# Position Details

## Research Projects- CSOF4

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| The following information is for applicants | |
| Advertised Job Title | Research Officer – Agricultural modelling & data management |
| Job Reference | 87808 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$87,068 - AU$98,504 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Forest Hill/Toowoomba, Queensland |
| 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 |
| Client Focus – Internal | 0% |
| Client Focus – External | 100% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Lindsay Bell via email at Lindsay.Bell@csiro.au or phone +61 7 4571 3201 |
| 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).

### 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.

CSIRO’s Integrated Agricultural Systems group is a world leading research group examining options to improve the productivity and sustainability of agriculture in Australia and across the globe.

The team in Toowoomba seeks a self-motivated individual to support several of their research activities. The successful applicant for this indefinite role requires strong skills in data management and analysis, and some experience with computer modelling and agricultural research is desirable.

A critical function of the role will be to compile, manage and analyse a diverse range of data from agricultural experiments and field monitoring activities. This will involve undertaking complex calculations of economic, sustainability and efficiency metrics (e.g. gross margins, greenhouse gas emissions, water-use-efficiency) and producing outputs for communicating to a variety of audiences (e.g. farmers, other researchers, and for reports and publications). The position will also be responsible for applying simulation models using APSIM (Agricultural Production Systems sIMulator, <https://www.apsim.info/>) and preparing simulation outputs. Increased reliance on integrated data technologies by agricultural decision-makers means that these skills will remain in high demand.

### Duties and Key Result Areas

* Use appropriate approaches to design, collate, check and analyse data from field-based and simulation experiments
* Configure and test agricultural simulation models that meet the specification and needs of the research team, clients and other collaborators.
* Under general direction, contribute to research and/or technology through the development of original and adapted research methods or software.
* Participate in planning projects and accept responsibility for scheduling and completion of major parts of the project, particularly data collection and analysis.
* Make significant contributions to the communication of research results and collaborate on drafting presentations, and detailed written reports for clients and the scientific community.
* Work as part of a multi-disciplinary, often regionally dispersed research team, to carry out tasks under limited direction in support of scientific research.
* Show initiative to seek new approaches to meet experimental or technological needs when encountering new problems where methods are not defined.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.

## **Selection Criteria**

#### Essential

1. **Education/Qualifications:** Relevant Bachelors/Masters Degree or equivalent experience in Science, Computing, Data, Mathematics or Statistics
2. **Communication:** Good written and oral communication skills including experience preparing reports or publications for clients or scientific audiences.
3. **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.
4. **Adaptability:** The ability to effectively manage a number of competing priorities simultaneously and carry out non-routine tasks under general direction.
5. **Problem Solving:** Proven ability to investigate routine problems by identifying and considering the implications of a range of available alternative solutions**.**
6. **Data management & analysis skills.** Experience with managing large and complex datasets using database and/or statistical packages. Must demonstrate a high level of accuracy and attention to detail.
7. **Teamwork**. The ability to work effectively as part of a multi-disciplinary team, plus the motivation and discipline to carry out autonomous activities

## **Desirable**

1. Understanding of agricultural production systems
2. Experience with using agricultural models or similar simulation models
3. Interest or experience with application of information& communication technologies in agriculture (sensors, GIS, computer applications)

## **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 response by adapting/creating and testing alternative solutions.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **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 changes.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

Include if relevant:

* 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.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and <https://www.csiro.au/en/about/people/business-units/agriculture-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