

International PhD fellowship available to work on

Anemonefish Eco-Evo-Devo

As a collaboration between:

Eco-Evo-Devo team, (Laurence Besseau CNRS UMR 7232, OOB Banyuls-sur-Mer, France)

Marine Eco-Evo-Devo Unit (Vincent Laudet, OIST, Japan)

CRIOBE (David Lecchini CNRS UAR 3272, Moorea, French Polynesia)



This thesis project aims to better understand the recruitment of juveniles of coral reef fishes in their final habitat and will use the anemonefish as model systems. The PhD student will carry out ecological approaches in the field, combined with laboratory analyzes to characterize how the environment influences the physiological and neuroendocrine status of juveniles and their quality in their natural habitat. For this we will exploit natural situations in Okinawa and in French Polynesia where juvenile clownfish are found in different ecological contexts, and we will follow how they adapt to these contexts. We will also use mesocosms to reproduce the environments observed in the wild and to further characterize the mechanisms at play. In addition to analyze larval recruitment (a fundamental step that allows the renewal of reef fish populations), this work will allow to better understand the bases of local adaptation, a particularly important phenomenon in the context of global warming.

Recent papers of our teams in this area

- Roux et al., The multi-level regulation of clownfish metamorphosis by thyroid hormones. *BioRxiv*, 2022-482938v1.
- Salis et al., Thyroid hormones control the formation and plasticity of white bars in clownfishes. *Proc. Natl. Acad. Sci. USA*, 2021 118 : e2101634118.
- Roux et al., Anemone fishes, a model for Eco-Evo-Devo. *EvoDevo*, 2020, 11: 20.

Application deadline: June 12. The selection of applicants will be done before the end of June. The PhD will start on October 2022 for 3 years.

To apply, please send your CV, a motivation letter (2 pages in pdf) and a 2-pages summary on the research done in the literature on thyroid hormone in coral reef fish to laurence.besseau@obs-banyuls.fr, vincent.laudet@oist.jp and david.lecchini@ephe.psl.eu