

PhD project on The dynamics of deep-water vertical habitats

We seek a PhD student to study megabenthic species distribution (including cold-water corals) from ROV video footage to be acquired as part of a planned 2021 research expedition to the Galapagos. Cold-water corals (CWCs) represent important, though vulnerable, marine ecosystems. Yet, owing to technological limitations, CWC reefs attached to vertical cliffs have been undervalued. Using a multi-disciplinary approach, the aim of this project will be to understand the links between environmental settings, CWC habitat complexity and biodiversity of associated communities. The student will be expected to (1) reconstruct vertical coral cliffs in high resolution using laser-scanning, multibeam or structure-from-motion datasets, (2) investigate how geological characteristic, terrain characteristics and hydrodynamic patterns influence the habitat complexity created by coral skeletons, and (3) quantify how different species exploit this complexity. Required skills include a quantitative background in ecology or marine biology, and a good knowledge of a programming language (e.g. R). Previous experience acquiring or processing acoustic or video data will be considered a strong asset.

To apply, please contact Katleen Robert (Katleen.robert@mi.mun.ca) with a CV and a cover letter stating your main research interests. Please also mention how you learned about this opportunity.

Closing date: until fulfilled

Prospective start date: September 2020

Salary: 21,000 CAD (4 years)

Please visit: <https://www.mi.mun.ca/graduateopportunities/>