# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | CSIRO Future Science Platform - Postdoctoral Fellowship in Environmental Genomics |
| Reference Number**:** | 54643 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $83K to AU $91K plus up to 15.4% superannuation |
| Location**:** | CSIRO Site, Negotiable |
| Tenure: | Specified Term of 3 years  |
| Relocation assistance**:** | Will be provided to the successful candidate if required  |
| Applications are open to: | * All Candidates
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| Functional Area**:** | Research Scientist / Engineer – Postdoc |
| % Client Focus - Internal: | 100% |
| % Client Focus - External: | 0% |
| Reports to the: | Project Leader (TBC) |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| [Future Science Platforms](http://www.csiro.au/en/About/Future-Science-Platforms) (FSPs) 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](http://www.csiro.au/en/Research/Collections/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.The Environomics Future Science Platform is one of eight “FSPs” supported by CSIRO. FSPs are hubs of scientific activity that are seeking to reinvent and create new industries for Australia. FSPs support world class, coherent and creative research teams that 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. Find out more about CSIRO’s FSP program [here](https://www.csiro.au/en/About/Future-Science-Platforms).Our natural environment is both beautiful and valuable. Tremendous effort is put into looking after it, but to meet modern demands this needs to be done smarter - based on more information, acquired more quickly and more accurately. Nature is also a source of innovation, and many opportunities exist to capitalise on this for human and environmental benefit.Just as genomic tools have revolutionised bio-medicine, many opportunities exist to revolutionise environmental science through genomics. CSIRO’s [Environomics Future Science Platform](https://research.csiro.au/environomics/) is using genomics and bioinformatics to create the tools to support the environmental management of the future. **The Position**The Postdoctoral Fellow in Environomics will be appointed for a three year term.They will be mentored by a CSIRO Research Scientist or Engineer and participate collaboratively within the Environomics FSP research program. We also encourage collaboration with university, government, and industry partners. The fellowship includes research costs, which will be negotiated with applicants.The incumbent of this role will conceive, design and implement a research project that will complement the [existing portfolio](https://research.csiro.au/environomics/our-research-projects/) of Environomics projects, but will not simply apply existing knowhow to a new case study. Instead, they will develop a new way of doing things – either at the laboratory bench, or in analysis. This may involve re-purposing existing knowledge or tools from another discipline, or it may be something totally new that is generalizable. Importantly, they will have a vision of how their innovation will make a difference in environmental science. While it’s expected that the toolkit utilised in this research will be genomics, or possibly other ‘omics technologies, the application domain is unrestricted within environmental science. It may be in fisheries, biodiversity, biosecurity, bio-prospecting, all of these, or another domain altogether. |

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| **Duties and Key Result Areas:** |
| * Under the direction of senior research scientists, carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
* With the guidance of a CSIRO scientist, conceive, design and implement a research project to complement the existing portfolio of Environomics projects.
* Other duties specific to this role as agreed with supervisors.
* Communication of results through the production of reports and scientific papers and contributions to appropriate scientific conferences.
* Produce high quality scientific and/or engineering papers suitable for publication in quality journals, for client reports and granting of patents.
* Contribute to the development of innovative concepts and ideas for further research.
* Make a contribution to the effective functioning of the research team and help deliver CSIRO’s organisational objectives and plans.
* 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.

***CSIRO’s postdoctoral training program***is developed between the Postdoctoral Fellow and a CSIRO scientist. 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

<http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships> |

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed****Pre-Requisites:***1. **Education/Qualifications:** A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, such as molecular biology, cell biology, molecular ecology, bioinformatics.

***Please note:*** *To be eligible for this role you must have no more than 3 years (or part time equivalent) of relevant postdoctoral experience.*1. **Communication: High level written and oral presentation skills and a capability for effective personal interactions that will promote the research. An ability to represent the research team effectively internally and externally, including at national and international conferences.**
2. **Publications: A record of publications in quality, peer reviewed journals.**
3. **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.

***Essential Criteria:***1. Demonstrated ability to design and implement novel molecular biological laboratory procedures, or to develop novel software or bioinformatics tools.
2. Demonstrated ability to analyse complex molecular biological, population biological or ecological data sets.
3. **A collaborative approach to science. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, as well as the ability to work independently without supervision.**
4. A record of innovation and creativity in self-directed research.
5. Demonstrated capacity to incorporate novel ideas into a project with goals determined by others.

**Desirable Criteria:**1. **Evidence of involvement in service such as committees, professional bodies, science outreach, and/or mentoring of students or early career researchers.**
2. **Demonstrated commitment to seeing science translated into impact through, for example, commercialisation or incorporation into government policy.**

**CSIRO VALUES**As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to excellent science, inclusion, trust & respect, health, safety & environment and deliver on commitments.  In your application and at interview you will need to demonstrate alignment with these behaviours.To be appointed as a 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 ($78,479). 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.**Other special requirements:**Appointment to this role may be subject to conditions including security/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearance processes; which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <http://www.ielts.org/default.aspx> |

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| **Other Information:** |
| **How to Apply**Candidates will be evaluated on the basis of their CV, answers to selection criteria, and a brief proposal indicating a research program they would like to pursue within the Environomics FSP. Short-listed candidates may be asked to provide further details before a selection is made. The Environomics FSP may select more than one successful candidate to support.**You will need to provide one document only containing the following:**1. Your cover letter addressing the selection criteria outlined in this document
2. Your CV/Resume that best demonstrates your ability to meet the requirements of the role (due to file size restrictions please do not include images).
3. Your project proposal (up to 300 words). In your proposal consider including the following elements:
* The problem addressed, the need for the project and potential end-users (i.e. market pull)
* A brief overview of the proposed approach (e.g. objective, methodology, experimental approach)
* The transformative platform (i.e. what will the project enable?)
* In three years, what are the planned outputs? (e.g. physical, technological, academic outputs)
* Potential CSIRO mentor, potential non-CSIRO mentor (optional)

Please apply for this position online at [www.csiro.au/careers](http://www.csiro.au/careers). You may be asked to provide additional information (online) relevant to the selection criteria. Applicants who do not provide the information when requested may not be considered.If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: csiro-careers@csiro.au. **Referees**: Please provide contact details of two previous supervisor or academic/professional referees in your resume/CV. We will ask your permission before making contact. **Contact:** If after reading the selection documentation you require further information please contact: Oliver Berry via email: Oliver.Berry@csiro.au Please do not email your application directly to Dr Berry. Applications received via this method will not be considered.**About CSIRO**Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation. Find out more! [www.csiro.au](http://www.csiro.au). **About The National Research Collections of Australia:** CSIRO is the custodian of a number of collections of animal and plant specimens that contribute to national and international biological knowledge. Together, they constitute a vast storehouse of information about Australia’s biodiversity and underpin a significant part of the country’s taxonomic, genetic, agricultural and ecological research - making these vital resources for conservation and the development of sustainable land and marine management systems. Find out more! <https://www.csiro.au/en/Research/Collections>  |