



**SAIAB**  
South African Institute  
for Aquatic Biodiversity

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South Africa  
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Funding available for 2 x MSc students with an interest in non-invasive molecular sampling techniques for marine ecological research.

Post-graduate research projects are available at the NRF-SAIAB within the Genetics and Remote Imagery research platforms for suitable candidates to investigate the potential of environmental DNA (eDNA) to collect population and community level data for subtidal fishes occurring on photic and mesophotic reefs and other non-invasive *in situ* sampling techniques to collect genetic material from reef fishes for individual, community or population level molecular analysis.

The projects are fully funded through the NRF Marine and Coastal Research Grants programme and the students will join the team working on population genetics, reef ecology and conservation at the NRF-SAIAB.

The projects will aim to address research questions under the following topics:

**MSc 1 (2 years funding):** Sensitivity of eDNA to detect transient species and the dispersal and persistence of eDNA on subtidal reefs.

**MSc 2 (2 years funding):** Development of non-invasive sampling techniques to collect genetic material from fishes and the application of microsatellites to enable individual identification and population level studies

Minimum requirements:

- Completed undergraduate and BSc Honour degrees with relevant experience in marine and/or molecular biology.
- The selected students will have a background in molecular biology and ecology with strong analytical skills.
- The students will also need to demonstrate competency in planning and conducting fieldwork off small research vessels.
- The student must have a strong academic record (ideally with distinctions in recently completed degrees), be focussed, hardworking and willing to work as a part of a larger team.

The projects are open to South African citizens that meet the minimum criteria. If no suitable South African applications are received, international students will be considered.

The selected students will be based in Grahamstown at the NRF-SAIAB, registered through Rhodes University, for the full duration of their project.



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If you are interested in applying please submit (1) a cover letter, detailing your relevant experience and research interests, (2) your latest academic transcript, (3) CV, (4) a copy of your ID, (5) contact details of two referees, one of whom must be your most recent supervisor/mentor to Dr Gwynneth Matcher ([g.matcher@saiab.ac.za](mailto:g.matcher@saiab.ac.za)), Dr Gavin Gouws ([g.gouws@saiab.ac.za](mailto:g.gouws@saiab.ac.za)) and Dr Anthony Bernard ([a.bernard@saiab.ac.za](mailto:a.bernard@saiab.ac.za)). Applications open immediately and will close once suitable students have been identified.