# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Biosecurity Entomologist |
| Job Reference | 86429 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$102,724 – AU$111,165 per annum plus 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 | Team Leader, Market Access and Digital Biosecurity (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. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas 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

The role of Research Scientist staff is to lead projects that conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

The Biosecurity Entomologist will join the *Biosecurity Program* 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 play an integral role in CSIROs *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 is a key constraint for Australian agricultural growth. Pests and diseases remain a major barrier to market access, with trading partners needing confidence that produce is free of biosecurity risks.

The Biosecurity Entomologist will use their entomological and ecological skills to develop and test new approaches to both support market access and help keep Australia free of new biosecurity threats. 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 laboratory and field studies on quarantine pests affecting horticultural industries such as apples and cherries to quantify trade risks and to find innovative ways for managing those risks.

Career development will require broadening the research portfolio by identifying new opportunities and securing new funding for projects that deliver on CSIRO’s strategy. The Biosecurity Entomologist 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

* Devise strategy and assume scientific responsibility for research and interpreting results to deliver on project-related outputs.
* Initiate and undertake laboratory and field research to help quantify and manage trade-related risks posed by horticultural pests of quarantine concern with the aim of helping the agricultural sector develop and maintain market access, and to support biosecurity incursion responses.
* Work closely with the agricultural industry (growers and packers), data scientists and other disciplines, to identify how digital and technological innovations could be applied to address biosecurity risks in horticultural systems.
* 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.
* Act as a trusted advisor for industry.
* Produce scientific papers suitable for publication in high quality international journals and for presentation at national and international conferences. Present or write reports for clients and the scientific and/or technology community.
* Provide coaching, mentoring and on-the-job training to post-doctoral fellows, technical staff and students to ensure high quality research results.
* Communicate openly, effectively and respectfully with all staff, collaborators and customers to build productive relationships and collaborations regionally, nationally and internationally, to enhance impact of the science or create new business opportunities.
* 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.
* Maintain confidentiality when dealing with commercially or culturally sensitive information.
* 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.

## **Selection Criteria**

#### Essential

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

1. A doctorate (or an equivalent combination of qualifications and research experience) in a relevant discipline, such as ecological or behavioural entomology, applied entomology, integrated pest management, invasion biology or biosecurity.
2. Strong experience and skills in designing, conducting and analysing rigorous and insightful laboratory and field studies on insect behaviour, ecology or management.
3. Ability to lead projects or components of large multi-disciplinary projects, and carry out independent research, to achieve project goals.
4. A record of science and/or technological innovation and creativity, including the ability and willingness to incorporate novel ideas and lateral thinking into scientific investigations to develop appropriate solutions to research challenges.
5. Excellent 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 scientific papers and effectively share research outcomes to clients, collaborators, and technical/community stakeholders.
6. An ability to, under guidance, identify and secure new strategically-aligned R&D opportunities through engagement with stakeholders and collaborators.

## **Desirable**

1. Demonstrated research experience in biosecurity or Integrated Pest Management.
2. Ecological analysis and/or modelling skills using R.
3. Track record in developing science-based solutions for industry through to adoption.
4. A track record in developing proposals and obtaining funding

## **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 responses by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **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 change.

Special Requirements

* The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate will require the willingness and ability to travel throughout Australia and internationally and work outside of regular hours, as required for the role, which will include occasional extended trips away from home and occasional weekend work.
* The successful candidate will be required to provide evidence of a current and valid Australian driver’s licence.
* 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/>)

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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:

* People First
* Further Together
* Making it Real
* Trusted

Find out more about CSIRO [Health and Biosecurity](https://www.csiro.au/en/Research/BF)