

## Summer 2022 Undergraduate Researcher in Freshwater/Landscape/Fire Ecology

### Description:

We seek an MSU undergraduate to join a research project recently funded by the US National Science Foundation on the effects of wildfires on lake ecosystems for summer 2022. The project will be primarily based in the Data Intensive Landscape Limnology (DILL) Lab (<https://bigdatalimno.org/>) in the MSU Department of Fisheries and Wildlife, but there will be some field work in Superior National Forest, Minnesota. This is the site of the 2021 Greenwood Fire, a lightning-induced wildfire that burned 11,000 hectares and all or parts of 28 lake watersheds that we are studying.

The successful candidate will be part of an integrative research team that applies quantitative approaches to questions at the intersections of freshwater, landscape and fire ecology. The work will entail a combination of statistical, geospatial and field-based research approaches. Field work may include long hours, lake water quality sampling from land, boat or canoe, trekking through wet/rugged terrain, GPS operation and driving on dirt roads. The student will be primarily mentored by Dr. Ian McCullough, but will receive secondary mentorship from Dr. Kendra Spence Cheruvilil and other members of the project team and DILL Lab. The student will have opportunities to develop their own research related to this project, with the goal that this will help build skills for future research and career opportunities. The student should also be comfortable working with minimal supervision during some portions of the summer (when not conducting field work).

**Desired qualifications:** Preference will be given to students with coursework and/or experience in ecology, statistics, ArcGIS and/or R. Previous field experience in aquatic ecology, ability to operate a GPS unit and a valid driver's license are also desirable.

**Hours:** 40 hr/week, May – August; exact start and end dates are negotiable. Minimum 10 weeks employment expected.

**Pay:** \$15/hr

**Location:** Data Intensive Landscape Limnology Laboratory, MSU, East Lansing, MI and Superior National Forest, MN (approximately 2 weeks of the summer). Remote work for non-field work is negotiable, depending on the status of the COVID-19 pandemic and associated MSU work policies.

**Deadline:** March 4, 2022

**To apply:** Submit a resume, cover letter (addressing relevant skills, experience, interests and career goals) and names and contact information for three professional references to Dr. Ian McCullough on Handshake (Job #5992123). Review of applications will begin on March 7, 2022 and interviews will take place after MSU spring break. If you have questions about the project, please email Dr. McCullough ([mccull169@msu.edu](mailto:mccull169@msu.edu)).