Postdoctoral Fellowship: Food web modeling in Lake Erie
GLIER, University of Windsor &
Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF)

Job Summary
A postdoctoral fellowship is available for a highly qualified individual to work with Drs. Aaron Fisk (Professor and CRC, University of Windsor, https://www.fisklab.com/pdfandstudentopportunites) and Ying Ming Zhao (Research Scientist, NDMNRF) to develop a spatial explicit ecosystem model using Ecopath with Ecosim and/or Atlantis for Lake Erie. The main objective is to simulate impacts of climate changes and fishery harvest on economically and ecological important fish species (e.g., walleye and yellow perch) on the largest commercial harvest of freshwater fisheries in the world. The successful candidate will work with Great Lakes scientists and management biologists from Canada and US and existing dataset to: (1) estimate the parameters required for ecosystem modelling such as identification of functional groups, species consumption, diet composition and biomass and other necessary parameters; (2) simulate climate changes and fishery harvest impacts on Lake Erie ecosystem using the ecosystem model; and (3) attending academic conferences and management committee meetings and publish in peer-reviewed journals. The post doc is also encouraged to explore any other ecosystem modelling research that they might be interested, for example management strategy evaluation or invasive species.

The successful applicant's appointment will be with the University of Windsor, a leading institution working on the Great Lakes that has strong ties with NOAA Great Lakes Environmental Research Laboratory (GLERL) and Cooperative Institute for Great Lakes Research (CIGLR) at the University of Michigan. The successful candidate will also work closely with the biologists and scientists from NDMNRF and US state fisheries agencies.

This position offers a highly competitive salary plus benefits. The initial appointment is for one year, with opportunity and funding for extension based on performance for two more years. Support for national and international conference travel will be provided. The successful applicant can start at anytime.

Required qualifications
A Ph.D. in biology, ecology, fisheries or similar field, with a background in ecological/food web modeling is required. Familiarity with data analysis and visualization in a scripting environment using R, Python, or similar software is also necessary. Experience with running simulations on supercomputer or cluster computing environment is preferred. Strong communication skills are needed, and a demonstrated

ability to work both as a team and independently and lead the development of manuscripts for refereed journal publications.

Desired qualifications
Preference will be given to candidates that have strong experience with Ecopath, Ecosim, and/or Atlantlis. Preference will also be given to candidates with a demonstrated ability to analyze data and publish results in a timely manner.

Apply
To apply, please email Drs. Fisk (afisk@uwindsor.ca) and Zhao (yingming.zhao@ontario.ca).

The application deadline is May 1 2022, or until the position is filled.