# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | Postdoctoral Fellowship in crustacean nutritional immunology |
| Reference Number**:** | 56912 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $80K to AU $91K plus up to 15.4% superannuation |
| Location**:** | Brisbane, St Lucia preferred or Bribie Island, QLD |
| Tenure: | Specified Term of 3 years  |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | All Candidates |
| Functional Area**:** | Research Scientist / Engineer - Postdoc |
| % Client Focus - Internal: | 20% |
| % Client Focus - External: | 80% |
| Reports to the: | Team Leader – Aquatic Animal Health |
| 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.The role of Postdoctoral Fellow will work across the Aquaculture health and nutrition teams to investigate how nutrition can affect immune competence and disease resistance in shrimp. A major focus of this role will be in characterising the impact of beneficial bioactive ingredients on crustacean immunity and disease resistance, and how they link with growth and survival in culture, and nutrient requirements. The Postdoctoral Fellow will be involved in a project providing the following key advantages: (i) a large applied industry-funded aquaculture research project; (ii) opportunity to join a dynamic multidisciplinary team integrating across nutrition, genetics and health; (iii) extensive research facilities for aquatic animal trials, state-of-the-art analytical laboratories and technical support (iv) opportunity to collaborate with scientists at other CSIRO sites across Australia or within international collaborative networks. |

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| **Duties and Key Result Areas:** |
| * Under the direction and/or guidance of research scientists within the Aquaculture health team, carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
* Actively contribute to the planning, management, and delivery of research investigations in crustacean immunity, health and disease resistance.
* Support research projects domestically and internationally focused on the testing, improvement and development of current and new products against pathogens to address commercial needs of our industry partner.
* Draw on professional expertise, knowledge, research and hands-on laboratory experience to deliver original and complex multidisciplinary experiments.
* Undertake regular reviews of relevant literature and patents, and contribute to the development of innovative concepts and ideas for further research.
* Produce high quality client reports and scientific manuscripts suitable for publication in high impact journals.
* Prepare appropriate conference papers and present those at conferences as agreed with your supervisor. Communicate findings through leading academic journals, seminars, conferences and industry publications and presentations
* 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.
* Undertake an appropriate training and development program developed by CSIRO.

Key responsibilities and duties may be subject to change from time to time.**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 crustacean immunology, physiology, virology or microbiology.

***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.
4. **Travel –** The ability and willingness to travel between sites
5. **Drivers licence:** A current full drivers licence or the ability to obtain one

***Essential Criteria:***1. Demonstrated knowledge and expertise in crustacean pathobiology with emphasis on viral and/or bacterial disease responses in crustaceans.
2. Experience in generating and analysing complex multi-dimensional data types, including next generation sequencing and/or microbiome metagenomics.
3. Demonstrated knowledge and expertise in cellular and molecular immunology, including DNA/RNA isolation, quantitative PCR, bioassays or western blotting.
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 in measurement of immune competence, disease challenge, RNAi or host-pathogen interaction, ideally applied in an aquaculture species
2. Sound expertise in at least one complimentary research field such as virology, microbiology, microscopy, or biochemistry.
3. An understanding of crustacean nutrition and its impact on disease resistance and health.

**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 *($80,833pa).* 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 **56912**. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’) Please load your CV (Maximum 2MB). 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 selection documentation you require further information please contact: Dr James Wynnevia email: James.Wynne@csiro.au phone: +61 3 62 325204Please do not email your application directly to Dr Wynne. 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). 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/A-great-place-to-work/Work-life-balance) **CSIRO Agriculture and Food** is helping Australian farmers and industry improve productivity and sustainability across the agriculture sector. The Agriculture and Food business unit will conduct research to impact on the whole value chain from paddock to plate by focussing on the following challenges:* crop improvement
* livestock and aquaculture genetic improvement
* farming systems for productivity and sustainability
* interactions between agriculture and the environment; climate change, adaptation and mitigation; science for health soils
* global food security and development.

**What CSIRO offers you**A great opportunity to join a dynamic multidisciplinary team of researchers, technicians and students working on applied industry-funded aquaculture research integrating across nutrition, genetics, biology, health, environmental management and socio-economics. The role will involve participation in the management and maintenance of research trials at the Bribie Island Research Centre (BIRC) and analyses at the Queensland Bioscience Precinct (QBP) site based at the University of Queensland in Brisbane, as well as opportunity to collaborate with scientists at other CSIRO sites across Australia. The role will also require participation and coordination of research trials with overseas partners.  |