



## POSITION DESCRIPTION

<b>Position:</b>	Research Fellow/Senior Research in Forest Science
<b>Classification:</b>	Level B or C
<b>Supervisor:</b>	Associate Professor Andrew Marshall Principal Investigator, FoRCE project
<b>Position No:</b>	4974

### Overview

A Research Fellow/Senior Research Fellow plays a major role in research by leading research projects and supervising candidates for higher degrees by research. They make significant connections with and impact on their discipline/field, which is recognised and acknowledged by peers nationally.

The project for this fellowship is the FoRCE Project ([www.force-experiment.com](http://www.force-experiment.com)), a pantropical experiment, aiming to measure and understand the long-term dynamics of tropical forest recovery from major human disturbance, and interactions with climate, topography and experimental management. We are using a combination of permanent sampling plots, hemispherical photographs, experimental vine removal, seed germination, tree planting and remote sensing. The Research Fellow will be based at the University of the Sunshine Coast (USC), within the Tropical Forests and People Research Centre, the largest research centre for forestry research in Australia. USC is a research-oriented university rated “well above world standard” in the fields of forestry, ecology, and environmental management (ERA 2018).

The project lead partners are the University of York (UK), University of the Sunshine Coast (Australia) and Newcastle University (UK). We are also collaborating with several other academic, charitable and government collaborators across the world. The work is mostly research council funded (Australian and UK Research Councils) but with additional funding and in-kind support from corporate and charitable sources (IUCN Sustain, African Wildlife Foundation, United Bank of Carbon, Flamingo Land Ltd. and the Kilombero Sugar Company). Our work is also registered with the Tanzania Wildlife Research Institute and the Tanzania Commission for Science and Technology. Our lead NGO partner is Reforest Africa, who will be using our findings to implement new forest management and training.

### Duties can include:

1. Be an effective researcher and provide leadership in research and research training by:
  - Purposefully developing focused expertise in a relevant discipline/field;
  - Developing a research agenda and participating in a research team(s);
  - Framing research problems and researchable hypotheses;

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- Designing and conducting research projects and writing research reports;
  - Communicating research outcomes to both expert and lay audiences through publishing;
  - Successfully applying for research grants, particularly external competitive grants;
  - Successfully supervising candidates for higher degrees by research; and
  - Contributing to the development and maintenance of a positive academic environment that is conducive to high levels of engagement and standards of performance in research.
2. Maintain substantial involvement in professional/community service as a scholarly practice through which discipline knowledge and skills are applied to consequential problems in the world beyond the University. Service can be both in a remunerated capacity as consultancy, or without remuneration and can include:
- Editing journals and being a member of review panels;
  - Creating opportunities for discussion of intellectual, social, economic and cultural issues of importance to the well-being of the community;
  - Making professional commentary on issues in the general media and within the wider community which involves bringing specialist expertise to bear on issues of general public interest in a range of fora; and
  - Undertaking major consulting projects through the University.
3. Provide service to the University by contributing to the definition and achievement of its goals and enable it to be a healthy organisation and can include:
- Developing and maintaining strategic and productive partnerships, connections and relationships with people, groups and organisations at local, national and international levels;
  - Communicating with multiple researchers to establish data agreements for the collation of tree and liana vegetation plot data, from study sites across the world;
  - Development of a new dynamic vegetation model to determine liana-tree interactions and their influence on forest recovery from human disturbance;
  - Analysis of data to produce peer-reviewed scientific articles in top-tier journals;
  - Development of new grant proposals for continuation of work beyond the postdoctoral period; and
  - General assistance to the PI in the fulfilment of research objectives of the broader FoRCE project
4. Other duties within the range of skills normally associated with this classification, including those associated with an evolving research, teaching, learning and professional environment, as required. This may include participation in undergraduate teaching, supervision of Honours and HDR students, etc.

### Selection Criteria

1. Qualifications and Experience
  - Completion of a relevant doctoral qualification in a relevant field or equivalent accreditation and standing and experience as a researcher
2. Quality and trajectory of the applicant's track record relative to opportunity:
  - Excellent publication record in relevant, high-impact, peer-reviewed journals;

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- A proven track record of developing new mathematical models through programming;
- Experience with the development or handling of large databases;
- Advanced spatial analysis skills using either R, Python, Matlab or GIS software;
- Experience of working in a diverse and interdisciplinary research team;
- Membership of and sound connections with relevant professional bodies and community groups and/or in professional practice;
- Strong personal qualities and collegial approaches that contribute to the development and maintenance of a positive academic environment and the development of new partnerships;
- The desire to participate in academic development activities and continue to learn and improve as an effective academic;
- Experience in conducting fieldwork in tropical environments; and
- Proven ability to meet deadlines and complete independent work.

**Desirable Criteria**

- Previous experience with dynamic vegetation models;
- Experience of working in tropical forests.

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