



UNIVERSITY
OF MANITOBA



Job advertisement

University of Manitoba, Department of Biological Sciences

PhD – Characterization of a novel ammonia transporter in aquatic invertebrates and fish

The Weihrauch lab is seeking for a highly motivated PhD student to investigate a recently identified ammonia transporter. The goal is to functionally characterize this new transporter (heterologous expression in frog oocytes) and to determine its physiological role in acid-base regulation in a comparative manner employing sea- and freshwater invertebrates as well as trout. **A full stipend is guaranteed.**

Study animals include but are not limited to:



Carcinus maenas

Belongs to the top 10 invasive species due to its physiological adaptability. Thrives in brackish (BW) and seawater (SW).



Oncorhynchus mykiss

Rainbow trout (FW). Economically relevant with good background information on acid-base physiology available.



Aedes aegypti

Vector for Yellow fever disease and Zika virus. Larvae thrive in FW and BW. Gene-knock-downs are possible.

Start date: Upon mutual agreement, preferably by mid-2018 or soon after.

Requirements: The candidate must have a minimum score of 80 out of 100% (or equivalent) in order to apply for internal and external funding. For international students a valid TOEFL-test (or equivalent) is required in addition to excellent communication skills (English).

In my laboratory we follow an integrative research approach, combining transport physiological methods with molecular (gene expression/functional expression of transporters) and imaging techniques. Accordingly, a strong background in molecular and/or imaging methodology is an asset. Most important however will be enthusiasm and dedication to the project and the capability to work independently. Research stays in labs of national and international collaborators are an option.

What to provide: If you are interested please provide your updated CV, an unofficial transcript of your last degree, copy of MSc and/or BSc thesis, and contact information of at least 2 references.

Applications should also include a letter outlining their own research interests and how that would fit into our overall research program. Any suitable research proposal/idea will be considered.

I will attend the up-coming CSZ meeting in St. John's and will be happy to discuss projects.

Please contact me directly by email: **Dirk.weihrauch@umanitoba.ca**, or phone: **1-204 4746310**.