

Masters placement/internship opportunity beginning early 2015 European University Institute of the Sea (IUEM), University of Western Brittany (UBO), France Marine Biology research station, Natural History Museum of France (MNHN), Concarneau, France
Linking morphology and molecular responses of marine mollusc larvae to

climate change

We are looking for a masters student to join the Nunes lab (IUEM), in collaboration with Stéphanie Auzoux-Bordenave (MNHN), to carry out a placement investigating how temperature and ocean acidification affect larval development, in terms of both morphology and underlying gene expression. As a result of the changing global climate, marine organisms are increasingly subject to environmental stressors such as rising sea surface temperatures and ocean acidification. One group of organisms that may be at particular risk are calcifying mollusc larvae, as elevated atmospheric CO₂ results in reduced carbonate availability for biomineralization of their calcite shells; however, effects of environmental change are often taxa specific. Multispecies comparative approaches are therefore required to identify shared or divergent responses. This project will aim to link morphology (via analysis of larval growth and shell development, using transmitted and polarized light microscopy) with the underlying changes in gene expression (using Quantitative real-time PCR), as part of an investigation into the responses among four mollusc species (*Crassostrea gigas*, *Pecten maximus*,

Venerupis philippinarum

and

Haliotis tuberculata

). The position will start in January/February 2015, and a stipend of 523 EUR per month will be available for the 5 month placement. For more information contact Ewan Harney <

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> or Flavia Nunes <

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<http://www.labexmer.eu/en/international/research-chairs/on-going-international-chair-in-evolutionary-marine-ecology>

<http://concarneau.mnhn.fr/la-station-de-biologie-marine/le-personnel-de-la-station/stephanie-auzoux-bordenave>

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