



## Position Description

# Post Doctoral Research Associate

*Position Number: NA*  
*Position Title: Post Doctoral Research Associate*  
*Date Written: March 2018*

*Faculty / Division: Science*  
*School / Unit: Biological, Earth and Environmental Sciences*  
*Position Level: A*

## ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

## UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high performance culture. The behavioural expectations for UNSW are below.

Please refer to the UNSW Behavioural Indicators for the expectations of your career level.

### Demonstrates Excellence

Delivers high performance and demonstrates service excellence

### Drives Innovation

Thinks creatively and develops new ways of working. Initiates and embraces change

### Builds Collaboration

Works effectively within and across teams. Builds relationships with internal/external stakeholders to deliver outcomes

### Embraces Diversity

Values individual differences and contributions of all people and promotes inclusion

### Displays Respect

Treats others with dignity and empathy. Communicates with integrity and openness

## OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

### **The Centre of Marine Bio-Innovation (CMB)**

The CMB is an internationally recognised focal point for research on environmental microbiology and marine ecology and is highlighted as a prime research centre at UNSW ([www.cmb.unsw.edu.au](http://www.cmb.unsw.edu.au)). A major research theme of the CMB is the study of interactions between marine eukaryotes and their associated microbiome, both in natural and applied settings. The CMB has more than 40 researchers and a strong collaborative network within Australia and overseas. The CMB has generated more than 550 publications and 21 patents over that last 22 years and has mentored over 120 students and over 50 research staff. The CMB also occupies laboratory space with a full range of equipment for molecular-biological and microbiological work as well as maintains equipment for marine-based fieldwork.

### **The School of Biological, Earth and Environmental Sciences (BEES)**

The School of BEES has over 100 academic staff, over 170 research students and 60 Honours students. BEES incorporates environmentally-relevant disciplines enabling the School to undertake comprehensive education and research in the mainstream disciplines of biology, geography and geology. This also provides students the opportunity for interdisciplinary and multidisciplinary studies.

BEES has research strengths in climate system science, environmental management, evolutionary ecology, genetics and behaviour, geospatial information systems, natural resources and environments, palaeosciences and terrestrial and marine conservation and ecology.

### **Sydney Institute of Marine Science (SIMS)**

SIMS (<http://sims.org.au/>) is NSW's leading multidisciplinary marine institute, formed through a collaboration of its founding partners and shareholders, the four major Sydney-based universities (University of NSW Australia, University of Sydney, Macquarie University, University of Technology Sydney). Membership of UNSW in SIMS is managed through the Faculty of Science and BEES. The Director, Professor Peter Steinberg, is a staff member of BEES. SIMS was established in 2005 and is based at Chowder Bay, Mosman, on Sydney Harbour.

The appointee will be located within the CMB and administrated through BEES. Some of the work may be based at SIMS, including the PC2 aquarium.

The Post Doctoral Research Associate will be a highly motivated microbial ecologist / microbiologist to work in a two-year research project studying marine host-microbiome interactions as part of an ARC Discovery project based at the Centre for Marine Bio-Innovation, UNSW (Randwick campus).

The role of Post Doctoral Research Associate reports to Professor Peter Steinberg and Dr Ezequiel Marzinelli and has no direct reports.

## RESPONSIBILITIES

Specific responsibilities for this role include:

- Contribute to the experimental design of large-scale field surveys, field mesocosm experiments and laboratory testing
- Conduct field sampling (from seaweeds and water) and analyses (through molecular sequencing approaches) to investigate structure and function of communities of microorganisms
- Prepare and present scientific reports and papers; and coordinate and maintain accurate records of research activities
- Co-supervise research students as required

- Contribute to (in relation to opportunity and appointment level) service to the discipline, lab, school, university and profession
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

## SELECTION CRITERIA

### Essential

- PhD in Microbial Ecology, Microbiology, or related fields.
- Demonstrated experience in experimental design and statistical analysis of microbial community datasets.
- Practical experience in qPCR, amplicon sequencing, metagenomics and metatranscriptomics.
- Highly competent in bioinformatics.
- Experience in culturing microorganisms.
- Excellent oral and written communication skills as demonstrated by a strong research and publication track record.
- Demonstrated capacity to deliver high quality project outcomes in a timely manner.
- Demonstrated ability to work effectively with others in a research environment
- Ability and willingness to supervise research students including undergoing compliance and supervising training as required.
- Current drivers licence.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training

### Desirable

- Background in ecology and in host-associated microbiomes.
- Experience in analyses of water quality and other environmental parameters.
- Recreational or commercial boating qualifications.
- SCUBA diving licences including Rescue level and at least 20 hours logged dives.

## PRE-EMPLOYMENT CHECKS REQUIRED FOR THIS POSITION

- Verification of qualifications

*It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.*