# Position Description

## Research Scientist/Engineer – CSOF5

The following information is for applicants

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| Advertised Job Title**:** | Research Scientist - Plant Phenomics |
| Job Reference: | 59810 |
| 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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| Percentage of Client Focus - Internal: | 30% |
| Percentage of Client Focus - External: | 70% |
| Reports to the: | Director, High Resolution Plant Phenomics Centre |
| Number of Direct Reports: | Up to 10 |
| Name and Contact Details For Applicant Enquiries  | Dr Xavier Sirault via email Xavier.Sirault@csiro.auPlease do not email your application directly to Dr Sirault. Applications received via this method will not be considered by the selection panel. |
| Contact Details For Applying | Call 1300 984 220 or email careers.online@csiro.au.  |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon  |

## 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.

In this role you will be leading a team that is responsible for developing and validating next generation high-throughput phenotyping tools for breeding, broad-acre farming and horticultural crop research.

Plant phenotyping is a rapidly emerging research area concerned with quantitative measurement of the structural and functional properties of plants. It is motivated by concerns over global food security and the need to double food production by 2050. As part of this role you will be allocated 80% to the High Resolution Plant Phenomics Centre (HRPPC), a world-class plant analysis facility located at CSIRO Black Mountain Science and Innovation Park in Canberra. The centre which is part of the National Collaborative Research Infrastructure Network for Australia provides a set of tools for Australian and International Plant Scientists to explore plant gene function and develop higher-yielding crops better suited to current and future environmental challenges. The centre exploits recent advances in robotics, imaging and computing to enable sensitive, high throughput analyses to be made of plant growth and function.

For this position, CSIRO is seeking an on-going, local, high-availability and immediately operational person with clear commitment to team-based processes and outcomes and willingness to provide immediate response and support to clients. You will be responsible for supervising and conducting experiments in glasshouse, growth chambers and in the field as well as supervising everyday working of HRPPC operating process and increase efficiency of colleagues/workers/students through efficient coaching and monitoring. You will need an excellent working knowledge of phenotyping technologies and a good physiological understanding of environmental factors affecting plant growth. In addition to assisting and conducting experiment on behalf of clients, you will need to manage these relationships.

## 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 in fundamental Phenomics research by incorporating novel phenomics approaches to scientific investigations for applications in breeding, horticulture and agricultural systems.
* Design and conduct experiments for the evaluation of new phenotyping technologies and validation of novel traits derived using these technologies.
* Lead, coach and manage a multi-disciplinary team by providing a positive team-working environment characterised by science excellence, creativity, innovation and flexibility.
* Oversee a portfolio of phenotyping capability and coordinate the delivery of services and new phenotyping technologies to users of the facility.
* Direct the development of method for the phenotyping of key traits in broad-acre and horticultural crops.
* Work closely and synergistically in and with a multi-disciplinary team of engineers, breeders, statisticians, and technical support.
* Communicate research findings in scientific literature, industry and governmental reports, as well as conferences and workshops.
* Undertake regular reviews of relevant literature and produce high quality scientific reports and papers suitable for publication in quality journals.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.

## 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.

## Selection Criteria:

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

1. A doctorate and/or minimum 5 years equivalent research experience in a relevant discipline area, such as *remote sensing* or *plant physiology*.
2. Demonstrated experience in the application of phenotyping technology to the measurement of physiological and morphological traits in plants and crops.
3. Demonstrated experience with field and controlled-environment based phenotyping in view of providing expert advice on best practice and methods to deliver exceptional services to clients of a National Facility.
4. Demonstrated experience in managing, coaching and leading a multi-disciplinary, regionally dispersed research team to achieve organisational goals.
5. A record of science innovation and creativity plus the ability to incorporate novel ideas and approaches into scientific investigations.
6. Evidence of customer engagement skills and relationship management that grows new science opportunities and supports commercial outcomes

## Desirable Criteria:

1. Extensive experience of applied plant phenotyping at the laboratory and field scale.
2. A strong background in the application of plant Phenomics for scientific discovery in an applied setting (agriculture or plant physiology).
3. Mastery of working within and managing multi-disciplinary teams spanning biology, engineering and computational sciences disciplines.
4. Strong scientific leadership experience, with clearly documented achievements in multidisciplinary collaborative research.
5. Exemplary communication skills, with an ability to motivate and inspire toward fulfilment of ambitious research goals; experience of change management preferred.

## Special Requirements:

This role requires travel to conduct experiments in the field. The applicant must be available to travel for periods of up to four nights. A drivers licence and experience in driving is also desirable. There may also be international travel therefore a valid passport is required.

## About CSIRO:

We imagine. We collaborate. We innovate. To find out more visit us [online](http://www.csiro.au/)!

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