# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Scientist, Plant Pathologist/Epidemiologist |
| Job Reference | 84002 |
| Tenure | Specified Term of up to 3 years Full-time |
| Salary Range | AU$102,724-$111,165 per annum (pro-rata for part-time)plus, up to 15.4% superannuation |
| Location(s) | Canberra, ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens, Australian Permanent Residents and Australian temporary residents currently residing in Australia (visa sponsorship may be provided to eligible onshore candidates). |
| Position reports to the | Team Leader |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Luke Barrett via email at luke.barrett@csiro.au or phone +61262465049 |
| 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

The role of **Research Scientist** in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership, and pursue new ideas and approaches that create new concepts.

We are seeking a highly motivated plant pathologist to join our dynamic Plant-Microbe Interactions team. Active areas of research in the team include delivering sustainable integrated disease management strategies to the Australian grains industry, managing disease risk in climate-adaptive farming systems, identifying and phenotyping host genetic resistance using novel approaches including image analysis, establishing the economic value of host genetic resistance, supporting the development of decision support tools, and exploring microbiome function to improve plant health. As part of this team, the Research Scientist will use their plant pathology, epidemiology, and computational skills to lead the initiation, design and execution of modelling, laboratory, glasshouse, and field experiments to develop integrated strategies for the sustainable control of plant diseases of economically important crops such as canola and chickpeas. We would particularly welcome candidates with a research interest in integrating experimental and modelling approaches to predict the epidemiological and genetic dynamics of plant pathogens, and in the application of ecological and evolutionary principles to solving applied problems in agro ecosystems.

More broadly, the RS will have the opportunity to work within the Systems Group which includes research spanning agronomy, breeding, crop physiology, crop and farming systems modelling, soil science, pasture, and animal science. This is a unique opportunity to join an established research team whilst exploring innovative solutions to deliver sustainable disease control.

### Duties and Key Result Areas:

* Use and contribute to the development of plant-disease models that investigate the influence of different management strategies on disease epidemiology.
* Help lead the initiation, design and execution of manipulative laboratory, glasshouse, and field experiments
* Under limited direction, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity, and innovation.
* Assist with identifying new scientific opportunities and lead small research projects, including the negotiation of resource requirements.
* Present experimental and modelling results and their implications in speaking forums, reports, and scientific publications.
* Draw on professional expertise, knowledge and research experience and networks with scientific colleagues across a range of disciplines to recognise and pursue opportunities for innovate and generate new theoretical perspectives.
* Communicate openly, effectively, and respectfully with all staff, clients, and suppliers in the interests of good business practice, collaboration, and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* 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.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

* A PhD (or an equivalent combination of qualifications and research experience) in a relevant field such as plant pathology, epidemiology, or ecology.
* Demonstrated knowledge and experience in plant disease epidemiology and/or pathology including experience in data science, biostatistics, and modelling.
* Demonstrated ability to undertake original, creative, and innovative research by generating and pursuing novel ideas and solutions to fundamental questions in biology.
* Demonstrated proficiency in scientific writing and communication.
* Willingness and ability to undertake overnight travel for meetings and remote field work.
* Current drivers’ licence.

**Desirable:**

1. Demonstrated experience in identifying new science opportunities and obtaining research funding.
2. Demonstrated experience in managing scientific projects.
3. Understanding of ecological and evolutionary processes and how they influence plant disease management.

## **Required Competencies:**

1. **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.
2. **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.
3. **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.
4. **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
5. **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
6. **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.

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 Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

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CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* 1. People First
	2. Further Together
	3. Making it Real
	4. Trusted

Find out more about CSIRO [Agriculture and Food](https://www.csiro.au/en/Research/AF)