MSc Stipends in Whale & Ship Acoustics – Curtin University MAURITIUS

Project:
The "Quieter Western Indian Ocean" (QWIO) project, funded by the Fonds Français pour l'Environnement Mondial (FFEM), commenced in 2022 and will be running for another 2 years.
https://www.ffem.fr/en/carte-des-projets/reducing-underwater-noise-emitted-maritime-transport-and-services-western-indian
The project is a partnership of the Wildlife Conservation Society (WCS), the African Aquatic Conservation Fund, Armateurs de France, Bureau Veritas, Centre d'Etude et de Découverte des Tortues, Curtin University, The French Biodiversity Agency, Globice, Kelonia, The Marine Megafauna Foundation, Quiet Oceans, and The University of St Andrews. The aims of the QWIO project are two-fold: 1) to study and assess underwater noise from shipping and maritime services and its potential effects on targeted species among large cetaceans (baleen whales and sperm whales), sharks, and sea turtles in the South-Western Indian Ocean, and 2) in consultation with regional governments, ship owners, ports, and relevant international authorities, to identify and initiate concrete and practical measures to reduce the risks of noise impacts and collisions. The project commenced in 2022 and will run for at least another 2 years.

At this stage, we have MSc stipends available through Curtin University Mauritius. These are for Masters by research degrees, which do not involve any course work but allow students to focus on a research topic for 18 months. The MSc theses will comprise (depending on student interest and skills) any of the following: underwater ship noise (measurement, modelling, mapping, management, minimisation, mitigation), marine soundscapes (characterisation, quantification, sources, sound budgets, geographic and temporal variability, trends, modelling, prediction), and large whale bioacoustics (species diversity, vocal behaviour of humpback whales, blue whales, minke whales, and/or sperm whales, passive acoustic monitoring, sound production, song structure, song variability, dialects, spatial and temporal distribution, migration, relative abundance, acoustic ecology, risk of ship strike, effects of noise).

Location:
Students will be enrolled at Curtin University Australia. However, they will be based at Curtin Mauritius (Moka, Mauritius). While most of the QWIO data has been collected within the first 2 years of this project, some opportunities for fieldwork remain from Mauritius, to Reunion, Madagascar, and eastern Africa.

Supervision:
Students will be supervised by Prof Christine Erbe (Centre for Marine Science and Technology, Curtin University), Dr Salvatore Cerchio (African Aquatic Conservation Fund), Dr Violaine Dulau (Globice), and Tim Collins (WCS).

Stipends:
Each stipend includes an international tuition fee scholarship for 1.5 years. In addition, we are offering an annual living cost stipend of EUR 9,000, for 1.5 years (total EUR 13,500).

Eligibility:
We are looking for students who are citizens of Indian Ocean Rim countries.

Essential Criteria:
- Given the focus on underwater acoustics and bioacoustics, and depending on the chosen thesis project, students would ideally have a degree (4-year undergraduate; Honours) in Physics, Engineering, Computer Science, Data Science, or a related field, or a degree in Biological Sciences with experience in Organismal Biology, Bioacoustics, Acoustic Ecology, or a related field. Students with experience in both disciplines may be strongly favoured.
- Strong command of English is required. Students will have to pass an IELTS prior to enrolment, with a minimum grade of 6.5 overall and a minimum of 6 for any of its components (i.e., speaking, writing, reading, and listening).

Desirable Criteria:
- Experience programming in MATLAB, Python or R.
- Prior experience in acoustics is desired but not essential.
- Prior experience in marine science and offshore fieldwork is valuable.

How to apply:
Please email your expression of interest, including CV, summary of research skills and experience, reason you are interested in this project, and choice (focus) of project (e.g., ship noise, soundscape, whale ecology) to Christine Erbe: info@cmst.curtin.edu.au, subject: QWIO Stipend.

Dates:
Applications close 20 June 2024. Theses would ideally commence by September 2024.