



The University of Hong Kong
School of Biological Sciences

Qualifying Seminar

Investigating Anthropogenic Impacts on Coastal Benthic Ecosystems Across Local, Regional, and Global Scales

Date: April 2nd, 2025

Time: 10:00 a.m.

Venue: 6N-11 and Zoom



Paul Mckenzie/www.wildencounters.net

About the speaker:

Mengjin Zhang is a Ph.D. student in the Coral Biogeochemistry Lab. His research focus on how anthropogenic disturbances affect coastal benthic marine biodiversity on different spatial and temporal scales.



Abstract:

Coastal regions are home to nearly 40% of the global population. Urbanization has been shown to profoundly impact coastal marine biodiversity at local, regional, and global scales through various anthropogenic stressors, with pollution being one of the most prominent concerns. However, research in relevant fields remains nascent and limited, with less than 10% of past urban biodiversity studies focusing on marine taxa. This gap is even more pronounced for benthic communities, which harbor significant cryptic biodiversity, perform essential ecological functions, and provide crucial ecosystem services but remain historically understudied.

To help address this knowledge gap, my doctoral research will investigate how human activities influence benthic biodiversity in urban coastal environments across multiple spatial scales. Specifically, I am interested in understanding how disturbances create and drive the biodiversity patterns we observe. By integrating local, regional, and global perspectives, I hope to better understand the interplay between human activities and urban marine biodiversity and contribute to more effective conservation and management strategies in the future.