UNIVERSITY of TASMANIA

Position Description

POSITION TITLE	Postdoctoral Research Fellows (two positions)

FACULTY/INSTITUTE/DIVISION	Science, Engineering & Technology (SET)
SCHOOL/SECTION	Biological Sciences
CAMPUS	Hobart
CLASSIFICATION	Academic Level A
DATE	August 2017

POSITION SUMMARY

Open to Talent, the University of Tasmania's strategic plan, sets a bold vision for the future, with high ambitions across the domains of research, students and community. UTAS recognises that achieving this vision is dependent on the people who work for the University. *Opening UTAS to Talent: The UTAS Academic* specifies performance expectations in both research and learning and teaching for each academic level and for each discipline area. These performance expectations will inform recruitment to this position and the ongoing obligations of the appointee.

Two postdoctoral positions are currently being offered within the University of Tasmania Node of the new ARC *Centre of Excellence for Australian Biodiversity and Heritage* (CABAH) – ARC Australian Laureate Prof. BW Brook and Prof. CN Johnson are chief investigators. The Postdoctoral Research Fellows will work collaboratively CABAH and the Dynamics of Eco-Evolutionary Patterns (DEEP) research group to improve understanding of Australia's unique biodiversity and heritage.

The goals of CABAH are to develop a world-class, interdisciplinary research programme to understand Australia's unique biodiversity and heritage spanning the last 130,000 years. The goal is to identify and track long-term environmental change and responsible processes.The knowledge and lessons learned here will be used to predict responses to future changes, and ensure Australia's biota can adapt successfully to the changing environment. This will involve a mix of large-scale data analyses (using historical and contemporary records), new field studies, and integration and forecasting using statistical and simulation modelling. The appointees will be expected to have a strong background in palaeontology, conservation biology or environmental change, with field, laboratory and/or modelling experience/skills. They will also assist with supervision of students and with other tasks as directed by the project supervisor.

Due to the projects' interdisciplinary nature, there will be substantial collaboration with members of the Centre of Excellence for Australian Biodiversity and Heritage (CABAH), with researchers from the School of Biological Sciences actively involved in the Centre's activities. Headquartered at the University of Wollongong, CABAH brings together eight Australian universities (UOW, James Cook University, University of New South Wales, Australian National University, University of Adelaide, Flinders University, Monash University and University of Tasmania), with a range of partner organisations, including major public education and engagement institutions in Australia (Australian Museum, Queensland Museum, South Australian Museum and State Library of New South Wales) and overseas (Papua New Guinea, Indonesia, France, Germany, Denmark, the UK and the USA). The CABAH team consists of 27 researchers based in Australian and international universities and research institutions, as well as a range of other Australian and international leaders in research, science communication, and education and engagement. The Centre will commence in June 2017, with significant funding from the Australian Research Council, the NSW Government and participating universities,

museums, and other organisations. CABAH will support around 40 new research positions and more than 50 research students over its 7-year life.

Two contracts will be offered, initially for a period of two years, with the possibility of extension subject to satisfactory performance and approval by the project supervisors.

The University's Statement of Values indicates a commitment to 'working from the strength that diversity brings'. The University is anxious to work towards fulfilling that commitment through its recruitment policies and practices. In particular, women are especially encouraged to apply for this position.

POSITION RELATIONSHIPS	
Supervisor	Laureate Professor Barry Brook; Professor Chris Johnson, Jessie Buettel
Direct reports	Postgraduate and/or Honours students
Other	Head of School, other research and administrative members of the School as appropriate, collaborators at other interstate and international institutions.

	KEY ACCOUNTABILITIES AND OUTCOMES
1.	Undertake research on the processes responsible for the changes to Australia's unique biodiversity and heritage, to explore and determine threats to faunal and floral biodiversity caused by regional and global change. This research will be evaluated using a number of approaches, including (but not restricted to) historical archives, new field data (sample collection, pattern mapping), and model-based stochastic forecasts. Analyse Australian (national- or regional level) datasets to assess the timing of human presence and the impacts of people on other species, the timing or extent of major changes in climate and fire regimes, or how landscapes and biota responded to the altered conditions. Explore the consequences of a suite of paleo-environmental scenarios, supported by syntheses and models, to forecast how lessons of past environmental shifts can be used to policy on adapting to future environmental change.
2.	Prepare and publish scientific papers, including effective liaison and communication with research collaborators and stakeholders.
3.	Contribute to the preparation of progress reports to supervisors and research partners, ensuring reporting obligations to the *ARC Centre of Excellence for Australian Biodiversity and Heritage* grant are met and recommendations on future directions for the focal research are provided.
4.	Present results of the research at relevant national and international meetings.
5.	Participate in the supervision of Honours and postgraduate-level research projects.
6.	Participate in team-based research support activities within the CABAH and DEEP research groups, including organising group meetings, administration of research resources and preparation of relevant databases, codes, scripts and file management.
7.	Undertake other relevant duties as assigned by the supervisor.

DECISION MAKING AUTHORITY/LEVEL OF RESPONSIBILITY
Tasks and research/scholarly activities to be performed under the general direction of the immediate supervisor, with limited supervision either independently or as a team member. Independently implement protocols and undertake literature searching, data collation and analysis, and report writing within the scope of established research priorities.

Occasional contributions to science communication and undergraduate or postgraduate teaching in the project area.

POSITION CRITERIA

Essential Requirements

1. A PhD in conservation biology, palaeontology, ecology, evolution, environmental change, modelling, or a related discipline.
2. Experience in implementation of logistically challenging tasks, including robust study design, literature synthesis, data collection and database management.
3. Demonstrated, well-developed written and oral communication skills, including multiple first-author publications in refereed journals.
4. Substantial demonstrated knowledge of paleo-environmental change.
5. Capacity to undertake statistical analysis, such as generalised linear models, model selection and multi-model inference, likelihood and Bayesian methods.
6. Ability to work as a part of a team to collaboratively write and co-publish scientific papers and work on joint research projects.

Desirable Attributes

1. Experience in supervising Honours and postgraduate projects.
2. Well-developed skills and experience in coding for computer simulation modelling and optimisation, using R or Python scripting languages.
3. Understanding of, and capacity to, undertake research administration duties.
4. Willingness to engage in travel and fieldwork as appropriate to the project.

WORKPLACE HEALTH AND SAFETY

- All staff will assist the University to create and maintain a safe and healthy work environment by working safely, adhering to instructions and using the equipment provided in accordance with safe operating procedures. Where appropriate, staff will initiate and participate in worksite inspections, accident reporting and investigations and develop safe work procedures.
- All supervising staff are required to implement and maintain the University's WHS Management System in areas under their control, ensuring compliance with legislative requirements and established Policies, Procedures and Guidelines and, provide the appropriate information, instruction, training and supervision.
- Staff will inform their supervisor of any unsafe working practices or hazardous working conditions

UTAS STATEMENT OF VALUES

We subscribe to the fundamental values of honesty, integrity, responsibility, trust and trustworthiness, respect and self-respect, and fairness and justice. We bring these values to life by our individual and collective commitment to:

* Creating and serving shared purpose
* Nurturing a vital and sustainable community
* Focusing on opportunity
* Working from the strength diversity brings
* Collaborating in ways that help us be the best we can be

POSITION DESCRIPTION APPROVED

HEAD OF SCHOOL/CENTRE/SECTION

Signature	Name	Date
DEAN/HEAD OF INSTITUTE/HEAD OF DIVISION		
Signature	Name	Date
PROVOST		
Signature	Name	Date
HUMAN RESOURCES (Classification Assessed and Approved)		
Signature	Name	Date