



SAIAB
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PhD opportunity investigating the potential of environmental DNA (eDNA) for assessing reef fish community structure and for investigating spatial ecology of reef fishes

A PhD opportunity is available at the NRF-SAIAB within the Genetics and Remote Imagery research platforms for a suitable candidate to investigate the potential of eDNA to collect population and community data for subtidal reef fishes occurring on photic and mesophotic reefs. The project is fully funded through the NRF Marine and Coastal Research Grants programme and the student will join the team working on population genetics, reef ecology and conservation at the NRF-SAIAB.

The research will aim to optimise eDNA sampling and laboratory protocols and implement a comparative method assessment to determine if eDNA can be used to analyse spatial and temporal patterns in reef fish biodiversity and community structure through field experiments and comparisons with baited remote underwater stereo-video systems (stereo-BRUVs).

The selected student will have a background in molecular biology and ecology with strong analytical skills. The student will also need to demonstrate competency in planning and conducting fieldwork off small research vessels. The molecular techniques and video processing will require that the student has good attention to detail. The student must have a strong academic record (distinctions in post-graduate degrees), be focussed, hardworking and willing to work as a part of a larger team.

The PhD is only open to South African citizens that have obtained, or at least submitted for review, their MSc degree. The selected student will be based in Grahamstown at the NRF-SAIAB, registered through Rhodes University, for the full duration of the 3 year PhD.

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 and (5) a copy of a research output (thesis or publication) where you are the lead author to Dr Gwynneth Matcher (g.matcher@saiab.ac.za) and Dr Anthony Bernard (a.bernard@saiab.ac.za). Application open immediately and will close once a suitable student has been identified. The project will start in early 2019.