# Position Details

## Research Projects- CSOF3

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | Research Projects Officer in Experimental Insect Functional Biology |
| Job Reference | 96324 |
| Tenure | Specified Term until 30/06/2026, Full-time |
| Salary Range | AU$70k - AU$90k 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 |
| Position reports to the | Team Leader, Environmental Systems Biology |
| Client Focus – Internal | 0% |
| Client Focus – External | 100% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Gunjan Pandey via email at Gunjan.Pandey@csiro.au or phone +61 2 6246 4244 |
| 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 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

This role of the Research Projects Officer at CSIRO is centered around insect manipulation, bioassays, conducting tissue dissections, and performing DNA/RNA extractions, along with the execution of various biochemical assays. Under broader supervision of and in collaboration with senior researchers in the Industry Environments Program, the Officer will play a vital part in understanding of molecular and biochemical processes in insects around various circular economy research domains such as “plastic degradation” and “waste to protein conversion” by insects.

Key responsibilities of the position include conducting bioassays for the growth and degradation of various food substrates as well as xenobiotic chemicals such as plastic by various insect species. The Officer will also be actively involved in the design and execution of experiments focused on insect feeding, tissue dissections, and the extraction of biomolecules (DNA, RNA, protein, lipid etc) . Additionally, the role encompasses conducting biochemical assays, contributing to the advancement of research in this field.

A demonstrated proficiency in molecular biology and genomic data analysis tasks will be a distinct advantage in fulfilling the responsibilities associated with the insect bioassays, tissue dissections, biomolecule (DNA, RNA, protein, lipid etc) extractions, and biochemical assays. This role is integral to CSIRO's ongoing efforts to unlock the full potential of insect as engineers for environmental applications, contributing to innovative and sustainable solutions in waste management.

### Duties and Key Result Areas

* Under limited supervision, design and conduct insect bioassays and biochemical assays for scientific research as directed.
* Under limited supervision, design and perform insect dissections, tissue/sample collection and biomolecule (DNA, RNA, protein, lipid etc) extractions and result 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.
* Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, regionally based operations team in support of CSIRO scientific objectives.
* 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 or equivalent relevant work experience in Entomology, Insect Molecular biology or Biochemistry.
2. Demonstrated experience in performing scientific research on insects.
3. Demonstrated experience in Molecular Biology laboratory techniques including extraction of biomolecules (DNA, RNA, lipids, proteins etc), and appropriate QC methods.
4. A demonstrated proficiency in molecular biology and genomic data analysis tasks will be a distinct advantage in fulfilling the responsibilities associated with the insect bioassays, tissue dissections, biomolecule extractions, and biochemical assays. This role is integral to CSIRO's ongoing efforts to unlock the full potential of insect as engineers for environmental applications, contributing to innovative and sustainable solutions in waste management.
5. Demonstrated experience in record keeping for scientific research.

## **Desirable**

1. Experience in bioinformatics, genetic manipulation and/or microinjection.
2. Experience in analytical chemistry (lipid and protein extraction and analysis).
3. Experience with black soldier fly rearing and the application of flies for waste management.
4. Insect dissection experience.

## **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

* 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 will be required to undertake a pre-employment medical examination prior to commencement.
* The successful candidate will be required to work with insects and will need to confirm they do not have any allergies to insects before commencing.

## **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