



The University of Hong Kong  
School of Biological Sciences

Qualifying  
Seminar

# Assessing coral trophic dynamics and acclimatization to environmental change

**Date: 18<sup>th</sup> February 2022**

**Time: 11:00 AM**

**Venue: Zoom**



## About the speaker:

**Emily Chei** is a PhD student in Dr. David Baker's lab. Her research focuses on trophic ecology and characterizing coral responses to environmental and anthropogenic stressors.



## Abstract:

Coral reefs are facing a multitude of global and local threats, and understanding how corals acclimate to environmental changes is integral to predicting the future of these ecosystems. Corals are symbiotic organisms that obtain nutrients through both autotrophic and heterotrophic pathways. Although corals largely rely on their symbiotic algae to fulfill their metabolic needs, heterotrophic feeding has been shown to aid survival and recovery from stressors. Consequently, a coral's trophic strategy may underpin its ability to tolerate chronic and acute disturbances.

Despite its importance, the intersection between nutrient acquisition and coral resilience is not well understood. Using stable isotope analysis and novel analytical methods, I will examine trophic dynamics across several genera of corals. I will compare coral responses to varying environmental conditions and investigate the factors that influence resource sharing within the symbiosis.