# Position Description

## Research Projects – CSOF3

The following information is for applicants

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| Advertised Job Title**:** | Cotton Biotechnology Research Technician |
| Job Reference: | 61713 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | Australian Citizens Only  Australian/New Zealand Citizens and Australian Permanent Residents Only   * All Candidates |
| Percentage of Client Focus - Internal: | 50% |
| Percentage of Client Focus - External: | 50% |
| Reports to the: | Cotton Biotechnology Core Project Team Leader |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries | Dr Danny Llewellyn via email [Danny.Llewellyn@csiro.au](mailto:Danny.Llewellyn@csiro.au)  *Please do not email your application directly to Dr Llewellyn. Applications received via this method may not be considered by the selection* |
| Contact Details For Applying | Call 1300 984 220 or email [careers.online@csiro.au](mailto:careers.online@csiro.au). |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |

## Role Overview:

Research Projects staff in CSIRO collaborates 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.

The Cotton Biotechnology Research Technician will be part of the Agriculture & Food's Cotton Biotechnology Group. This laboratory-based role will be critical in supporting the breeding and deployment of new commercial cotton varieties by CSIRO’s highly successful breeding program that is based in Narrabri, NSW. The technician will help track a suite of GM and non-GM traits through breeding populations using advanced molecular and biochemical assays and provide essential quality control on the release of seed to our domestic seed partner, Cotton Seed Distributors. The role will work as part of a small integrated technical team interacting closely with our field staff in Narrabri and gain some experience in the processes need to develop crop varieties for industry.

## Duties and Key Result Areas:

* As part of a small team, undertake high volumes of sample preparation for antibody-based ELISA assays of leaf or seed material and/or extraction of DNAs for trait genotyping and genome sequencing.
* Analyse cotton DNAs for presence/absence and zygosity of several different GM and non-GM agronomic traits using PCR fluorescence-based assays such as KASP and Taqman, set up using a liquid handling robot.
* Troubleshoot to identify and correct any failures in assay results.
* Prepare reagents for all antibody and molecular biology duties.
* Undertake general laboratory housekeeping and stock management in a shared laboratory space.
* Between breeding screening cycles, assist in performing other molecular analyses of transgenic cotton and tobacco plants (Q-PCR, genomic PCR) and some cloning and sanger sequencing to generate new gene constructs for transformation into cotton and tobacco.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed, cotton breeding research team to carry out tasks in support of CSIRO’s obligations to its commercial seed industry partner and the Australian cotton industry.
* 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.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## Competencies:

1. **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.**
2. **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.**
3. **Resource Management/Leadership: Provides instruction and assists other staff to complete allocated tasks and activities.**
4. **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.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **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.

## Selection Criteria:

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

1. Relevant diploma/bachelor’s degree in molecular biology, biotechnology or genetics or relevant work experience.
2. Demonstrated experience in the preparation of molecular biology reagents and conducting molecular assays such as PCR assays.
3. Demonstrated experience in the use of equipment such as thermal cyclers, centrifuges and electronic pipettors and an ability to follow and, when necessary, optimise a written protocol.
4. Demonstrated organisation skills coupled with the ability to keep careful records of experimental work and basic computer skills for data entry and analysis.
5. Good oral and written communication skills.
6. Demonstrated commitment to a high level of personal performance and a track record of following good Health and Safety practices at work.
7. Ability to be adaptable and flexible in assigned tasks as work priorities change or in response to externally imposed commercial deadlines and to self-manage allocation of time to tasks.
8. **A history of professional and respectful behaviours and attitudes in a collaborative environment.**

## Desirable Criteria:

1. Experience in working with liquid handling robots and more complex scientific equipment under instruction.
2. Familiarity with the techniques of ELISA, high-throughput DNA extraction and DNA genotyping would be an advantage*.*

## About CSIRO:

We imagine. We collaborate. We innovate. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Agriculture and Food](https://www.csiro.au/en/Research/AF)