

Cleaning mutualisms in a changing world

Date 25th Feb. (Fri.)

Time 16:00 (UTC+8)

Venue 3N01 & Zoom



You can also email us to require the Zoom link
(check SBS website → NEWS & EVENTS)

Symbiotic relationships reveal interesting adaptations to deal with challenging marine environments. One charismatic symbiosis is the mutualism between cleaner fishes and their clients. In this case, small fishes occupy specific territories, known as “cleaning stations”, and provide a service to their “clients”, eating ectoparasites. To engage in cleaning interactions, cleaner wrasses (*Labroides dimidiatus*) evolved a set of complex behavioural tools. Yet, the ecological conditions where cleaning symbiosis evolved are changing due to environmental stressors, such as ocean warming and acidification. This seminar will explore how cleaning symbiosis respond to ocean warming and acidification (OWA) within a multidisciplinary and integrative approach. More specifically, two major research questions: 1) “Is cooperative cleaning behaviour affected by OWA? If so, what are the neurobiological mechanisms and is there potential for adaptation?” 2) “Are ectoparasites resilient to OWA? If so, how do they impact client fishes and how their abundance can be controlled?”

All are welcome!



About speaker:

Dr. José Ricardo Paula is from Portugal. He obtained his PhD in Biology from the University of Lisbon (Portugal). He joined HKU as a postdoc in Dr Celia Schunter Lab in January 2022. His primary focus is to study how behaviour evolves and adapt to different environments using integrative approaches (e.g. behavioural ecology, cognition, neurobiology, physiology, biogeography and now neurogenomics!). He’s passionate about cooperation, mainly in marine ecosystems. Currently, he is investigating the neuro-molecular landscape of cleaner fish cognitive phenotypes.