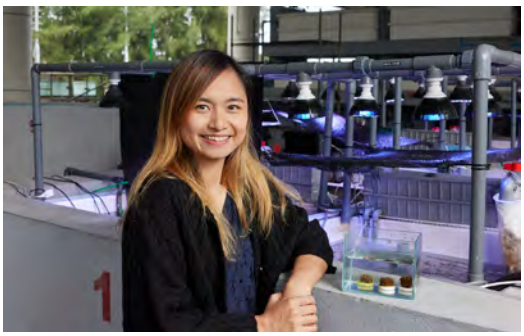
TMSI Tropical Marine Science Institute
National University of Singapore

RESEARCH SEMINAR

From Decline to Revival: A Journey Through Coral Research, Restoration, and Community Outreach

By Dr Apple Chui
The Chinese University of Hong Kong

Date: Friday 21 February 2025
Time: 3-4pm
Format: Online
Host: Dr Lionel Ng
Registration: https://tinyurl.com/4bkk42e7



ABSTRACT:
Until the 1980s, Tolo Harbour and Channel in North-eastern Hong Kong supported a high coverage of corals. But these have been severely affected by extensive pollution impacts. Our surveys showed that fifteen years after the progressive improvement of water quality inside Tolo Harbour and Channel, coral recovery remains slow. One of the most likely reasons is a lack of coral recruitment, which could be due to high sedimentation or intense competition for space with fouling organisms (e.g. algae, oysters, barnacles and bryozoans). Although natural recruitment of corals is necessary, it is not sufficient to restore the damaged coral communities. While the majority of existing restoration protocols are focused on reefs, marginal non-reefal coral communities present limitations which cause restoration efforts to be even more challenging. This talk will focus on the opportunities and challenges of various coral restoration methods used in Hong Kong, and what we have learned so far.

About the Speaker:
Dr Apple Chui is a Research Assistant Professor at the School of Life Sciences, The Chinese University of Hong Kong. She is also a Pew Marine Fellow and a National Geographic Explorer. Her research focuses on 1) how climate change affects corals in marginal coral environments such as Hong Kong, and 2) how coral population resilience and restoration of degraded coral habitats can be achieved at ecologically meaningful scales. A passionate advocate for marine conservation, she has actively engaged in many public outreach and education activities on marine and coral conservation in Hong Kong. In 2018, Apple officially founded the "Coral Academy" (www.coralacademy.hk) to raise public awareness, build capacity, and inspire action through various coral restoration themed programmes and workshops. In recognition of her contributions, she received the GGEF Women Eco Game Changer Awards - Eco Star of China in 2019, as well as the Falling Walls Science Summit Breakthrough of the Year (Science Engagement) award in 2024, focusing on climate change and adaptation.