

Academic Duty Descriptor



Research Officer (AC/A) or Senior Research Officer (AC/B)

Position Number	6000016718
Division/College	Division of Tropical Environments and Societies/ TropWATER, DTES
Campus Location	Townsville
Classification	Research Academic Level A/B
Fraction	100%
Reports To	Director TropWATER
Supervisor Position Number	1070171163
Number of positions supervised	Directly: 0
Date Last Reviewed	N/A

(eDNA)

Position Overview

As part of the TropWATER Freshwater Ecology Group the Research Officer/Senior Research Officer will contribute to the new and rapidly evolving area of molecular genetics by applying environmental DNA analysis to detect the occurrence of species in water bodies through the genetic analysis of water and/or soil samples. The incumbent will utilise their experience and specialist expertise in the field of eDNA genetics. The incumbent may have a strong research background or a more applied background.

TropWATER

TropWATER undertakes projects across a range of activities from pure research to consultancy. The mix of research and fee-for-service projects varies between team members and over time, depending on availability of funds and opportunity. This combination of project styles creates a vibrant and diverse intellectual working environment. Our goal is to make a difference in the applied management of environmental issues. We also aim to gain research outcomes from the conduct of commercial projects, thus value-adding to the use of such funds.

Organisational Charts

[James Cook University](#)

Division of Tropical Environments and Societies

TropWATER

Principal Accountabilities

1. Conduct both independent and team-based research and consulting activities associated with TropWATER projects.
2. Prepare and negotiate research and consultancy funding proposals to external funding agencies, both independently and as part of a research team, including ensuring project salary income will cover salary costs of the position.
3. Manage all aspects of project investigation, finances, field activities, data assessment and reporting to ensure on-time and on-budget delivery of agreed project milestones.
4. Design species-specific eDNA probes and experiments to access efficiency of eDNA sampling procedures, provide comparisons of the utility and cost effectiveness of eDNA techniques to traditional sampling methods and undertake genetic analysis of water and soil samples.
5. Deliver workshops outlining project goals and achievements and present scientific papers at seminars and conferences.
6. Produce scientific technical reports, publications in peer-reviewed journals and conference and seminar papers.
7. Plan, organise and conduct field programs and be prepared to undertake field work in remote locations.
8. Where required, present lectures and tutorials and mentor/co-supervise postgraduate research students.
9. Undertake administrative functions connected with the position's activities.
10. Support the University's commitment to the principles of [reconciliation](#), which exemplify respect for Aboriginal and Torres Strait Islander heritage and the valuing of justice and equity for all Australians.
11. Demonstrate a commitment to the University values.
12. Support the principles of the TropEco program and engage in commitment to JCU sustainability goals and objectives.

Generic Accountabilities

There are generic responsibilities that apply to all James Cook University staff.

1. The **Research Officer/Senior Research Officer** is required to observe the lawful and reasonable directions, policies and decisions of the University Council, understand and comply with the Enterprise Agreement, the Statutes and Rules of the University, the policies and decisions of the University Council and other appropriate University authorities, as in force from time to time.
2. The **Research Officer/Senior Research Officer** is required to demonstrate a personal commitment to ensure personal safety and the safety of others and contribute to the continuous improvement of our WHS performance. This includes the effective implementation and compliance with James Cook University WHS policies, procedures and safe systems of work, together with all relevant legislation, duties and obligations. Contribute to the continuous improvement of our WHS performance.

3. The **Research Officer/Senior Research Officer** is required to exercise proper discretion in all matters affecting the well-being of the University which involve public writing or speaking in accordance with the University's [Code of Conduct](#).

Special Conditions

- It is a requirement of this position to hold current CPR and First Aid Certification.
- It is a requirement of this position to be prepared to undertake field work in remote areas and outside of normal working hours.
- It is a requirement of this position to hold a current 'C' Class manual Queensland Driver's licence.

Selection Criteria

Selection and appointments will be assessed against selection criteria.

Essential

1. Possess a PhD or a Bachelor's degree with a minimum of 6 years of professional experience in a related field.
2. Demonstrated high level molecular genetic skills with the ability to apply theoretical and practical expertise to the identification of DNA presence of aquatic species in water and soil samples.
3. Demonstrated skills in primer probe design, quantitative PCR and relevant statistical analysis.
4. Experience managing projects individually or contributing significantly to the management of projects, including preparing funding proposals, sourcing opportunities for projects and developing relationships with potential clients, stakeholders and collaborators.
5. Demonstrated history of research outputs including the production of reports and the publication of scientific results in peer-reviewed journals.
6. Demonstrated computer skills including the use of Microsoft and database related software.
7. Experience with organizing field trips or similar logistical operations, including for the collection of samples for genetic analysis.

Desirable

1. Experience mentoring/supervising postgraduate research students
2. Experience presenting lectures/tutorials to undergraduate students
3. Knowledge of the aquatic biodiversity of northern Australia