# Position Details

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

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | CSIRO Postdoctoral Fellowship in Social-Ecological Systems Integration |
| Job Reference | 81057 |
| Tenure | Specified Term of 3 years  Full-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 (other locations by negotiation) |
| 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) |
| Position reports to the | Team Leader, Environmental Futures, Sustainable Pathways Program, Land and Water |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Rebecca Pirzl via email at [Rebecca.Pirzl@csiro.au](mailto:Rebecca.Pirzl@csiro.au) or phone +61 2 6246 4108 / Nicky Grigg via email at [Nicky.Grigg@csiro.au](mailto:Nicky.Grigg@csiro.au) or phone +61 2 6246 5569 |
| 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](mailto: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; and
* 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 (**[**VS-FSP**](https://research.csiro.au/vsfsp/)**).** The VS FSPis a substantial new 5-year investment in cutting edge research by CSIRO that will recruit 15 post-doctoral fellows 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.

This position is one of three integrated CERC fellowships within the VS-FSP **Functional Ecosystems for Nature + Prosperity Project**. It offers an exciting opportunity to join an interdisciplinary team aiming to develop new leading indicators of ecosystem health and integrity within a social-ecological systems context, and embed these indicators into decision processes to accelerate practice change for nature-positive outcomes across agri-food and nature-based systems. The research will build tools and knowledge-to-action frameworks based on a deep understanding of ecosystem health and integrity and social values, to support effective identification, prioritisation, and actions planning to protect and restore ecosystems at risk of irreversible decline. The research aims to provide options that allow stakeholders to identify, prioritise and take action on ‘at risk’ values and ecosystem functions.

The **Social-Ecological Systems Integration Postdoctoral Fellow** will drive the component of the research that designs and embeds ecosystem health and integrity indicators in the social-ecological system and develops knowledge-to-action frameworks for uptake of indicators in diverse decision contexts. This research will develop novel approaches to link stakeholder values to ecosystem functions, and to co-design ecosystem health and integrity indicators suited to assessing ‘values at risk’ from ecological change. The research will include addressing diverse and contested values and characterising system boundaries and scales relevant to both social interactions and transactions, and ecosystem function.

The Functional Ecosystems project team will bring together skills in social and economic sciences with biophysical and data sciences to work with a diverse range of stakeholder groups and regional communities. As a key member of the team, the Postdoctoral Fellow will lead the social-ecological systems specific research and collaborate with other CERC Fellows in quantitative natural systems ecology and soil biogeochemistry. The CERC Postdoctoral Fellows will work as part of a broader collaborative team with researchers at CSIRO and/or partner agencies and will be expected to engage with managers and other stakeholders to build participatory approaches. Inter-disciplinary activities will collectively address challenges in the design and uptake of monitoring and reporting tools to ensure that co-produced leading indicators of ecosystem health are relevant, accessible, reliable and trusted by a broad range of stakeholders and embedded in social processes. The project aims to develop research outcomes that underpin sustainable innovation and prosperity for Australia’s future.

### Duties and Key Result Areas:

Under the direction of senior research scientists the Postdoctoral Fellow will:

* + 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 further development of approaches linking social values and benefits to ecosystem function.
  + Work with project stakeholders and collaborators to co-develop and design research questions, implement research activities and evaluate outcomes.
  + Translate outcomes of research activities to partners and end-users, for instance through participation in meetings, workshops, field visits and presentations.
  + Carry out research investigations requiring originality, creativity and innovation.
  + Produce high quality scientific papers suitable for publication in peer reviewed journals, and internal and external reports. Prepare appropriate conference papers and present those at national and international conferences as agreed with their supervisor.
  + Record, manage, and analyse data/information using relevant domain data science techniques.
  + Proactively undertake development to grow effective researcher capabilities to support career goals.
  + Work collaboratively with colleagues across the Valuing Sustainability Future Science Platform and across CSIRO, as identified and appropriate.
  + Adhere to the spirit and practice of CSIRO’s Code of Conduct, including ethical human research and privacy requirements, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.

1. 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/s. 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**

To allow assessment of your application, please address each selection criteria with a short paragraph demonstrating the relevance of your research experiences and achievements.

#### Essential

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

1. A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, such as social-ecological systems science, sustainability science, quantitative, spatial or experimental natural systems ecology in soil and/or plant science

Please note: To be eligible for this role you must have **no more than 3 years** (full-time or equivalent) of postdoctoral research experience.

1. Demonstrated experience in participatory research methods, knowledge co-production, values framing and elicitation, and stakeholder engagement
2. Demonstrated experience in undertaking interdisciplinary research linking social and biophysical systems, ideally with experience linking qualitative and quantitative approaches
3. Background knowledge in ecology, biodiversity, soils and/or ecosystem function concepts, ideally including their application in a social-ecological systems context.
4. High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including the presentation of research outcomes at national and international conferences.
5. A sound history of publication in peer reviewed journals and/or authorship of scientific papers, reports, grant applications or patents, and conference presentations.
6. A record of science innovation and creativity, including the ability and willingness to incorporate novel ideas and approaches into scientific investigations.
7. The ability to remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.

## **Desirable:**

1. Experience in the development and/or use of indicators for decision-making.
2. Experience with remote or regional field work and safety requirements and the willingness to travel, preferably with a current driver’s license.
3. **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/)!

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* 1. People First
  2. Further Together
  3. Making it Real
  4. Trusted

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