

TOM KWOK LUN HUI

Rm419, Chung Tak Hse, Chung On Est, Ma On Shan, N.T., Hong Kong SAR

Tel: 5104-6777 | **Email:** huikwoklun@link.cuhk.edu.hk | **ORCID:** 0009-0001-5906-8072

EDUCATION

MPhil in Biology

The Chinese University of Hong Kong

Aug 2019 - Nov 2023

- Field: Molecular Ecology
- Conducted metagenomic and transcriptomic experiments on digestive functions of herbivorous crab holobionts.

BSc (Hons) in Biology

The Chinese University of Hong Kong

Sept 2014 – July 2018

- Classification: 2:1

RELEVANT EXPERIENCE

Junior Research Assistant

The Chinese University of Hong Kong

Nov 2018 - Jul 2019

Dec 2023 - Present

Senior Experimental Project

The Chinese University of Hong Kong

Jun 2017 – Feb 2018

- Designed experiments in forward genetics approach to determine genes responsible for mushroom generation.

Material Secretary

The iGEM 2017 Hong Kong CUHK Team

Jan 2016 – Nov 2017

- Conducted validation for genetically engineered pathway to detect Influenza A RNA as part of a team. Details in:
<https://www.sls.cuhk.edu.hk/index.php/programmes/undergraduate-programmes/special-programmes/igem/igem-2017>
- Purchased chemicals for experiments and monitored the conditions of equipment

ADDITIONAL EXPERIENCE

Teaching Assistant

Biodiversity lab (Animals)

Sept 2019- Apr 2021

Training Program, International Junior Science Olympiad 2017

Sept 2017

CUHK Summer Institute 2017

Jul 2017

- Prepared and presented teaching materials, supervised practical sessions, and assessed students' performance through assessments and practical examinations.

Part-time Programme Assistant

Eco-education and Resources Centre

Apr 2017-Nov 2018

Volunteer

Hong Kong Black Kite Festival and Hong Kong Raptor Festival

Jan 2017

PUBLICATIONS

1. Tsang, C. T. T., **Hui, T. K. L.**, Chung, N. M., Yuen, W. T., & Tsang, L. M. (2024). Comparative analysis of gut microbiome of mangrove brachyuran crabs revealed patterns of phyllosymbiosis and codiversification. *Molecular Ecology*, 33, e17377. <https://doi.org/10.1111/mec.17377> Jun 2024
2. **Hui, T. K. L.**, Lo, I. C. N., Wong, K. K. W., Tsang, C. T. T., & Tsang, L. M. (2024). Metagenomic analysis of gut microbiome illuminates the mechanisms and evolution of lignocellulose degradation in mangrove herbivorous crabs. *BMC Microbiology*, 24(1), 57. <https://doi.org/10.1186/s12866-024-03209-4> Feb 2024

LAB SKILLS

Wet Lab skills

- Field collection and dissection of intertidal animals
- Nucleic acids extraction on difficult samples
- PCR, cloning, competent cell preparation
- Protein expression and Western blotting

Dry Lab skills

- Basic bash, R, Python implementation
- Familiar with common omics tools, including but not limited to:
- Amplicon Sequencing, Whole Metagenomic sequencing (WMS) and RNA-Seq

AWARDS

Gold Medal Winner, Best Diagnostics Nomination

The iGEM 2017 Hong Kong CUHK Team

Nov 2017

LANGUAGE

Native Cantonese, Fluent English and Mandarin

IELTS (International English Language Testing System)

Sept 2024

- Overall Band Score: 8.0 (Listening: 8.5, Reading: 8.5, Writing: 6.5, Speaking 7.5)