



Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Biology
Department/Unit:	Division of Plant Sciences, ARC Training Centre for Future Crops Development
Position Title:	Postdoctoral Fellow (Innovation Fellow)
Classification:	Academic Level A
Position No:	TBC
Responsible to:	Centre Director, Professor Barry Pogson
Number of positions that report to this role:	Nil
Delegation(s) Assigned:	Nil

PURPOSE STATEMENT:

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics and Engineering, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and delivers a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

The Training Centre aims to build new capabilities for agriculture and global food security through socially responsible genetic and field technologies to develop future crops. The Centre is funded by the Australian Research Council (ARC) for five years. It connects ANU and The University of Adelaide with over 20 industry and research organisations to train a new generation of practitioners in the development and implementation of cutting-edge gene and field technologies for future crops, to drive growth, profitability, sustainability and competitiveness in Australian agriculture. The partners include local, national and international companies and research organisations. At ANU, the Training Centre is within the Research School of Biology, which is a leading centre of biological research in Australia and the Centre for the Public Awareness of Science. Our researchers have a tradition of excellence in addressing the world's most pressing issues, including in plant science, food security, biomedical sciences, ecology and evolution.

The Innovation Fellow is expected to undertake work in all three areas of academic activity –research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the external funding conditions that support the appointment, the appointees research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Innovation Fellow may also be required to supervise or assist in the supervision of students, and contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Innovation Fellow will be a member of the ARC Training Centre for Future Crop Development and the Research School of Biology. The positions report to the Centre Director. Key components of the position will be research, teaching and mentoring students in areas relevant to the Training Centre and the School's Biological Transformation Facility. Priority research areas will be developing and optimising gene editing, crop transformation and cell-based or cell-free transient expression technologies with applications to foci of the Centre (See <https://futurecropscentre.edu.au> for details). The Innovation Fellows will be expected to work collegiately, leading by example to develop and maintain effective, productive and beneficial workplace relationships with academic, professional School and College staff, students and Centre Partners and with

stakeholders.

Role Statement:

In their role as an Academic Level A the Innovation Fellow is expected to:

- Undertake independent research in the technology area(s) of plant gene editing, crop transformation, cell-based/cell-free expression, bioinformatics, genomics and/or plant phenomics 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 level.
- Work as part of a team spanning social science to genetic technologies and field-based research on an externally funded project subject to deadlines. Contribute to the operations of the Training Centre and the School's Biological Transformation Facility, including the development and deployment of new technologies.
- Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
- Contribute to the teaching activities of the School at both undergraduate and graduate levels. This includes, but is not limited to, delivering short-courses or micro-credential programs, preparation and delivery of lectures and practicals, assessment, or acting as subject coordinators.
- Assist with supervision of research students working on individual or group projects at undergraduate, honours, graduate-coursework levels.
- Assist to supervise research support staff in your research area.
- Actively contribute to all aspects of the operation of the School.
- Assist in the Centres' training programs and outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.
- Comply with all policies and procedures of the host organisation(s), particularly those relating to work health and safety and equal opportunity.

Skill Base:

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. A Level A academic will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

A Level A academic will normally contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. The contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

SELECTION CRITERIA:

- A PhD (or awarding of a PhD within six months of appointment commencement) in crop or plant genetic technologies, or equivalent qualifications and experience in a related area, with a track record of independent research in the field of gene editing, plant transformation, cell-based or cell-free transient expression systems as evidenced by publications in peer-reviewed journals, patents, and/or conference presentations.
- Evidence of experience that is relevant to Centre's research in some or all of the following areas: gene editing, crop transformation, cell-based or cell-free transient expression systems. Specific research experience in the development of technology area(s) of plant gene editing, crop transformation, transient high throughput phenomics, bioinformatics or phenomics would be an advantage but is not essential.
- An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.

- Evidence of an ability and willingness to teach at all levels.
- The ability and willingness to assist in the supervision of students working on research projects.
- The ability to work as part of a team in a cross-disciplinary academic environment, an awareness or willingness to learn and incorporate the principles of socially responsible research, and an ability to meet deadlines.
- 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.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:		Date:	
Printed Name:		Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Biology
Department/Unit:	Division of Plant Sciences, ARC Training Centre for Future Crops Development
Position Title:	Research Fellow (Innovation Fellow)
Classification:	Academic Level B
Position No:	TBC
Responsible to:	Centre Director, Professor Barry Pogson
Number of positions that report to this role:	Nil
Delegation(s) Assigned:	Nil

PURPOSE STATEMENT:

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics and Engineering, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and delivers a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

The Training Centre aims to build new capabilities for agriculture and global food security through socially responsible genetic and field technologies to develop future crops. The Centre is funded by the Australian Research Council (ARC) for five years. It connects ANU and The University of Adelaide with over 20 industry and research organisations to train a new generation of practitioners in the development and implementation of cutting-edge gene and field technologies for future crops, to drive growth, profitability, sustainability and competitiveness in Australian agriculture. The partners include local, national and international companies and research organisations. At ANU, the Training Centre is within the Research School of Biology, which is a leading centre of biological research in Australia and the Centre for the Public Awareness of Science. Our researchers have a tradition of excellence in addressing the world's most pressing issues, including in plant science, food security, biomedical sciences, ecology and evolution.

