# Position Details

## CSIRO Early Research Career (CERC) Postdoctoral Fellowship– CSOF4

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| The following information is for applicants |
| Advertised Job Title | CSIRO Postdoctoral Fellowship in Navigating Sustainability Transitions and Innovation Dynamics |
| Job Reference | 81167 |
| Tenure | Specified Term of 3 YearsFull-time or Part-time (0.75 FTE) |
| Salary Range | AU$89,926 to AU$98,504 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Canberra, ACT preferredBrisbane, QLD, and Hobart, TAS considered |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens;
* Australian Permanent Residents; and
* Australian temporary residents currently residing in Australia (visa sponsorship may be provided to eligible onshore candidates)
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| Position reports to the | Line Manager: Dr Nicky Grigg (Environmental Futures, Team Lead, Land and Water). Project Lead: Dr Stuart Whitten, Adaptive Communities and Industries, Group Leader, Land and Water)  |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact via email at Stuart.Whitten@csiro.au or Nicky.Grigg@csiro.au  |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the area that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

**CSIRO Early Research Career (CERC) Postdoctoral Fellowships** provide opportunities to scientists and engineers who have completed their doctorate and have less than three years relevant postdoctoral work experience. These fellowships aim to develop the next generation of future leaders of the innovation system through:

* A differentiated career development program to deliver capability excellence and breadth across all facets of the national innovation system
* Research training via strategic research and development projects with a clear focus that will deliver real impact through science and engineering excellence
* An innovative culture supporting the development and demonstration of original thinking and expertise leading to peer-recognition
* Opportunities to develop skills and experience in collaborative research teams to effectively work within national and global multi/transdisciplinary and multi-stakeholder environments.

CERC Postdoctoral Fellows **are appointed for three years full-time or equivalent.**

The successful candidate for this position will play a pivotal research role in CSIRO’s Valuing Sustainability Future Science Platform. The **Valuing Sustainability Future Science Platform (VS FSP)**is a new 5-year investment in cutting edge research by CSIRO that will recruit 15 postdoctoral researchers who will be embedded in diverse inter-disciplinary research teams. The VS FSP aims to co-produce future pathways, measures and indicators to underpin sustainable innovation and prosperity for current and future industries and communities. The VS FSP will bring together social, biophysical, economic and data science teams and work with diverse stakeholders to advance these outcomes, in part through developing measurement and assessment technologies that can support decision-making, attribute change to practice, and track progress.

Within the VS FSP, the **Navigating Transitions** project focuses on supporting the transformative shifts across Australian sectors, regions, corporate and consumer practices that will be needed to return within Earth system boundaries and to support diverse human values. Successfully navigating these transitions requires society to initiate and mainstream innovations to drive transitions, to monitor and manage transition risks, and to avoid perverse or undesirable outcomes. Successful sustainability transitions in a wide range of contexts will require new or adapted tools, indicators and methods to support transition governance.

The Navigating Transitions project will consider questions around how sustainability transitions are initiated and led, feasibility of socio-technical approaches, and the relationships between diverse actors, and what socio-technical approaches are feasible. Key areas and critical questions for this area of cross-disciplinary research include:

* Which elements and dynamics contribute to successful sustainability transitions (driving forces and barriers, capitals/capability, diversity of actors, information flow, stakeholder relationships, value-sharing)?
* How do we identify, foster and fast-track innovation to disrupt and transform the mainstream (i.e., conventional business, resource use practices and systems) whilst effectively managing risks?
* What knowledge, processes and institutions (including data/tools developed by the VS FSP) reduce risk or translate it to opportunity, avoid lock-ins/unjust outcomes?
* What options for co-production can support public / private value contributions and build trust and ownership?
* How do we support and improve governance to navigate transitions matching the urgency and scale of needs?

The Postdoctoral Fellow will focus on the first three research topics.

