



The University of Hong Kong
School of Biological Sciences

**Qualifying
Seminar**

Behavioural and neuromolecular responses of aquatic organisms to environmental changes

Date: 21 Oct 2021 (THU)

Time: 0900

Venue: KBSB 3N-01 + Zoom



About the speaker:

Jade Sourisse is a PhD student in Dr Celia Schunter's lab. Her research focuses on describing the influence of environmental changes on the neuromolecular mechanisms involved in the behaviour of aquatic animals.



Abstract:

Global environmental changes are happening at an unprecedented rate in our aquatic environments. Two of the most known are rising water bodies temperature and the acidification of the ocean.

Aquatic life is already affected by them in various ways, notably in terms of animal behaviour, which is controlled by the nervous system. However, we still know little about how neural molecular responses to global change could drive behavioural impairment, neither whether parental exposure to such conditions influences the offspring's response. As individual behaviour can influence population dynamics and *in fine* ecosystem functioning, it is becoming primordial to better understand the underlying molecular mechanisms behind behavioural changes if we want to predict how organisms will respond to future environmental conditions. With the study of neurological model species such as the zebrafish (*D. rerio*) and the sea hare (*A. californica*), I will target observation in parallel of behaviour, neural activity and transcriptomic responses under predicted near-future conditions. I will then adapt the methodology produced during such studies to focus on the response of non-model species of ecological relevance, such as the yellowtail anemonefish (*A. clarkii*).