



## **Multiple opportunities for research towards a Master's degree at the University of Cape Town**

Three opportunities for research towards a Master's degree are available for 2022 in the group around the [South African Research Chair in Marine Ecology and Fisheries](#) at the University of Cape Town. The group offers a vibrant and supportive research environment, producing research that is kept in high regard nationally, regionally, and globally. Our research focusses on three themes, (i) modelling in marine social-ecological systems for management strategy evaluation, (ii) indicators for marine social-ecological systems at the science-policy interface, and (iii) inter- and transdisciplinary research into marine social-ecological systems under global change. The opportunities presented speak to theme (iii), and are linked to the larger "[Southern Cape Interdisciplinary Fisheries Research \(SCIFR\)](#)" and "Building adaptive capacity to ocean change at multiple scales through promoting ecosystem-based adaptation and community engagement (Eco-ACE)" projects.

By approaching challenges using social-ecological systems thinking and engaging several academic disciplines as well as members of fishing communities, the SCIFR project aims to find viable means of working with diverse kinds of knowledge and stakeholder concerns in South Africa's southern Cape region. Drawing on broad disciplines and using common themes and methods, the research centres around coastal fisheries. SCIFR seeks to work even-handedly with different ways of knowing, recognising that no single perspective can contain the expertise required to understand a complex marine social-ecological system, and manage human interactions with it accordingly. Thus, rather than viewing selected natural resource users as mere data repositories, we aim to work with them as knowledgeable experts in their own right, alongside other experts e.g. from various academic disciplines. The research aims to inform various decision-making entities at different scales with the goal to enhance resilience and sustainability in this region.

### **1) Vulnerability of fishing communities in the southern Cape to change, including additional pressure caused by Covid-19**

Numerous studies have sought to describe and understand social vulnerability and drivers of change in the southern Cape line fishery (e.g., Gammage et al 2017; Gammage et al., 2019 and Martins et al., 2019). This Master's project aims at understanding how social vulnerability and drivers of change may have evolved over time by updating an earlier survey that sought to understand social vulnerability. In particular, the objective will be to understand the additional pressures caused by Covid-19 and the impacts on various temporal time scales (short, medium, and long term).

Candidates should have an interdisciplinary or social science Honours degree (or equivalent) in Environmental Science, Sustainability Science, Geography, Sociology, or a related field. The successful candidate should have documented interest and some experience in conducting mixed method research – in particular, they should be conversant with interview and survey techniques and the analyses of such data. Successful candidates will have a passion or interest in working with diverse groups of people and an ability to work independently and collaboratively. A working knowledge of Afrikaans would be advantageous but is not crucial. Experience in marine research will be an advantage.

The successful candidate will be co-supervised between Dr. Louise Gammage and Prof. Astrid Jarre.

### **2) Linking stressors to impacts in coastal communities: a transdisciplinary, social-ecological systems approach to change in the southern Benguela**

Fisheries systems are complex, dynamic systems. Causal maps have proven valuable in visualising economic, social-cultural and ecological drivers and pressures to a central goal of putting food on the table. This study aims to improve the understanding of complex and dynamic fisheries systems in the southern Benguela by conducting comparative research with fishers in at least one community on the south African west coast and in the south-eastern region of the southern Benguela. This study will further previous research conducted in the southern Cape (e.g. Gammage et al., 2019). Quantification of the resulting maps using a semi-quantitative modelling approach is a possibility, depending on interests of the candidate.

Candidates should have a background in systems approaches such as sustainability studies, systems ecology, development studies and/or marine studies. The successful candidate will demonstrate interest and some experience in conducting mixed method research. Formal training in methodology related to participant-led research and interviewing as well as demonstrable interest in decision-making in complex, dynamic systems will be advantageous. Candidates should have a passion for working with diverse groups of people and an ability to work independently and collaboratively. A working knowledge of Afrikaans will be advantageous but is not crucial.

The candidate will be co-supervised between Dr. Louise Gammage, Dr. Kelly Ortega-Cisneros and Prof. Astrid Jarre.

### **3) Capturing marine social-ecological dynamics in the southern Cape using Photovoice**

Creative methodology is gaining traction in stakeholder-led research towards understanding the dynamics of social-ecological complexities in coastal communities. Photovoice is a visual research methodology of participatory action research in which participants use cameras to document, reflect upon and communicate everyday life, including issues of concern, in their communities. The successful candidate will conduct the action research in a disadvantaged, marine fishing community in the southern Cape and reflect on the transformative potential of this approach.

The project is suited to candidates with a background in anthropology and/or social sciences such as development studies or human geography, who have had some training in participatory research methodologies, in particular participatory action research. Candidates will demonstrate interest in interdisciplinary research across the natural and social sciences and the humanities. Exposure to, or some experience with research in coastal communities and/or in marine social-ecological systems will be an advantage.

The candidate will be co-supervised between Dr Louise Gammage, Dr Nina Rivers and Prof. Astrid Jarre

## **Application process**

### **Funding**

Bursaries will be funded from the National Research Foundation through the SA Research Chair in Marine Ecology and Fisheries and/or the Eco-ACE project (subject to confirmation of funding). The NRF minimum academic requirement for Master's funding is 65% average for the preceding Honours degree. Applicants for Master's funding must be 30 years of age or younger in the year of application.

Successful applicants will be funded either at Full Cost Study (FCS) or Partial Cost of Study (PCS). The FCS funding will be awarded to South African citizens and permanent residents only, who are either financially needy (i.e., those whose combined household family income is less or equal to R350 000 per annum), living with a disability, or exceptional academic achievers. PCS funding will be awarded to 5% of international students including South African citizens and permanent residents who could not be funded under FCS but meet other minimum requirements for the NRF scholarship funding criteria.

Necessary running and travel expenses will also be covered.

### **Requirements**

Potential Masters candidates are required to have completed an Honours degree (or an equivalent 4-years degree) and must have graduated by January 2022. All candidates should show evidence of strong scholarly performance. Following the National Research Foundation's funding guidelines, strong preference will be given to South African nationals and under-represented groups.

### **To apply**

Applications will follow a Two-step process:

#### **Step 1. Apply to the supervisors/grant holders in the group of the SA Research Chair in Marine Ecology and Fisheries**

All interested candidates should contact email the following documents to eaf.sarchi@uct.ac.za before 12h00 noon on **21 June 2021** with the subject line "**Masters Application: <Master Subject>**" (here please indicate which project you are applying for)

- a motivation letter (detailing your previous academic and work experience, and how your experiences and skills speak to the proposed research topic, as well as your specific interests with regard to the proposed project),
- a detailed CV that includes your academic record, previous work experience, any scientific publications on which you have been an author/co-author, and the names of at least two academic referees,
- transcripts of academic qualifications,
- at least one example of recent written work (e.g., a paper, report, thesis chapter).

We intend to interview selected candidates on 23 and 24 June 2021.

***Step 2. Apply to the NRF***

Suitable candidates will then be instructed to apply on the NRF system by **2 July 2021** and link their application to the project. **Instructions on this process will be communicated to successful applicants in Step 1.** More information on the NRF funding instruments for 2022 can be found [here](#).

***Please note that funding will only be awarded to candidates selected and approved by the NRF.***

***We reserve the right not to appoint.***