# Position Details

## Research Projects- CSOF3

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| The following information is for applicants |
| Advertised Job Title | Molecular Biology Technician  |
| Job Reference | 98293 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$73,567 - AU$93,630 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Black Mountain, Canberra, ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents
* Australian Temporary Residents with a valid work visa for the duration of the specified term
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| Position reports to the | Team Leader  |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Chris Helliwell via email at chris.helliwell@csiro.au or phone +61 2 6246 5346 |
| 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.

We have an opportunity for a motivated research technician to join a GRDC-funded project investigating the genetics of reproductive frost tolerance in wheat. Late season frosts when wheat is entering the flowering stage lead to yield losses estimated to cost the industry hundreds of millions of dollars each year. In this project we are using modern genomic analysis methods to identify genes and markers for frost tolerance in wheat as well as engineering wheat to improve its performance in frost.

The appointee to the role will have a central role in the project, including analysing gene edited wheat lines (tracking the presence of edits and assessing performance under frost conditions), preparation of libraries for transcriptome sequencing and assisting with controlled environment experiments being conducted at Charles Sturt University, Wagga Wagga.

The ideal candidate will have qualifications and experience in using molecular techniques (nucleic acid extraction, PCR, Next-Gen Sequencing (NGS) library preparation) and working with plants; skills in managing and analysing genomic datasets would also be desirable.

The appointee will join the Genome to Phenome team within the Breeding Innovation group in the CSIRO Crops program.

### Duties and Key Result Areas

* Genotyping of gene-edited wheat lines
* Assessment of frost tolerance of gene edited wheat plants in controlled environments
* Preparation of NGS transcriptome libraries
* Maintenance of edited wheat lines (plant growth, crossing, seed collection).
* Assisting with assessment of frost response of a large wheat diversity panel in controlled environments in collaboration with CSU
* Planning and executing analysis, interpreting and communicating research, presenting at project meetings, and working with other team members & collaborators to achieve objectives, including contributing to reports or scientific publications.
* Participating in planning experiments and accepting responsibility for scheduling and completing parts of the project, including experimental design, data collection and analysis, and delivery.
* 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.
* Independently test possible solutions to resolve identified problems.
* May have responsibility for maintaining laboratory or fieldwork consumables and scheduling and instructing staff in the use of shared equipment.
* Oversee the activities of less experienced staff and provide guidance on experimental/ technological techniques and protocols as required.
* Communicate openly, 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 dispersed research team to carry out tasks in support of CSIRO’s 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 molecular biology
2. Experience in working with DNA and RNA.
3. Practical experience in general molecular biology lab techniques, such as PCR.

## **Desirable**

1. Experience working with plants (ie wheat) and general glasshouse maintenance skills
2. Experience in preparation of NGS libraries

## **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.
* 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/

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Agriculture & Food](https://www.csiro.au/en/work-with-us/industries/agriculture/Ag-and-Food) 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