# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist –Geneticist |
| Job Reference | 91583 |
| Tenure | Specified Term of up to 3 years / Full-time |
| Salary Range | CSOF6: AU$121,455 - AU$142,321 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 only |
| Position reports to the | Group Leader, Vertebrate Management Systems |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Tanja Strive [tanja.strive@csiro.au](mailto:tanja.strive@csiro.au) (+61 2 6246 4176), or Peter Brown [peter.brown@csiro.au](mailto:peter.brown@csiro.au) or phone +61 2 6246 4086 |
| 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 Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist/Engineer will 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.

### For this role, we are seeking a geneticist familiar with the concept of genetic biocontrol/gene drives and a strong background in population- and functional genomics/genetic modelling required for the design, implementation and impact assessment of genetic biocontrol strategies, ideally in a mammalian context. This mid-level career scientist will lead a newly formed team developing and implementing novel genetic biocontrol strategies (including but not limited to gene drives) for the effective population control of established vertebrate pests, as a more humane alternative to lethal controls.

There will be the opportunity to interact and collaborate with other groups across CSIRO with capability in genome engineering for animal agriculture and aquaculture applications, and strong bioinformatics capability within the broader Health& Biosecurity Program and through CSIRO’s Applied Genomics Initiative. Close collaborative links also exist with leading researchers in genetic biocontrol at the University of Adelaide and Macquarie.

### Duties and Key Result Areas

* Carrying out innovative, impactful research of strategic importance to CSIRO that will, lead to novel and important scientific outcomes.
* Undertaking genetic and genomic analysis of target species, both at the individual and population level, to identify targets and strategies for genetic biocontrol approaches, including the acquisition and interpretation of population genomics datasets required to assess safety and feasibility.
* Using knowledge of genetic biocontrol principles and functional genomics skills, collaborate with genome engineers to design constructs for genome editing of pest animals, including identification of potential gene targets for sex/fertility control strategies and considerations of optimal developmental time points for genetic modifications.
* Where possible, develop CSIRO IP in genetic biocontrol strategies and applications to bias inheritance ratios in the context of population control
* Liaising with stakeholders and customers to identify opportunities for the development and translation of genetic biocontrol approaches in the pest animal control context, and develop new research proposals
* Supervise and mentor more junior scientists to develop research strategies and projects
* Produce high-quality scientific papers suitable for publication in quality journals, for client reports and for granting of patents.
* Prepare appropriate conference papers and present those at conferences as agreed with your supervisor.
* Accurately record experimental results in approved Laboratory Notebooks and maintain computer databases.
* Work collaboratively with colleagues within your team, the business unit and across CSIRO.
* Communicate 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 Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Undertake an appropriate training and development program developed by CSIRO.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A PhD in genetics or similar relevant research field.
2. Demonstrated ability to undertake original, independent, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. Demonstrated theoretical, conceptual and practical experience with analysis of genetic data (both at individual and at population levels) in the context of genetic biocontrol
4. Demonstrated strong oral and written communications skills, including authorship on scientific papers in peer-reviewed journals, reports and/or grant applications, and conference presentations.
5. The ability to work effectively as part of a multi-disciplinary, multi-location research team to achieve project goals.
6. Demonstrated ability and willingness to supervise and develop students, technical staff and post-doctoral fellows.

## **Desirable**

1. Non-model organism genetic/genomics skills and experience
2. A track record in successful project proposals/grant applications
3. Experience with writing animal ethics proposals and familiarity with relevant codes of practice.

## **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:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

Special Requirements

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

* 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 CSIRO [Health and Biosecurity](https://www.csiro.au/en/Research/BF) for more information.

CSIRO is a values-based organisation.  In your application and at the interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted