



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

Application Deadline: October 26, 2020

The University of Wisconsin-Madison's Aquatic Sciences Center in partnership with the U.S. Environmental Protection Agency's Great Lakes Toxicology and Ecology Division seek postdoctoral candidates interested in tackling toxicological challenges related to water resources management and human health. Together, these programs will support a Postdoctoral Fellow to provide technical expertise to advance toxicological 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 Drs. Dan Villeneuve and Gary Ankley in addition to researchers from across Wisconsin and the region.

We seek a Fellow with a background in toxicology, pharmacology, risk assessment, biology, analytical or environmental chemistry, or related fields in the biological and naturals 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 freshwater ecosystems and the services they provide. 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. Given the large number of PFAS of concern, it is unreasonable to evaluate each compound with traditional analytical monitoring and whole animal toxicity testing alone. Consequently, there is a need to develop predictive approaches to support assessment of PFAS, using existing knowledge, computational models, pathway-based in vitro assays, short-term in vivo tests with molecular/biochemical endpoints and other innovative approaches. Together with other EPA scientists, the fellow will conduct research that aims to couple understanding of the occurrence, distribution, and concentrations of PFAS in critical habitats like the Laurentian Great Lakes with novel toxicological data defining the biological pathways these contaminants can perturb and their consequences for ecological fitness. 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 efficiently and cost-effectively evaluate this expansive class of chemicals.

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.

Work arrangements may need to be flexible and may evolve amid the coronavirus (COVID-19) pandemic, adhering to all University of Wisconsin-Madison and EPA directives and guidance.

Additional information

More detail on the fellowship is below. If you have any questions, please contact:

Jennifer Hauxwell at jennifer.hauxwell@aqua.wisc.edu.

Eligibility

Fellows must have completed all degree requirements before starting the fellowship. A person eligible for a postdoctoral fellowship is usually within five years of having received their doctorate degree.

Stipend and Expenses

\$55,000 (minimum), 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-Madison Aquatic Sciences Center and should include:

1. A cover letter 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 undergraduate and graduate student transcripts. Scanned copies are acceptable.
- 4. A list of three academic and professional references with contact information, including a faculty member from your graduate institution familiar with your academic record.

5. Up to 4 writing samples, both formal and informal (e.g., journal articles or other technical documents, popular articles, web resources, etc.).

Please use the naming convention "Last name – description of file" for all files associated with the application (e.g. "Smith – cover letter", "Smith – cv", "Smith – 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 background in toxicology or a relevant field, 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 two years, with the possibility of an extension and an anticipated start of late fall 2020. This timeline may be adjusted to accommodate academic semester needs or the needs of the candidates or funding institutions.

Timeline October 26, 2020 – Deadline for submission of applications Early November – Interviews December/January (approx.) – Fellowship begins