# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist in Molecular/Synthetic Biology |
| Job Reference | 96642 |
| Tenure | Specified Term of 3 years *(with possibility for extension upon future reviews)*  Full-time (preferred) |
| Salary Range | AU$110,038 - AU$119,080 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 | All Candidates |
| Position reports to the | Team Leader, Data Intensive Approaches |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Melania Figueroa (Research Group Leader) via email at [melania.figueroa@csiro.au](mailto:melania.figueroa@csiro.au) or phone +61 2 6218 3416 |
| 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

The role of Research Scientist/Engineer staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. They may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. They will also have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

This position will provide a bridge between disciplines and overarching goals of two CSIRO Business Units, Agriculture and Food (A&F) and Health and Biosecurity (H&B), with key target areas for innovation including technology to reinvent crop protection strategies and biosecurity. The Research Scientist in this role will be housed in the ‘Pest and Diseases’ Research Group of the broader ‘Crops’ Research Program in A&F and will interact with H&B scientists and critical Australian stakeholders. The appointee will conduct research towards broadening the discovery of virulence molecules for plant pathogens of economic importance using high throughput gene discovery platforms. They will leverage these platforms to design durable solutions to biotic stress and protect Australian agriculture from emerging global pathogens that remain exotic to the country. The appointed Research Scientist will facilitate growth of the group in areas of genetic disease resistance engineering and identify innovation opportunities with domestic and international partners. This role requires an understanding of modern molecular biology, biochemistry and genetics, synthetic biology and genome engineering. Willingness to develop industry engagement and demonstrated ability to deliver high quality research outputs into projects in a timely manner is essential.

### Duties and Key Result Areas

* Carry out innovative and impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
* Expand and scale up gene discovery platform applications to disease problems that threaten Australia’s crop production.
* Participate in identification of further opportunities in disease and pest control.
* Work together with senior scientists to plan and prepare research proposals, and carry out research investigations requiring originality, creativity and innovation.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication (high-level journals and conferences).
* Contribute to the supervision and other management responsibilities of junior scientific and technical staff.
* Address problems promptly and in a constructive manner.
* Communicate effectively and respectfully with all staff, clients, and suppliers in the interests of good business practise 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 Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A PhD (or an equivalent combination of qualifications and research experience), and at least some demonstrated post-doctoral experience in a relevant field such as Molecular Biology, Genetics, Synthetic Biology, or Plant Sciences.
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. Evidence of strong molecular biology skills and functional genomics applications.
4. Ability to combine experimental and computational analysis to deliver research outcomes.
5. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.
6. High level communication skills with the ability to represent the research team effectively internally and externally, including presentation of research outcomes at national and international conferences.

## **Desirable**

1. Experience in cell sorting flow cytometry, protein biochemistry and/or structural biology.
2. Experience in high-performance computing and machine learning approaches.
3. Demonstrated skills in genome engineering methodologies.

## **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 responses by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **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 change.

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 [Agriculture and Food - CSIRO](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