



## **Seeking postdoctoral and post-master's applicants for the Wisconsin Water Resources Science-Policy Fellowship with a focus on Cyanobacterial Harmful Algal Blooms**

*Application Deadline: March 28, 2021*

The University of Wisconsin-Madison's Aquatic Sciences Center (UW), home to the University of Wisconsin Water Resources and Sea Grant Institutes, and in partnership with the Wisconsin Department of Health Services (WDHS) seek postdoctoral and post-master's candidates interested in tackling timely science and policy challenges related to water resources management and human health in Wisconsin. Together, these programs will fund a Wisconsin Water Resources Science-Policy Fellow position. This program places a recent master's or doctoral graduate within a state program full-time for one to two years, with the Fellow bringing technical skills to address water issues and tackle related public health challenges and receiving valuable real-world science-policy experience from the resource professionals who will serve as mentors. This mutually beneficial partnership will result in advancing science to support public health policy decisions as well as valuable training opportunities for new professionals entering the work force.

This fellowship offers a placement within the Harmful Algal Bloom (HAB) Program at the WDHS in downtown Madison to learn about and help address the important public health challenges of cyanobacterial HABs in Wisconsin. This unique position entails working with both people and data on an emerging One Health issue, focusing on protecting and promoting the health of people, animals, and the environment through bloom-related illness investigation and public health response and outreach efforts.

Cyanobacterial harmful algal blooms (HABs) occur worldwide and are increasing in severity and magnitude. HABs impact both human and animal health, recreation, and local economies. In inland lakes, HABs result in economic losses from decreased tourism, recreational water use, and sport fishing. Human illnesses have been associated with exposure to HAB toxin-contaminated water through direct contact, ingestion, or inhalation of toxins during swimming or motorized water sports. Companion animal and livestock illnesses and deaths have also occurred after similar exposures to affected surface water.

Wisconsin's HAB Program seeks to collect, evaluate, analyze, and disseminate data related to the health consequences of HABs in the state. These data are used to identify and evaluate interventions that may help address the problem and protect the health of the public. Work in this program frequently includes outreach projects related to the diverse needs of local public health departments, physicians, veterinarians, pet and livestock owners, recreational swimmers (including triathletes and race organizers), local lake management associations, and others.

The Fellow will work closely with WDHS staff, other state and federal agencies such as the Wisconsin Department of Natural Resources (WDNR) and the Centers for Disease Control and Prevention (CDC), and professionals from a variety of fields to tackle the important public health challenges of cyanobacterial HABs. The fellowship mentor team will include toxicologist Dr. Roy Irving and epidemiologist/health educator Amanda Koch from WDHS, as well as Julia Noordyk and Dr. Jennifer Hauxwell from the UW. This position will also be closely connected with officials at the WDNR, including statewide harmful algal bloom coordinator Gina LaLiberte.

We seek applicants from a variety of backgrounds including public health/epidemiology, water resources, climate sciences, social sciences, communications, etc. to conduct ongoing surveillance, detection, investigation, and reporting of human and animal illnesses resulting from exposure to cyanobacterial blooms in Wisconsin and related outreach and education efforts. Core priorities for this fellowship include:

- Receive and process health complaints submitted to WDHS or referred from other agencies such as local health departments, the WDNR, and the Wisconsin Poison Center.
- Conduct phone interviews with illness complainants (suspect case-patients/animal owners) using a standardized questionnaire to gather information on signs and symptoms, environmental conditions, and activities at the time of exposure to a cyanobacterial bloom.
- Perform health hazard assessment and determine if water sample collection and testing is appropriate.
- Coordinate bloom investigation response activities alongside the WDNR, including water sampling for cyanobacteria and cyanotoxins.
- Interpret water testing results in the context of public health risk and convey public health intervention recommendations (e.g., posting signage, issuing beach closure).
- Enter completed investigation questionnaire data and upload any additional documents (e.g., doctor or veterinarian notes, clinical and/or environmental test results, bloom photos, etc.) into Wisconsin's bloom-related illness surveillance database.
- Report valid human and animal cases of bloom-related illness to CDC via their One Health Harmful Algal Blooms Surveillance (OHHABS) reporting system.
- Participate in various outreach and education activities, including authoring monthly Harmful Algal Bloom Program e-Newsletters for local health officials, developing public-facing signage and social media messaging, and giving oral or webinar presentations for various scientific and non-scientific audiences on the health effects related to cyanobacterial blooms and related public health investigation and response efforts.
- Assist the UW and/or WDNR with potential water quality-focused mini-projects.

The Fellow will have opportunities to work with a variety of stakeholders such as other state agencies, local partners, and members of the public. Through this project, the Fellow will gain a better understanding of, and experience serving in, the role of an applied scientist in public health practice. The Fellow will also have the opportunity to expand their science and risk communication skill sets, learning best practices to effectively convey technical information to a broad range of audiences. In addition to the core priorities above, the fellowship provides flexibility in pursuing other projects uniquely suited for the Fellow related to HABs research, outreach, and/or policy.

This Fellow is intended to be stationed in downtown Madison at the WDHS (1 W. Wilson St.) but will work remotely during the COVID-19 pandemic. The position requires occasional travel, including overnight stays.

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

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

#### *Eligibility*

Students or postgraduates who will have graduated in the past five years with a graduate degree in public health/epidemiology, water resources, climate sciences, social sciences, communications, etc, are eligible to apply. Fellows must have completed all degree requirements before starting the fellowship.

#### *Stipend and Expenses*

Annual stipends are dependent on the Fellow's academic background, with post master's Fellows earning \$40,000/year and postdoctoral Fellows earning \$55,000/year, both with additional benefits (see -

<http://www.ohr.wisc.edu/benefits/new-emp/grad.aspx>). Fellows will be allotted funds 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](mailto:jennifer.hauxwell@aqua.wisc.edu) at the University of Wisconsin Sea Grant Institute 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 all undergraduate and graduate student transcripts
4. Up to 4 writing samples, both informal and formal (e.g., popular articles, web resources, web-based applications/visualizations/decision tools, journal articles or other technical documents, etc.)
5. A list of three professional references with contact information, including a faculty member from your graduate 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. "Smith – cover letter", "Smith – cv", "Smith – transcripts", etc.).

#### *Selection Process*

Wisconsin Sea Grant and Wisconsin Department of Health Services staff will identify a short list of candidates for interviews. Interviews will be conducted by a panel with representatives from both programs to determine the best fit for the position. It is expected that applicants will possess strong analytical skills, an ability to manage projects and work independently, and excellent written and verbal communication skills. Priority will be given to candidates expressing interest in a two-year placement.

#### *Length of Assignment*

The length of assignment is up to two years with an anticipated start in May 2021. This timeline may be adjusted to accommodate academic semester needs or the needs of the candidates or funding institutions.

#### *Timeline*

March 28, 2021 – Deadline for submission of applications

mid April – Interviews

May 2021 (approx.) – Fellowship begins