# 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 Quantitative Ecology |
| Job Reference | 76780 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$89,926 to AU$98,504 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane, QLD or Canberra, ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All candidates |
| Position reports to the | Group Leader (Pest Management Systems) |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Rieks Van Klinken via email at Rieks.vanklinken@csiro.au *Please do not email your application directly to Rieks Van Klinken. Applications received via this method will not be considered.* |
| 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. |

### 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 of 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 or part time equivalent.**

This position is an exciting opportunity for an early career, highly motivated research scientist with skills in quantitative analysis and modelling as it relates to biosecurity to join the Program Managing Invasive Species and Diseases of the Health and Biosecurity Business Unit of CSIRO. This multi-disciplinary program undertakes research to reduce the actual and potential economic, environmental and social impacts of national priority pests, weeds and diseases of agriculture and the environment. The position will also play an integral role in CSIRO’s newly formed Trusted Agrifood Exports Mission which aims to boost global export earnings of Australian grown food through tools and technologies that verify our quality, safety and clean and green credentials. Market-access (both domestic and international) is a key constraint for Australian agricultural growth. Pests and diseases remain a major barrier to market access, both in terms of demonstrating produce is pest-free and meeting maximum residue limits for chemicals used in pest management. Industry is therefore increasingly assessing research based on its ability to grow exports.

In this role you will be using your quantitative and empirical skills to develop and test new approaches to both support market access and help responses to agricultural biosecurity threats entering Australia. You will also be turning your research into practical tools and solutions by working closely with prospective users. This will involve working collaboratively with industry, regulators and scientists from diverse disciplines, including working closely with data analysts and modellers in Data61. Research will include developing and conducting risk analytics to support the development of phytosanitary systems approaches for market access, optimising pest surveillance and “track and trace” methodologies, and guiding the design and implementation of relevant empirical studies.

You will have the opportunity to build and maintain networks, develop new business, provide scientific leadership and pursue new ideas and approaches that create new concepts and beneficial impacts.

### Duties and Key Result Areas

Under the direction of senior research scientists and engineers, this CERC Postdoctoral Fellow will:

* + Initiate, and undertake through to adoption, analyses and modelling to help the agricultural sector develop and maintain market access, and to support biosecurity incursion responses. This will include guiding empirical studies to inform and test modelling activities.
	+ Maintain a focus on adoption of Research and Development (R&D).
	+ Incorporate novel approaches to scientific study by adapting and/or developing original concepts and ideas into existing and future research.
	+ Under the guidance of senior colleagues, develop and contribute to new, multi-disciplinary research projects, including negotiation and securing of external funding requirements.
	+ Develop active collaborations with scientists from other disciplines that are working within the Trusted Agrifood Exports Mission.
	+ Produce scientific papers suitable for publication in high quality international journals and for presentation at national and international conferences, and present or write reports for, clients and the scientific and/or technology community.
	+ Under general direction, participate in planning projects and accept responsibility for the scheduling and completion of major parts of projects, including allocating and directing tasks where appropriate.
	+ Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
	+ 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. A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, such as ecological modelling, quantitative ecology, ecological entomology or plant pathology.

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

1. Willingness and the ability, when permitted, to travel throughout Australia and internationally, requiring occasional extended trips away from home and occasional weekend work.
2. A current and valid Australian drivers’ licence or the ability to obtain one.
3. Strong quantitative analytical and statistical skills, combined with an ability to source, interpret and utilise empirical data.
4. Interest and ability to turn research into practical tools and solutions by working closely with prospective users.
5. High level skills in scientific computing languages and software (such as R or Python) relevant to the domain questions and data.
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 achieve project goals.**
7. Demonstrated ability to lead projects or components of large multi-disciplinary projects**.**
8. High level communication skills, both written and spoken, needed to make research accessible to diverse audiences in constrained time frames. This includes a demonstrated ability to publish impactful research and make scientific presentations to audiences with scientific and non-scientific backgrounds.
9. A record of science and/or technological innovation and creativity, including the ability & willingness to incorporate novel and lateral thinking and approaches into scientific investigations to develop appropriate solutions to research challenges.
10. An ability to, under guidance, identify and secure new strategically-aligned R&D opportunities through engagement with stakeholders and collaborators.

## **Desirable**

1. Track record in developing science-based solutions for industry.
2. Relevant technical skills such as experience coding, handling “big data”, and an ability to build software tools.
3. Demonstrated research experience in biosecurity or entomology.
4. A track record in developing proposals and obtaining funding.
5. Remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.

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 ($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 [Health and Biosecurity](https://www.csiro.au/en/Research/BF)