# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | Postdoctoral Fellowship in Health Informatics |
| Reference Number**:** | 57469 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $83 to AU $91k per annum, plus up to 15.4% superannuation |
| Location**:** | Herston (Brisbane) Queensland |
| Tenure: | Specified Term of 3 years |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | Australian Citizens Only  Australian Citizens and Permanent Residents Only   * All Candidates |
| Functional Area**:** | Research Scientist / Engineer - Postdoc |
| % Client Focus - Internal: | 30% |
| % Client Focus - External: | 70% |
| Reports to the: | Health Data Analytics 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** and will work closely with other members of the Health Data Analytics Team. 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 Postdoctoral Fellowship in Health Informatics will sit in the Australian e-Health Research Centre (AEHRC) team that is delivering solutions which improve patient flow through Australia’s healthcare system. The role will support others in the development of novel software-based tools that model, analyse and provide insight and solutions to identified challenges in Australia’s hospitals and healthcare system, with a view to improving health service delivery.  The Postdoctoral Fellow will contribute to collaborative projects between the e-Health Research Program and health partners to help improve evidence driven patient flow management in Australia’s healthcare system. These projects will advance the science behind mathematical and algorithmic techniques for managing hospital patient flow processes and resources, provide opportunities to produce high impact publications describing the contributions to knowledge made, and generate potential commercialisation opportunities. |

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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. * Contribute to and deliver projects conducted by the health statistics team tackling problems in patient flow and health service delivery. * Develop new and apply existing algorithms, concepts, theories, tools and techniques in the area of modelling, prediction, scheduling and efficient use of health resources. * Obtain ethical and legislative approval for use of health data. * Evaluate the effectiveness of ICT solutions through qualitative and quantitative analysis. * Undertake regular reviews of relevant literature and patents. * Publish scientific results in leading clinical and technical journals and for conference presentations. * Help build CSIRO’s research reputation for integrated and multi-disciplinary science related to health statistics and health system performance engineering. * Contribute to the effective functioning of a research team and help deliver upon CSIRO’s organisational objectives and values. * 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 Statistics, Operations Research, Engineering, Computer Science or equivalent field.   **Please note:** To be eligible for this role you must have **no more than 3 years** 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. Demonstrated knowledge and skills in statistical modelling and/or inference, machine learning, and operations research*.* 2. Ability to investigate issues of complex and ill-defined problems and develop appropriate responses by adapting/creating and testing alternative solutions. 3. Evidence of self-organisation, including the ability to meet demanding deadlines and respond creatively and rapidly to new requirements. 4. Proven ability to work autonomously and as part of a team to prototype research ideas and develop them into demonstration and/or proof of concept systems. 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 translation of research, where research outputs are adopted in real-life situations. 2. Programming skills for example in R, Matlab, Java, Python, C++.   **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$80,833)*.* 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*](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 **57469**. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’).  Please load one document containing your CV and a brief cover letter which outlines your interest in the role and your motivations for applying (Maximum 2MB). At the end of the online application process, you will also be required to respond to some screening questions. Where text responses are required, to avoid being timed out of the system we recommend that you prepare your responses offline and paste them into the appropriate spot prior to submitting your application.  If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: [csiro-careers@csiro.au](mailto:csiro-careers@csiro.au).  **Referees**: If you do not already have the names and contact details of two previous supervisors or academic/ professional referees included in your resume/CV please add these before uploading your CV.  **Contact:** If after reading the selection documentation you require further information please contact:  **Mr Norm Good**via email: [Norm.Good@csiro.au](mailto:Norm.Good@csiro.au) or phone: **+61 7 3253 3640**  Please do not email your application directly to Dr Good. 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).  At **CSIRO Health and Biosecurity** we are working in the face of an ageing population and increasing incidence of chronic diseases to deliver a sustainable healthcare system through the promise of digital health. With the reality that a major biosecurity incident could cause significant disruption to the ongoing delivery of healthcare in Australia we are exploring new technologies for detection, surveillance, diagnosis and response to pre-empt and respond to the next human pandemic.  The **Australian e-Health Research Centre (AEHRC)** is the leading national research facility applying information and communication technology to improve the safety, quality and efficiency of health services, creating a better health system for all Australians. |