The Innovation Fellow is expected to undertake work in all three areas of academic activity –research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the external funding conditions that support the appointment, the appointees research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Innovation Fellow may also be required to supervise or mentor less senior staff, and undertake leadership roles as applicable. The staff member will contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Innovation Fellow will be a member of the ARC Training Centre for Future Crop Development and the Research School of Biology, accountable to the Centre Director and Director of the School. Key components of the position will be research, teaching and mentoring students in areas relevant to the Training Centre and the School's Biological Transformation Facility. Priority research areas will be developing and optimising gene editing, crop transformation and cell-based or cell-free transient expression technologies with applications to foci of the Centre (See <https://futurecropscentre.edu.au> for details). The Innovation Fellows will be expected to work collegiately, leading by example to develop and maintain effective, productive and beneficial workplace relationships with academic, professional School and College staff, students and Centre Partners and with

stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

Role Statement:

In their role as an Academic Level B the Innovation Fellow is expected to:

- Undertake independent research in the technology area(s) of plant gene editing, crop transformation, cell-based/cell-free expression, bioinformatics, genomics and/or plant phenomics 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/or international level. This includes working as part of a team on an externally funded project subject to deadlines and being primarily responsible for project delivery in some areas.
- Work as part of a team spanning social science to genetic technologies and field-based research on an externally funded project subject to deadlines. Contribute to the operations of the Training Centre and the School's Biological Transformation Facility, including the development and deployment of new technologies.
- Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
- Contribute to the teaching activities of the School at both undergraduate and graduate levels. This includes, but is not limited to, the initiation and development of course/subject material, delivering short-courses or micro-credential programs, preparation and delivery of lectures and practicals, assessment, or acting as subject coordinators.
- Supervise research students working on individual or group projects at undergraduate, honours, graduate-coursework levels.
- Supervise Postdoctoral Fellow's and research support staff in your research area.
- Actively contribute to all aspects of the operation of the School. This may include representation through committee memberships.
- Assist in the Centres' training programs and outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.
- Comply with all policies and procedures of the host organisation(s), particularly those relating to work health and safety and equal opportunity.

Skill Base:

A Level B academic will undertake independent teaching and research in their discipline or related area. In research and/or scholarship and/or teaching a Level B academic will make an independent contribution through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

A Level B academic will normally contribute to teaching at undergraduate, honours and postgraduate level, engage in independent scholarship and/or research and/or professional activities appropriate to their profession or discipline. The academic will normally undertake administration primarily relating to their activities at the institution and may be required to perform the full academic responsibilities of and related administration for the coordination of an award program of the institution.

SELECTION CRITERIA:

- A PhD in crop or plant genetic technologies or a related area, with a track record of independent research in the field of gene editing, plant transformation, cell-based or cell-free transient expression systems as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
- Evidence of experience that is relevant to Centre's research in some or all of the following areas: gene editing, crop transformation, cell-based or cell-free transient expression systems, with the ability to articulate and prosecute innovative research in this field. Specific research experience in the development

of technology area(s) of plant gene editing, crop transformation, transient high throughput phenomics, bioinformatics or phenomics would be an advantage but is not essential.

- A demonstrated ability and commitment to apply for competitive external funding to support individual and collaborative research activities.
- Evidence of an ability and willingness to teach at all levels.
- An ability to supervise and graduate high quality PhD/Masters research students.
- The demonstrated ability to work as part of a team in a cross-disciplinary academic environment, contributing to team management, an awareness or willingness to learn and incorporate the principles of socially responsible research, and an ability to meet deadlines for project elements.
- 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.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:		Date:	
Printed Name:		Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)

	Australian National University	<h1>Pre-Employment Work Environment Report</h1>
---	---	---

Position Details

College/Div/Centre	College of Science	Dept/School/Section	Research School of Biology
Position Title	Innovation Fellow	Classification	Academic level A/B
Position No.		Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- '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

Potential Hazards

<ul style="list-style-type: none"> • Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 			
TASK	regular	occasional	
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	
repetitive manual tasks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Organizing events	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
fieldwork & travel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
driving a vehicle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NON-IONIZING RADIATION			
solar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ultraviolet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
infra red	<input type="checkbox"/>	<input type="checkbox"/>	
laser	<input type="checkbox"/>	<input type="checkbox"/>	
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>	
CHEMICALS			
hazardous substances	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
allergens	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
cytotoxics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
pesticides / herbicides	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TASK	regular	occasional	
laboratory work	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
work at heights	<input type="checkbox"/>	<input type="checkbox"/>	
work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>	
noise / vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
electricity	<input type="checkbox"/>	<input type="checkbox"/>	
IONIZING RADIATION			
gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>	
beta particles	<input type="checkbox"/>	<input type="checkbox"/>	
nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>	
BIOLOGICAL MATERIALS			
microbiological materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
potential biological allergens	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>	
clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>	
genetically-manipulated specimens	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
immunisations	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER POTENTIAL HAZARDS (please specify):			
Supervisor/Delegate Name:	Barry Pogson		Date: 21/04/22