University of Manitoba | Faculty of Graduate Studies

Ph.D. Oral Examination

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Candidate

Biological Sciences

The oral examination of the doctoral thesis titled

Acid-Base Regulation and Physiological Responses to Aquaculture and Global Stressors in Euryhaline Crustaceans

will be held on

Tuesday, August 16, 2022 at 1:00 PM (CST)

See zoom link in email

Examining Committee

Advisor: Dr. Dirk Weihrauch, Biological Sciences

Examiners:
Dr. Gary Anderson, Biological Sciences
Dr. Jason Treberg, Biological Sciences
Dr. Peter Eck, Food and Human Nutritional Science

Investigations, Invited Member

External Examiner:
Dr. Carlos Luquet, National Scientific & Technical Research Council of Argentina

Thesis Abstract

Decapod crustaceans regularly face intrinsic stressors that challenge pH homeostatis, which is compensated through the process of acid-base regulation. Prior research on acid-base regulation in crustaceans has focused on stressors commonly experienced during day-to-day life like exercise or that experienced in estuarine environments such as changes in O_2, CO_2, and salinity. More recent work has centralized on ocean acidification. However, the effects of global change on freshwater crustaceans (chapter 2) and the effect of elevated CO2 in aquaculture (chapter 4) 3) have been largely ignored. In addition, the effects of feeding on acid-base regulation (chapter 4) have gone unstudied and may have direct implications on responses to global change and aquaculture.