TIDE LAB

Traits, Interactions and Dynamics of Aquatic Ecosystems

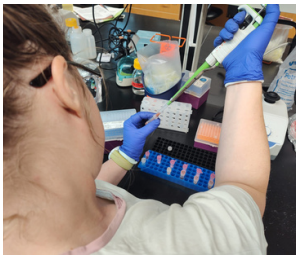
From Genes to Food Webs in a Changing Climate

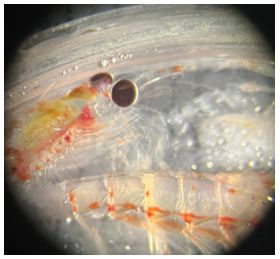
FUNDED MSc & PhD OPPORTUNITIES
Starting Fall 2027

How will climate change reshape aquatic ecosystems?

The TIDE Lab investigates how environmental change influences aquatic organisms, populations, and food webs through changes in physiology, resource allocation, species interactions, and nutritional quality. We combine field research, experimental ecology, molecular biology, lipidomics, and ecological modelling across freshwater and marine ecosystems.







PhD opportunity

Aquatic Resilience & Adaptation

Can organisms adjust quickly enough to keep pace with a changing world?

Investigate how physiological and biochemical responses influence resilience, adaptation, and ecosystem functioning under environmental change.

MSc opportunity

Climate Change & Zooplankton Ecology

Aquatic food webs support fisheries, biodiversity, and ecosystem health, but their foundation is increasingly influenced by environmental change.

Investigate how environmental change affects the physiology, nutritional quality, and performance of aquatic organisms.

What you will learn

- ✅ Zooplankton taxonomy and microscopy
- ✅ Experimental aquatic ecology
- ✅ Climate-change biology
- ✅ Transcriptomics and molecular biology
- ✅ Lipidomics and fatty-acid analyses
- ✅ Statistical analysis

Interested?

Application review will begin immediately and continue until positions are filled. Early inquiries are encouraged. Questions are always welcome.

Dr. Jessica Garzke
Incoming Assistant Professor
Dept. of Biology, Concordia University
📧 Jessica.Garzke@concordia.ca
🌐 www.jessicagarzke.ca

Interested students should send:

- CV
- Unofficial transcript
- 1-page statement of interest
- Contact information for two references

Graduate Program Info