PhD Student Assistantships – The role of turbulence in larval fish recruitment (swimming and feeding)

Physical Ecology Laboratory, Department of Integrative Biology (www.uoguelph.ca/ib/), University of Guelph

Understanding the recruitment of commercially and economically important fish species is critical to their management and sustainability in the Laurentian Great Lakes. Funding is available immediately to support a Ph.D. student to examine the effects of turbulence on larval fish swimming performance to inform modeling efforts related to fish recruitment. A second PhD position is anticipated (pending funding) to examine the effects of turbulence on larval fish feeding and growth to inform modeling efforts related to fish recruitment. Candidates should have an interest in applying mechanical/mathematical approaches to aquatic ecology/limnology, as well as participating in a large interdisciplinary multi-institutional project involving Guelph, Queen's, RMC and OMNRF).

The Physical Ecology Lab is well equipped for process- and system-scale studies involving state-of-the-art laboratory, field, and numerical modelling. Some of the resources include flow chambers (various sizes, configurations), PIV (Particle Imaging Velocimetry), Imaging Flow Cytometry (Flowcam), Acoustic Doppler Velocimeters (Vector, Vectrino+), and Workstations (Xenon).

The University of Guelph (a top-ranked comprehensive university in Canada) is in Guelph, a city of approximately 130,000 people, located about an hour drive west of Toronto, Ontario. Guelph has been selected as **one of the ten best places to live in Canada**. It is known for its friendly, supportive, and safe learning environment that welcomes students of diverse cultures and beliefs. It's also one of the fastest growing economic regions in Canada. The University is known for its commitment to student learning, innovative research, and collaboration with world-class partners. People who learn and work here are shaped and inspired by a shared purpose: *To Improve Life*.

Potential candidate should contact: Dr. Joe Ackerman via email (ackerman@uoguelph.ca; ackerman.uoguelph.ca/)

(posted: July 2021)