# Position Details

## Research Projects- CSOF3

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| The following information is for applicants |
| Advertised Job Title | Research Projects Officer in Experimental Insect Functional Biology |
| Job Reference | 95594  |
| Tenure | Specified Term of 3 years Part-time (0.5 FTE) |
| Salary Range | AU$68,148 - AU$86,733 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Canberra (Black Mountain), ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents only |
| Position reports to the | Team Leader, Environmental Synthetic Biology |
| Client Focus – Internal | 0% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Matthew Morgan via email at Matthew.Morgan@csiro.au or phone +61 2 6246 4172 |
| 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).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

Insects have emerged as invaluable waste biotransformers, presenting a sustainable solution to burgeoning waste stream challenges. Their rapid growth and high protein content make them an ideal candidate for repurposing organic waste into valuable resources like animal feed or fertilizer. Furthermore, various insect species exhibit a promising capacity to degrade pollutants, including plastics, showcasing their potential as eco-friendly agents in waste management. CSIRO is exploring genomic, microbial, and biochemical interventions to enhance these insects' plastic-degrading capabilities and optimise the process for large-scale applications. By unlocking the full potential of insect biodegradation, we are paving the way for innovative and sustainable solutions to combat plastic pollution.

The Research Projects Officer will work with researchers in the Industry Environments Program and support research to understand and enhance biotransformation pathways in insects and insect-associated microbiomes. The Officer will be responsible for creating and maintaining insect colonies in a range of relevant species and assisting with the design and performing of experiments involving insects and microbial communities. A demonstrated ability to perform molecular biology and data analysis tasks will be a distinct advantage.

### Duties and Key Result Areas

* Under supervision, design and implement experimental procedures to create and maintain insect colonies, including axenic and gnotobiotic insects, for scientific research as directed.
* Under supervision, design and perform straightforward experiments, sample collection and routine laboratory analyses. Where relevant, design new processes or apparatus by adapting existing techniques and components to meet special circumstances or undertake modifications to methods requiring some innovation.
* Work with Team members to help design data recording and entry systems.
* Work with discretion to decide on the timing of operations within the work team’s plan and plan ahead to meet experimental and/or project demands.
* May have responsibility for maintaining laboratory or fieldwork consumables and scheduling and instructing staff in the use of shared equipment.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Relevant bachelor’s degree in Genetics, Microbiology or Biochemistry
2. Relevant work experience in Insect Functional Biology, Insect Biochemistry or Insect-Related Microbiology.
3. Demonstrated practical experience maintaining insect colonies, especially black solider flies, beetles and moths, for scientific research under minimal supervision.
4. Demonstrated experience in performing scientific research on insects including experimental design, creating and maintaining axenic and/or gnotobiotic insects, and dissections.
5. Demonstrated experience in Molecular Biology laboratory techniques including extraction of DNA, RNA, proteins and small molecules (metabolites), and appropriate QC methods.

## **Desirable**

1. Demonstrated experience in bioinformatics or experimental data analysis.
2. Experience in Microbiology or insect-microbiome interactions would be advantageous.

## **Required Competencies**

* **Teamwork and Collaboration:** Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
* **Influence and Communication:** Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.
* **Resource Management/Leadership:** Provides instruction and assists other staff to complete allocated tasks and activities.
* **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate may be required to undertake a pre-employment medical examination prior to commencement.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Environment Business Unit](https://www.csiro.au/en/about/people/business-units/Environment) for more information.

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