant educational, professional and volunteer experience (no length limit)
3. Copies of all undergraduate and graduate student transcripts
4. Up to 4 writing samples, both formal and informal (e.g., journal articles or other technical documents, popular articles, web resources, etc.)
5. A list of two professional references with contact information, including a faculty member from your graduating institution familiar with your academic record

Please use the naming convention "Last name – description of file" for all files associated with the application (e.g. "Yang – cover letter", "Yang – cv", "Yang – transcripts", etc.).

Selection Process

UW and EPA staff will identify a short list of candidates for interviews. Interviews will be conducted by a panel of UW and EPA staff members to determine the best fit for the position. It is expected that applicants will possess a strong aquatic sciences and water resources background, strong analytical skills, an ability to manage projects and work independently, and excellent written and verbal communication skills.

Length of Assignment

The length of assignment is one year with an anticipated start of September 1, 2022. This timeline may be adjusted to accommodate academic semester needs or the needs of the candidates or funding institutions.

Timeline

22 May 2022 – Deadline for submission of applications

Late May/early June 2022 – Interviews

September 1, 2022 (approx.) – Fellowship begins