E&B Seminar Series

SCHOOL OF BIOLOGICAL SCIENCES
THE UNIVERSITY OF HONG KONG
香港大學生物科學學院

SHKU Science

ECOLOGY & BIODIVERSITY

Degrees of honesty: variation in cheating among cleaner wrasses

Date	**20th Jan. (Fri.)**
Time	**16:30 (UTC+8)**
Venue	**Zoom**

In coral reef ecosystems, cleaner wrasses remove ectoparasites, dead skin and mucus from client fishes. However, cleaners prefer to eat the protective mucus from their clients instead of parasites, which constitutes cheating. This conflict likely caused the development of highly sophisticated decision-rules used by cleaners during interactions, including social tool-use, reconciliation, and reputation management. Although some variation in cheating is predicted among these wrasses, classification of the degrees of honesty among these fishes is lacking. Little is also known from the molecular point of view as the molecular drivers behind this cheating behaviour have not yet been identified. Here we provide the first classification of cheating among cleaner wrasse species using two behavioural tests. By analysing the differences in the neural transcriptomic signatures across brain regions, we will exhibit the molecular signals associated with cheating in the cleaner wrasses.

Daniele Romeo is a PhD Student supervised by Dr. Celia Schunter. After obtaining a Bachelor's degree in Natural Sciences and a Master's Degree in Ecobiology at La Sapienza University of Rome, he moved to Hong Kong to join the SchunterLab. The focus of his research is to define the molecular mechanisms behind the cleaning behaviour in coral reef ecosystem. He is currently in Portugal to carry out behavioural experiments for the second chapter of his PhD. He loves sports, hiking and carbonara!

All are welcome!

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