

Timing and sex-specific parental effects of ocean warming in a coral reef fish

Date	3rd Nov. (Fri.)
Time	16:00 (UTC+8)
Venue	3N01 & Zoom



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Population and species persistence in a rapidly warming world will be determined by an organisms' ability to acclimate to warmer conditions. Transgenerational plasticity (TGP) is emerging as a key mechanism by which organisms could adaptively respond to climate change. However, the mechanisms of TGP and non-genetic inheritance are still poorly understood, and we lack crucial information about how the timing of exposure and the individual contributions of mothers and fathers influence their offspring's acclimation potential. By exposing two generations of the coral reef fish *Acanthochromis polyacanthus* to ocean warming conditions and analyzing F2 transcriptomes, we aimed at teasing apart A) the critical windows of sensitivity key to environmentally induced parental effects, and B) the paternal from the maternal effects in response to warming. Taken together, our results provide novel information regarding the molecular mechanisms underlying TGP, critical to make predictions on species acclimation potential in a rapid-changing world.



Dr Lucrezia Bonzi is a postdoctoral fellow in the Schunter Lab. She moved to HKU after obtaining a bachelor's degree in Biology at the University of Insubria, Italy, a master in Marine Environmental Biology from the University of Trieste, Italy, and a PhD in Bioscience at the King Abdullah University of Science and Technology, Saudi Arabia. She is interested in exploring the genetic and epigenetic mechanisms at the basis of organism acclimation and adaptation to environmental change.

All are welcome!