

POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title:	Associate Research Fellow	Level:	A
Faculty/Division:	SMAH	Department/Location:	Biological Sciences

Primary Purpose of the Position:

This position is to work with Prof Sharon Robinson as part of an international team modelling spatial and temporal change in terrestrial vegetation communities of continental Antarctica funded by Antarctic Science Grant 4046.

Position Environment:

Research in Biological Sciences at Wollongong spans many fields. The main areas are:

- Terrestrial Ecology
- Plant Physiology and Molecular Biology
- Cell Biology and Biotechnology
- Animal Physiology & Systematics
- Remote Sensing of the Environment

Our researchers include academic staff, research associates, PhD and Masters research students and honours students, as well as a range of collaborators in other institutions such as the National Parks and Wildlife Service, NSW Agriculture, the Australian Plant Phenomic Facility and the Australian Antarctic Division (AAD).

The teaching programs in the School include Bachelor of Science, Bachelor of Conservation Biology Bachelor of Marine Science, and Bachelor of Biotechnology degrees as well as a substantial contribution to multi-disciplinary Bachelor of Environmental Science and Medical Science degrees. The teaching curriculum in the BSc (Biological Sciences) is focused in two major strands: cellular and molecular biology; marine and terrestrial ecology. We offer research degrees at Masters and PhD levels and coursework Masters degrees in Biotechnology and in Science.

The position will join the Robinson Research group at UOW that comprises two academic staff, two postdocs and four PhD Students working in Antarctic Climate Change Science and Photosynthesis Research. Our multidisciplinary research encompasses plant, environmental and spatial sciences at UOW and through our local national and international collaborations. These include statisticians, Prof Kerrie Mengerson, Queensland University of Technology and Prof Noel Cressie, Centre for Environmental Informatics at UOW and scientists Dr Arko Lucieer, TerraLuma group at the University of Tasmania, A/Prof Jenny Watling, University of Adelaide and colleagues at Research institutions including the Australian Antarctic Division and the Australian Nuclear Science and Technology Organisation (ANSTO). Internationally we have strong links with the Universities of Vienna and Cambridge and the British Antarctic Survey. The project will contribute to the new Scientific Committee for Antarctic Research (SCAR) International framework for an Antarctic Terrestrial and Near Shore Observing System.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	The conduct of a specific research project, including publication and conference presentations.	To contribute to the research effort of the Discipline by achieving publications and presenting at conferences.	
2.	Build statistical models that relate physical and environmental variables to species distributions and other biodiversity and biophysical variables (e.g. species richness, moss growth rates and water content).	New models that relate physical and environmental variables to biodiversity.	
3.	Use these models to infer local and regional distributions of key biodiversity parameters, and predict changes under various climate change scenarios	Papers, reports and conference publications that describe how Antarctic terrestrial biodiversity is likely to change in the future	
4.	Assist in the preparation of milestone reports for grant	Successful reports and continuation of funding	
5.	Co-supervise students (undergraduate/postgraduate) working on the same project	Successful completion of student projects	
6.	Communicate and consult with other members of the group (both internally and externally) to facilitate knowledge exchange.	To foster direct relationships with coinvestigators and enhance engagement within the project team.	
7.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
8.	Have OH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & others.	

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

Reporting Relationships:

Position Reports to:	Prof Sharon Robinson
The position supervises the following positions:	none
Other Key Contacts:	Head of School of Biological Sciences

Key Relationships:

Contact/Organisation:	Purpose & Frequency of contact
Dr. Arko Lucieer/UTAS	Co-investigator on project (monthly)
Drs Ben Raymond, Jane Wasley & John McKinlay/AAD	Co-investigator on project (monthly)
Professor Kerrie Mengersen/QUT	Co-investigator on project (monthly)

Key Challenges:

1. To perform interdisciplinary study and communicate across science & informatics.
2. To facilitate fruitful national/international scientific cooperation between multiple institutes.
3. To do high quality research and publish articles in high quality academic journals.
4. To achieve the outcomes of the research position within fixed term according to the project proposal.

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- Demonstrated knowledge and skills in spatial modelling including expertise with GIS, ecological and/or environmental modelling, statistical data analysis and computational skills including expertise with statistical packages.
- Excellent verbal and written English communication skills
- Demonstrated publication record of research manuscripts in peer reviewed scientific journals
- Demonstrated experience of conference presentations (oral and/or poster)

SELECTION CRITERIA - Education & Experience:

Essential:

- A PhD (completed or near completion) in any quantitative science (e.g. environmental and natural sciences or applied mathematics/statistics)
- A strong motivation to apply expertise to modelling of Polar biodiversity under a changing environment.
- Experience in spatial and ecosystem modelling
- Experience in programming

Desirable:

- Research experience in developing models to explain spatial distributions or temporal change of biodiversity
- Demonstrated experience in scientific programming, solving statistical and numerical problems, data mining, and developing local to regional scale models

Personal Attributes:

Essential:

- Flexible and proactive person, capable of thinking and working independently
- Willingness to learn about new scientific problems and actively seek to solve these problems
- Willingness and ability to work collaboratively with other members of the research team from different scientific disciplines
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Desirable:

- Ability to work and interact collegially with members of the School as well as with external and international colleagues
- Willingness to co-supervise students working on the same project
- A genuine interest in high quality research into Antarctic ecosystem response to climate change.

Special Job Requirements:

Indicate any special job requirements such as necessity to work unusual hours, OH&S requirements.

Will this person be required to work with children (under 18 years of age), in an unsupervised capacity? If so then a Working with Children Check will need to be done.

- OHS- maintaining a safe working environment
- Willingness to travel to visit Australian collaborators if necessary

Organisational Chart:

Please attach an up to date organisational chart to this position description.

Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____

POSITION CLASSIFICATION STANDARD - Research Only

Level: A
Title: Associate Fellow

Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.