### Key Result Areas:

Under the direction of senior research scientists within the Navigating Transitions project team the Postdoctoral Fellow will:

* + Review available literature to identify the role of innovation dynamics in supporting sustainability transitions with emphasis on the applicability of learnings to the Australian institutional and economic context.
	+ Drawing on the literature review and case studies, design a diagnosis of the system challenges, barriers and driving forces to innovation readiness, including to mainstreaming innovation as part of system transitions.
	+ Design and build methods with potential to mobilize (i.e., trigger or initiate) socio-technical innovation at ‘micro’ to ‘meso’ levels of society.
	+ Work with team members and other VS FSP projects to design and implement interventions that test mobilization efficacy in at least one case study location.
	+ Support project development of a network of stakeholders and engage in workshops, conferences, community meetings that can identify and actualise desirable sustainable sector and regional development outcomes.
	+ Collaborate across the Valuing Sustainability Future Science Platform, including projects running in parallel to the Navigating Transitions project and across CSIRO, as identified and appropriate.
	+ Participate as a lead author and contribute to the development and publication of journal articles, manage external partnerships and relationships, and work together with the larger VS FSP team within and across CSIRO.

Additionally, all CERC Postdoctoral Fellows:

* + Carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
	+ Recognise and exploit opportunities for innovation and the generation of new theoretical perspectives, and progress opportunities for the further development or creation of new lines of research
	+ Utilise design thinking methodology to plan and prepare research proposals, and apply non-academic impact methodology to research projects
	+ Carry out research investigations requiring originality, creativity and innovation
	+ Record, manage, and analyse data/information using relevant domain data science techniques.
	+ Proactively undertake development to grow effective researcher capabilities to support career goals.
	+ Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

[**The CERC Postdoctoral Fellow learning and development program**](http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships)is developed between the CERC Postdoctoral Fellow and their CSIRO supervisor. The program will focus on enhancing the Fellows’ capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:

* Discipline-specific techniques and protocols
* Professional growth
* Project management
* Communication and influencing skills
* Working and collaborating with others

## **Required Competencies:**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Those with a doctorate (or candidates who will shortly satisfy the requirements of a PhD) from a wide range of relevant discipline areas are invited to apply. This includes (but is not limited to) economic geography, economic sociology, business strategy, institutional economics, human geography, and sustainability science.
2. Experience working on sustainability transitions, including developing frameworks and theories of change, with a focus in agricultural, land-use, and sustainability-focused topics, or in industrial and mining transformations in collaboration with a range of stakeholders.
3. A foundation in quantitative analytical approaches and evidence of proficiency (e.g., statistics, econometrics, microeconomics, industrial organisation, system dynamics, etc.).
4. Experience designing and undertaking transdisciplinary research, collecting primary data and managing fieldwork, developing and implementing experimental interventions including familiarity with human ethics in research processes.
5. Demonstrated capacity to lead research projects, conduct high-level workshops and conferences, and work productively with a range of external stakeholder groups with minimal supervision.
6. High level written and oral communication skills with the ability to listen to and accommodate diverse perspectives, and represent the research team effectively internally and externally, including the presentation of research outcomes at national and international conferences.
7. A sound history of publication in peer reviewed journals and/or authorship of scientific papers, reports, grant applications or patents.
8. A record of science innovation and creativity, including the ability & willingness to incorporate novel ideas and approaches into scientific investigations.
9. A current driver’s licence.

## **Desirable:**

1. Experience engaging with diverse stakeholder groups or partnerships for applied research.
2. Experience and comfortability with exploring and contributing to trans-disciplinary science outcomes.
3. Experience blending qualitative and quantitative methods.
4. Experience working on projects with multidimensional outcomes for diverse stakeholders, including those involving a range of public, private and civil society organisations and actors.
5. Remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.
6. **The ability to work effectively as part of a multi-disciplinary, potentially regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.**

To be appointed as a CERC Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4-1 (AU $87,068). Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- https://ielts.com.au/

**Our value proposition**

We want CERC Postdoc Fellows to join our world class science, engineering and digital teams to solve big, complex problems that make a real difference to the future of Australia and the world.

You'll get to work with some of the most talented minds in their fields, not just in Australia, but in the world. At CSIRO, we spark off each other, learn from each other, trust each other and collaborate closely to achieve more than we could individually.

CSIRO Early Research Career (CERC) Postdoctoral Fellow Experience Employee Value Proposition (EVP). Find out more [here](https://www.csiro.au/en/careers/postdoctoral-fellowships)!

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Agriculture and Food](https://www.csiro.au/en/Research/AF)

Find out more about CSIRO [Land and Water](https://www.csiro.au/en/Research/LWF)