

MSc. Defence

An Investigation into the Potential Use of 6-Gingerol to Combat Endotoxemia and Reduce Inflammation during Tissue Trauma in Larval Zebrafish

Nicole Moran

Date: July 20th, 2021 at 1:00pm

The MSc Defence for Nicole Moran has been scheduled for Tuesday July 20th, 2021 at 1:00pm. The defence will be held online via Teams: https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTcyYWQyYTMtMWIzMy00Y2U1LWFhNTctYTU5YjI2YTM2NWZj%40thread.v2/0?context=%7b%22Tid%22%3a%22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d

The exam committee will consist of:

Examining Chair: Dr. Eduardo Ribeiro

Advisor: Dr. Niel Karrow

Adv. Committee Member: Dr. Julang Li

Additional Member: Dr. David Huyben

Abstract:

Fish farming facilities are rapidly intensifying their operations in order to meet the increased demand for aquaculture products worldwide. As a result, fish farming populations are exposed to increased stressors such as higher bacterial load and higher incidence of injury, leading to higher incidences of mortalities. Immunomodulators can improve an organism's response to stress by augmenting the immune response via enhancement or inhibition. However, the use of immunomodulators is an emerging concept in the aquaculture industry, and therefore potential immunomodulators must be effectively assessed. The purpose of this thesis was to develop a comprehensive immune microbe-associated molecular pattern (MAMP) challenge using larval zebrafish as a model organism, utilize said immune challenge to assess the immunomodulatory efficacy of 6-gingerol, and assess whether 6-gingerol could also improve healing after tissue trauma.