# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | CSIRO Postdoctoral Fellowship in Tropical Beef Genetics and Genomics |
| Reference Number**:** | 58741 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $82k to AU $93k plus up to 15.4% superannuation |
| Location**:** | St Lucia, Brisbane  |
| Tenure: | Specified Term of up to 3 years (or part time equivalent) |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | [ ]  Australian Citizens Only[ ]  Australian/New Zealand Citizens and Australian Permanent Residents Only* [x]  All Candidates
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| Functional Area**:** | Research Scientist / Engineer - Postdoc |
| % Client Focus - Internal: | 25% |
| % Client Focus - External: | 75% |
| Reports to the: | Laercio (Juca) Porto-Neto, Project LeaderAntonio (Toni) Reverter, Team Leader |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| **Postdoctoral Fellowships** at CSIRO provide opportunities to scientists and engineers who have completed their doctorate and have less than three years relevant postdoctoral work experience. These fellowships will help launch their careers, provide experience that will enhance their career prospects, and facilitate the recruitment and development of potential leaders for CSIRO. Postdoctoral Fellows **are appointed for up to three years or part time equivalent** and will work closely with a leading Research Scientist or Engineer in their respective field. They carry out innovative, impactful research of strategic importance to CSIRO with the possibility of novel and important scientific outcomes. They present the findings in appropriate publications and at conferences.This **Tropical Beef Genetics and Genomics** project will build on recent achievements of the CSIRO Livestock Genomics Computational and Systems Biology team. More specifically, within the theme of exploring data collected on commercial herds to inform breeding and management decisions. A chief aim of this project is the development and application of breakthrough analytics, allowing the accelerated adoption of high-throughput molecular genomic technologies, to speed genetic progress in phenotypes of relevance to tropical cattle.The role will include contribution on other projects within the Computational and Systems Biology team, including research opportunities within the 1000 Bulls Genome Project, and collaborations with stud breeders and large pastoral companies across Queensland and Northern Territory. |

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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.
* Engage with members of the Computational and Systems Biology team in the development of novel methods for the estimation genomic relationships, genetic parameters and genomic selection.
* Undertake regular reviews of relevant literature and patents.
* Produce high quality scientific and/or engineering papers suitable for publication in quality journals, for client reports and granting of patents.
* Prepare appropriate conference papers and present those at conferences as agreed with your supervisor.
* 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 or engineer. 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 Quantitative Genetics and Genomics, Bioinformatics, Biostatistics.

***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 communication skills with the 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. Knowledge and skills in quantitative genetics and genomics, with specific application to genetic parameter estimation and genetic/genomic evaluation of livestock species (e.g. GWAS, genomic prediction).
2. Evidence of advanced programming skills and software design in languages relevant for bioinformatics in a UNIX environment (e.g. BASH, Fortran, Python, C++, Java, Scala, R or equivalent).
3. Demonstrated experience with handling, integrating, and analysing large volumes of data from a variety of sources.
4. **The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.**
5. A record of science innovation and creativity, plus the ability & willingness to incorporate novel ideas and approaches into scientific investigations.

**Desirable Criteria:**1. Experience with high-performance computer environments (e.g. PBS, SLURM).
2. Previous experience (or wiliness to learn dealing) with farm/cattle.
3. Experience with large collaborations which have collected, analysed and interpreted SNP genotypes and/or genome sequence data.

**As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to**:* Excellent science
* Inclusion, trust & respect
* Health, safety & environment
* Delivery 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 (AU$82,450).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 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**Please apply for this position online at <https://jobs.csiro.au/> and enter requisition number **58741**. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’) **Please load your CV (Maximum 2MB) and a one page Cover Letter (as one document) explaining your motivation in applying to this position.** You may also be required to respond to some screening questions.  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 position details above you require more information please contact: **Dr Laercio (Juca) Porto-Neto**via email: laercio.portoneto@csiro.au or phone: +61 7 3214 2443 **Dr Antonio (Toni) Reverter**via email: toni.reverter-gomez@csiro.au or phone: +61 7 3214 2392Please do not email your application directly to Drs Porto-Neto or Reverter. Applications received via this method may not be considered by the selection panel.**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). We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you. Find out more! [CSIRO Balance](https://www.csiro.au/en/careers/the-csiro-experience/balance) **CSIRO Agriculture and Food** carries out research and development for new agricultural technologies, value added foods, crop and livestock improvement, aquaculture, farming systems, sustainability and advancement of international agriculture. |