# Position Details

## Research Projects- CSOF4

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| **The following information is for applicants** | |
| Advertised Job Title | Research Projects Officer |
| Job Reference | 64358 |
| Tenure | Specified Term of 30 months  Full-time |
| Salary Range | AU$83,687 to AU$94,679 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Black Mountain Laboratories, 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 Only |
| Position reports to the | Team leader |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Alexander Schmidt-Lebuhn via email at alexander.s-l@csiro.au or phone +61 2 6246 5498 |
| 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. |

### Role Overview

[Future Science Platforms](https://www.csiro.au/en/About/Future-Science-Platforms) are an investment in science that underpins innovation and that has the potential to help reinvent and create new industries for Australia. FSPs will see us grow the capability of new generation of researchers and allow Australia to attract the best students and experts to work with us on future science. They are strategic investments aimed at developing capacity in areas of identified future importance for Australia. FSPs are both impact and science focused, developing innovative scientific solutions with industry, government and university partners. They support world class, coherent and creative research teams which integrate science and delivery over the long term, looking to the future science needs of CSIRO and our partners with a 5 to 10-year vision.

The [Environomics Future Science Platform](https://research.csiro.au/environomics/). Environomics is genomics for environmental science, a frontier science that brings together advances in DNA sequencing, evolutionary biology, big-data and environmental modelling. Just as genomics has revolutionised agriculture and medicine, Environomics will shift Australia towards a whole-of-environment understanding of the genetic roots and relationships of our biodiversity, from our evolutionary hotspots, to the trillions of microbes essential to our soils, to the genes that give plants drought tolerance. Environomics will allow us to see beyond the Australian landscape to the genescape, transforming our ability to manage our biodiversity and make use of the genetic resources locked inside.

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 successful candidate will be part of the Environomics project “Accelerating discovery: a collection genomics pipeline for high-throughput target enrichment” and work closely with a team of research scientists from the Australian National Herbarium and the Australian National Insect Collection. The project aims to:

* Establish lab procedures for the use of miniaturised, highly multiplexed libraries in target enrichment to reduce costs and increase sequencing through-put.
* Design novel bait sets for target enrichment of selected groups of organisms.
* Generate framework datasets for ecologically or economically important or understudied taxa.

### Duties and Key Result Areas:

* High-throughput DNA extraction from natural history collecting specimens, in particular plants and insects.
* DNA library preparation for high-throughput sequencing.
* Development, trouble-shooting and optimisation of sequence capture/target enrichment of miniaturised, pooled libraries.
* Use of liquid acoustic handler as well as other high-throughput pipetting technologies to decrease effort and cost and optimise laboratory workflow,
* Quality assessment of PCR results, including electrophoresis gels, fragment analysis, measurement of DNA concentrations.
* Planning and submitting NGS runs to sequencing provider.
* Documentation of all experiments in lab notebook.
* Make significant contributions to the interpretation and communication of research or technological results to team and may collaborate on drafting presentations to, and/or detailed written reports for, clients and the scientific and/or technology community.
* Under general direction participate in project management and accept responsibility for the scheduling and completion of major parts of the project.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed research team.
* 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.

## **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.

## **Selection Criteria**

#### Essential

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

1. Honours or master’s degree or equivalent relevant work experience in Biology.
2. Demonstrated experience with DNA extraction.
3. Hands on experience with library preparations for Next Generation Sequencing, ideally for sequence capture/target enrichment.
4. Practical experience in the independent implementation, optimisation and trouble-shooting of laboratory protocols.
5. Proven experience in proactively reviewing lab procedures, and contribute novel ideas and approaches in support of scientific investigations.

## **Desirable:**

1. Demonstrated experience with careful handling of biological collection specimens.
2. Demonstrated experience with DNA extraction from collection specimens.
3. Experience in analysis of NGS data.

Special Requirements

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

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Find out more about the CSIRO [Research Collections](https://www.csiro.au/en/Research/Collections)