

CAREER OPPORTUNITIES

National Research Foundation – South African Institute for Aquatic Biodiversity ABOUT US

The South African Institute for Aquatic Biodiversity (NRF-SAIAB) is a national research facility supported by the National Research Foundation (NRF). We study the full range of aquatic environments, from deep ocean waters to inland freshwater systems.

Our research focuses on ecology and conservation, exploring how biodiversity at the genetic and species levels connects with the environment. The NRF-SAIAB also contributes to South Africa's *Operation Phakisa* programs, which aim to grow the country's Biodiversity Economy and Blue Economy.

Strong support from the Department of Science, Technology and Innovation and the NRF has enabled NRF-SAIAB to develop advanced research platforms that allow us to work in a wide range of environments and made us a leader in aquatic biodiversity research.

'All our work supports High Education in training and development of the next generation of aquatic scientists and environmental managers

Freshwater Field Unit

WHAT IT IS AND WHY IT MATTERS

Our team focuses on studying freshwater fish in southern Africa, especially their classification and evolutionary relationships. We use two key scientific fields:

- **Systematics** the study of how different organisms are related, both in the past and today.
- **Taxonomy** the science of identifying and classifying organisms. By combining these approaches, we investigate freshwater biodiversity and the factors that shape where and how it develops.

Our research includes:

- Fieldwork in rivers, lakes, and wetlands
- Genetic and genomic analysis (studying DNA)
- Physical (morphological) studies of fish features and measurements

This work helps conservation by:

- Measuring biodiversity
- Identifying species at risk of extinction
- · Supporting the creation of Key Biodiversity Areas
- · Informing environmental policies

Our efforts also support four United Nations Sustainable Development Goals (SDGs):

- No Poverty (SDG 1)
- Zero Hunger (SDG 2)
- Good Health and Well-being (SDG 3)
- Life Below Water (SDG 14)

We work with local communities to raise awareness and promote sustainable fishing. Our goal is to build skills and knowledge among all stakeholders to ensure healthy ecosystems and long-term benefits for both people and nature. We aim to inspire future generations to protect southern Africa's freshwater biodiversity.

UNIVERSITY QUALIFICATIONS FOR THIS FIELD

A BSc in Biological Sciences, Environmental Sciences, Zoology, Life and Environmental Sciences

CAREER PATHS FOR STUDENTS IN OUR PROGRAM

Students involved in our research can follow careers in both science and applied environmental work. Some of the roles include:

- · Research Assistant
- Field Technician
- · Data Analyst

These roles provide hands-on experience in taxonomy, molecular biology, and ecological research. Graduates have gone on to work in:

- · Environmental consulting
- · Conservation and biodiversity assessment
- Policy and planning (including government and NGOs)
- · Academic research and university teaching

Their skills support sustainable management of freshwater ecosystems and make a positive impact on both nature and society.





