

Position title	Outstanding Future Researcher – Northern Water Futures
Position number	9530
Position classification	Research Focused Academic Level B/C
Organisational unit	College of Engineering, IT and Environment
Location	Casuarina Campus
Reporting to title	Dean, College of Engineering, IT and Environment
Special provisions	<ul style="list-style-type: none"> <li>• Appointment is contingent upon receipt of a satisfactory National Criminal History check and NT Working with Children clearance.</li> <li>• Successful appointee will undertake GCUTL as directed by the College Dean</li> </ul>

## SECTION 1: Purpose of the role

The Outstanding Future Researchers will contribute independent expertise, research impact and engagement, and publication record to the research profile of Charles Darwin University. These researchers are projected to be future leaders in their fields and future professors of the University. They will be mentored rather than supervised by the existing staff, to develop their independence

Specifically, the Outstanding Future Researcher – Northern Water Futures will contribute to research undertaken in RIEL as well as supporting the Director of the Institute as required, to strategically respond to research opportunities. The role supports the research capability in the fields of hydrology and biogeochemistry and is central to supporting research outputs and collaboration across the university. A particular focus is developing and maintaining relationships with research partners as well as key stakeholders including government and non-government agencies in the Northern Territory and further afield to ensure that research has a significant reach and impact. In part, this role will also support research students and training, deliver high quality research and applications, and contribute to the positive and collegial research culture within the Institute and College. It is intended that, over time, this position will transition from an exclusively research role to undertaking both research and teaching duties in the College of Engineering, IT, and Environment.

## SECTION 2: Key accountabilities

The following examples of accountabilities are not exhaustive and may include others as directed from time-to-time.

### Research:

- Participate in research within RIEL independently and as a member of a research team
- Contribute to the development and lead as appropriate, the application of innovative research methods suitable for use in surface and ground water interactions
- Steady development of an academic research profile in the area of hydrology and biogeochemistry including the development of research leadership
- Provide effective supervision of major honours or postgraduate research projects and supervise or co-supervise Research Higher Degree and Honours students

- Produce high quality, timely research outputs with a focus on building revenue through academic grants and research and evaluation consultancy and by using high ranking ERA journals
- Active participation in the communication and dissemination of research where appropriate
- Align research applications with strategic goals of the university such as NTG-CDU partnership agreement
- Contribute to research outputs including, but not limited to data collection, analysis and reporting

### **Teaching**

- There will be no teaching duties, except for the supervision of HDR students, during the first two years of the appointment.
- The appointee will be allocated 20 % teaching load in year 3 and 30 % in year 4, leading to 40 % teaching load in year 5 and subsequent years.

### **Liaison and Communication**

- Effectively collaborate and coordinate project activity both within the team as well as with clients and stakeholders
- Work directly with the Office of Research and Innovation as required to align research projects to the university's strategic goals
- Acquire and maintain a strong working knowledge and understanding of the organization's strategic intent and use that knowledge and understanding to inform which grants will be sought and leveraged.
- Active participation in enhancement of the reputation of the University through external networking in line with the strategic directions and plans of the University.

### **Strategic Business Administration:**

- Undertake related administrative and other duties as directed in support of the Institute's and College's research;
- Contribute, as appropriate, in committees and structures within the University in areas such as WH&S, to ensure that the legislative and procedural requirements of the Organisation are met;
- Lead or participate in the preparation of competitive research grants;
- Participate in appropriate university and industry committees, meetings, and professional events and community activities, as required.

### **Knowledge and proficiency**

- Develop and maintain a close working knowledge of social, political and scientific developments likely to impact on the work of the University and partners and ensure that this knowledge is integrated into research projects.
- Experience in and willingness to undertake teaching responsibilities after the research only component of the role as required

### **Additional Accountabilities at a Level C**

- Contribute to the College as a senior member of staff and make a significant contribution to the profile of the University.
- Enhance the reputation of the University through leadership and external impact, in line with the strategic directions and plans of the University.
- Team leadership within a complex project environment involving multiple partners and other stakeholders including those from diverse backgrounds
- Manage projects, including planning, budgeting and financial management of complex contracts, monitoring progress, evaluation and reporting

## SECTION 3: Selection competencies

### Essential competencies:

1. Postgraduate research qualification at a PhD or equivalent level in hydrology and/or biogeochemistry;
2. Research excellence in the areas of surface and ground water interactions - hydrology and biogeochemistry in particular, the fate and transport of biotic and abiotic stressors, impact of catchment management on aquatic and/or coastal systems, as demonstrated by a record of publications in Q1 journals (Scimago) as first or corresponding author;
3. Demonstrated record of impact, as established by citations and engagement with industry, government or NGOs, with respect to peer-researchers in the field;
4. Demonstrated experience and skills in hydrochemical and isotope tracing techniques, aquatic biogeochemical cycling, water, carbon and nutrient fluxes and advanced numerical skills including familiarity with programming platforms;
5. Proven significant participation in the successful pursuit of external research grants or competitive tenders in collaboration with domestic and international research collaborators, industry partners, and/or government agencies;
6. Demonstrated ability to liaise with a range of collaborators to coordinate and facilitate research implementation;
7. Demonstrated ability to successfully supervise undergraduate and postgraduate research students;
8. Demonstrated interpersonal skills and ability to work both autonomously and in a team environment; and
9. Demonstrated experience in and willingness to undertake teaching duties in the College.

### Additional essential competencies for appointment at Level C

1. Demonstrated postdoctoral research experience in the areas of hydrology and/or biogeochemistry;
2. Demonstrated record of supervision of PhD students to completion and high quality of PhD supervision;
3. Demonstrated leadership capability within a complex project environment involving multiple partners and other stakeholders including those from diverse backgrounds;
4. High level project management skills, including planning, budgeting and financial management of complex contracts, monitoring progress, evaluation and reporting;
5. Demonstrated ability to represent the university at a range of fora, and to liaise, communicate, negotiate and collaborate with clients, stakeholders and partners, in order to deliver a valued service and achieve agreed outcomes;
6. Proven ability to obtain external research grants or competitive tenders in collaboration with domestic and international research collaborators, industry partners, and/or government agencies; and
7. Demonstrable systematic approach to research impact and engagement.

### Desirable competencies

1. Ability to build partnerships internationally.