# Position Details

## CSIRO Early Research Career (CERC) Postdoctoral Fellowship– CSOF4

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| The following information is for applicants |
| Advertised Job Title | CSIRO Postdoctoral Fellowship in Museum Epigenomics |
| Job Reference | 64158 |
| Tenure | Specified Term until 30th June 2022 Full-time  |
| Salary Range | AU$83 687 to AU$94 679 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Canberra (Black Mountain and Crace), ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * All Candidates
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| Position reports to the | Museum Epigenomics Project Leader (Environomics Future Science Platform) |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Clare Holleley via email at clare.holleley@csiro.au or phone +61 2 6241 1545 |
| 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 or call 1300 984 220. |

### Role Overview

**CSIRO Early Research Career (CERC) Postdoctoral Fellowships** provide opportunities to scientists and engineers who have completed their doctorate and have less than six years’ relevant postdoctoral work experience by the end of their fellowship. These fellowships aim to develop the next generation of future leaders of the innovation system through:

* A differentiated career development program to deliver capability excellence and breadth across all facets of the national innovation system.
* Research training via strategic research and development projects with a clear focus that will deliver real impact through science and engineering excellence;
* An innovative culture supporting the development and demonstration of original thinking and expertise leading to peer-recognition; and
* Opportunities to develop skills and experience in collaborative research teams to effectively work within national and global multi/transdisciplinary and multi-stakeholder environments.

[The Environomics Future Science Platform](http://www.csiro.au/en/Research/Collections/Environomics) is an investment in environmental genomics that aims to reinvent and create new industries for Australia. This postdoctoral role is embedded within the Environomics Future Science Platform project aiming to develop new epigenomic techniques suitable for use in ancient and degraded museum specimens. Museum epigenomics has the capacity to increase our understanding of stable epigenetic modifications and the dynamic nature of gene expression, which are both key drivers of phenotypic responses to selection. Understanding these processes and how they have changed over time will help us define the characteristics of resilience to climate and environmental change and facilitate sustainable use and management our unique flora and fauna. Working with some of Australia’s most valuable historical specimens housed within CSIRO’s National Research Collections, the successful applicant will support the delivery of projects regarding temporal trends in gene expression change and the organisation of chromatin architecture during periods of rapid environmental change.

### Duties and Key Result Areas:

Under the direction of senior research scientists and engineers, CERC Postdoctoral Fellows:

* + Carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
	+ Conduct genomic and epigenomic analysis on a range of organisms, with a focus on preserved tissues and other low quality specimens (taxa may include terrestrial and aquatic vertebrates, plants and insects).
	+ Adapt and develop original experimental methods in support of existing and future research.
	+ Undertake genomic and epigenomic data analysis and develop novel bioinformatic pipelines.
	+ Contribute to the maintenance of collection databases and management of associated metadata.
	+ Undertake regular reviews of relevant journal and patent literature.
	+ Produce high quality scientific and technical outputs including journal articles, conference papers and presentations, patents and technical reports.
	+ Represent CSIRO at leading national and international conferences and forums as agreed with your supervisor.
	+ Maintain confidentiality when accessing commercially sensitive information of CSIRO and/or research or commercial partners.
	+ Maintain safe working practices when handling hazardous materials.
	+ Recognise and exploit opportunities for innovation and the generation of new theoretical perspectives, and progress opportunities for the further development or creation of new lines of research.
	+ Utilise design thinking methodology to plan and prepare research proposals, and apply non-academic impact methodology to research projects.
	+ Carry out research investigations requiring originality, creativity and innovation.
	+ Record, manage, and analyse data/information using relevant domain data science techniques.
	+ Proactively undertake development to grow effective researcher capabilities to support career goals.
	+ 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.

[**The CERC Postdoctoral Fellow learning and development program**](http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships)is developed between the CERC Postdoctoral Fellow and their CSIRO supervisor. The program will focus on enhancing the Fellows’ capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:

* Discipline-specific techniques and protocols
* Professional growth
* Project management
* Communication and influencing skills
* Working and collaborating with others

## **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. A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, such as genomics or epigenomics. Please note: To be eligible for this role you must have **no more than 3.5 years** (or part time equivalent) of postdoctoral research experience.
2. Demonstrated laboratory and analytical experience in epigenomic techniques involving peak detection, such as ChIP-seq, DNase-seq, FAIRE-seq and/or ATAC-seq.
3. Proven experience working with challenging sample types including historical, formalin preserved, trace quantity and/or ancient samples.
4. High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including the presentation of research outcomes at national and international conferences.
5. A sound history of publication in peer reviewed journals and/or authorship of scientific papers, reports, grant applications or patents.
6. A record of science innovation and creativity, including the ability & willingness to incorporate novel ideas and approaches into scientific investigations.

## **Desirable**

1. Experience conducting research within a museum setting.
2. Laboratory and bioinformatic experience in RNA-seq and/or bisulphite sequencing.
3. Remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.
4. **The ability to work effectively as part of a multi-disciplinary, potentially regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.**

To be appointed as a CERC Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4-1 ($83 687). Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.

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.

* 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.
* 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/>).

**Our value proposition**

We want CERC Postdoc Fellows to join our world class science, engineering and digital teams to solve big, complex problems that make a real difference to the future of Australia and the world.

You'll get to work with some of the most talented minds in their fields, not just in Australia, but in the world. At CSIRO, we spark off each other, learn from each other, trust each other and collaborate closely to achieve more than we could individually.

CSIRO Early Research Career (CERC) Postdoctoral Fellow Experience Employee Value Proposition (EVP). Find out more [here](https://www.csiro.au/en/careers/postdoctoral-fellowships)!

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!