



Australian  
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## Position Description

<b>College/Division:</b>	ANU College of Science
<b>Faculty/School/Centre:</b>	Research School of Biology
<b>Department/Unit:</b>	Division of Plant Sciences
<b>Position Title:</b>	Postdoctoral Fellow / Research Fellow
<b>Classification:</b>	<b>Academic Level A / B</b>
<b>Position No:</b>	TBC
<b>Responsible to:</b>	Professor Graham Farquhar

### PURPOSE STATEMENT:

The Postdoctoral Fellow / Research Fellow will undertake independent and/or team research on the ARC DP170104276 Grant 'To Péclet or not to Péclet? Understanding leaf water isotope composition'. This position is based within the Farquhar Lab at ANU and will liaise with Professor Barbour at The University of Sydney.

### KEY ACCOUNTABILITY AREAS:

#### Position Dimension & Relationships:

The Postdoctoral Fellow / Research Fellow reports to Professor Graham Farquhar, and is responsible for contributing to enhancing the academic discipline and strategic direction of the school, through establishing and maintaining excellence in research, teaching and professional activities within the University, and within the community, at both a scholarly and general level.

### Role Statement:

Specific duties required of a **Level A /B Academic** include:

1. Undertake independent research in the area of plants and stable isotope physiology with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and international level.
2. Be alert to opportunities for external funding including assistance with the preparation and submission of research proposals to external funding bodies.
3. Contribute to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students, acting as subject coordinators and the initiation and development of course/subject material.
4. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
5. Supervise less senior academic staff and research support staff in your research area.
6. Actively contribute to all aspects of the operation of the School.
7. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
8. Maintain high academic standards in all education, research and administration endeavours.
9. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
10. Other duties as required consistent with the classification level of the position.

**SELECTION CRITERIA****Academic Level A**

1. A PhD (or awarding of a PhD within six months of appointment commencement) in plant physiology, physics, physical chemistry or engineering, relevant to stable isotopes, or fluid flow, with a track record of independent research in one of these fields as evidenced by publications in peer-reviewed journals and conferences
2. Experience that is relevant to plant physiological research in some or all of the following areas: plant water relations, photosynthesis, environmental biology. Specific research experience in fluid dynamics through porous media, including numerical modelling as well as application of isotope and water relations techniques to plants would be an advantage
3. An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
4. Ability and willingness to teach at all levels within the scope of the project, as well as the ability to assist in the supervision of students working on research projects.
5. The ability to work as part of a team and to deadlines.
6. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
7. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

**Skill Base**

*A Level A research academic will typically conduct research/scholarly activities under limited supervision either independently or as a member of a team and will normally hold a relevant higher degree.*

*A Level A research academic will normally work under the supervision of academic staff at Level B or above, with an increasing degree of autonomy as the research academic gains skills and experience. A Level A research academic may undertake limited teaching, may supervise at undergraduate levels and may publish the results of the research conducted as sole author or in collaboration. They will undertake administration primarily relating to their activities at the institution.*

**References:** [Academic Minimum Standards](#)

**SELECTION CRITERIA****Academic Level B**

1. A PhD in plant physiology or a related area, with a track record of independent research, relevant to stable isotopes, or fluid flow in porous media as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, invitations to give talks at leading conferences etc.
2. Evidence of the ability to articulate and prosecute innovative research in the field of plant physiology and a vision for the activities they will undertake at the ANU. Specific research experience in fluid flow through porous media, including numerical modelling as well as application of isotope and water relations techniques to plants would be an advantage
3. An ability and commitment to help win bids for competitive external funding to support individual and collaborative research activities.
4. Ability and willingness to teach at all levels.
5. The ability to supervise and graduate high quality PhD/Masters research students.
6. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
7. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

**Skill Base**

*A Level B research academic will normally have experience in research or scholarly activities, which have resulted in publications in refereed journals or other demonstrated scholarly activities.*

*A Level B research academic will carry out independent and/or team research. A Level B research academic may supervise postgraduate research students or projects and be involved in research training.*

**References:** [Academic Minimum Standards](#)



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## Pre-Employment Work Environment Report

### Position Details

<b>College/Div/Centre</b>	CoS	<b>Dept/School/Section</b>	RSB
<b>Position Title</b>	Postdoctoral Fellow / Research Fellow	<b>Classification</b>	Academic Level A / B
<b>Position No.</b>	tbc	<b>Reference No.</b>	

**In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.**

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see [http://info.anu.edu.au/hr/OHS/\\_Health\\_Surveillance\\_Program/index.asp](http://info.anu.edu.au/hr/OHS/_Health_Surveillance_Program/index.asp) Enrolment on relevant OHS training courses should also be arranged – see [http://info.anu.edu.au/hr/Training\\_and\\_Development/OHS\\_Training/index.asp](http://info.anu.edu.au/hr/Training_and_Development/OHS_Training/index.asp)
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at [http://info.anu.edu.au/Policies/\\_DHR/Procedures/Employment\\_Medical\\_Procedures.asp](http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp)

### Potential Hazards

<ul style="list-style-type: none"> <li>Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a <b>regular</b> or <b>occasional</b> part of the duties.</li> </ul>					
<b>TASK</b>	<b>regular</b>	<b>occasional</b>	<b>TASK</b>	<b>regular</b>	<b>occasional</b>
key boarding	X	<input type="checkbox"/>	laboratory work	X	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	X	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	X	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	X
fieldwork & travel	<input type="checkbox"/>	X	electricity	<input type="checkbox"/>	X
driving a vehicle	<input type="checkbox"/>	X			
<b>NON-IONIZING RADIATION</b>			<b>IONIZING RADIATION</b>		
solar	<input type="checkbox"/>	X	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>				
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
<b>CHEMICALS</b>			<b>BIOLOGICAL MATERIALS</b>		
hazardous substances	<input type="checkbox"/>	X	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	X
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
carcinogens					
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHER POTENTIAL HAZARDS (please specify):</b>					

<b>Supervisor's Signature:</b>		<b>Print Name:</b>	Graham Farquhar	<b>Date:</b>	19/04/2018
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