

PhD scholarship (4 years) in molecular ecology at the [Vrije Universiteit Brussel \(VUB\)](http://www.vub.ac.be), [Department of Biology](#), [Marine Biology Lab](#), Belgium.

We are searching for a highly motivated PhD student that will work on **evolution, population genetics and connectivity in Antarctic sea stars** utilising a **genomics** approach (DNA barcoding, microsatellites and next generation sequencing) in the framework of the interdisciplinary project

Refugia and Ecosystem Tolerance in the Southern Ocean (RECTO).

Because of its long history and geographic isolation, the Southern Ocean (SO) provides a natural laboratory for research on evolution and biodiversity. Confronted with fast-paced environmental changes, biota in Antarctic ecosystems are strongly challenged and face three possible outcomes: adaptation, migration or extinction. Past glaciation periods have already forced marine zoobenthos of the SO into refugia, being either ice-free continental shelf areas, the deep sea or sub- or peri-Antarctic regions, followed by recolonization when the ice retreated. In a multidisciplinary approach and involving all major Belgian research groups studying evolution and diversity of SO faunas, RECTO will strive at understanding how such past events have driven diversification and adaptation in different animal groups and how these can be applied as proxies to understand the contemporary situation and predict future scenarios.

The Marine Biology Lab at the VUB specialises in research on molecular ecology of marine fauna from the poles to the tropics and from invertebrates to fishes. In the new collaborative research project RECTO the evolutionary history of Antarctic sea stars will be studied.

Profile of the PhD student:

- Master in (marine) biology with excellent study results
- Experience in genomics (lab work and bioinformatics)
- Interest in the ecology and evolution of Antarctic sea stars
- Excellent oral and written English skills (for minimum requirements see <http://www.vub.ac.be/en/studying-at-the-vub/language-requirements>)
- Willingness to participate in long sampling campaigns under extreme conditions in the Southern Ocean
- Obligation to finalise a doctoral thesis within 4 years

The marine biology lab offers excellent coaching in an inspiring research environment with up-to-date research facilities in the international and multilingual capital of Europe.

