



Technical Officer Plant Research

Gulbali Institute

Office of the Deputy Vice-Chancellor, Research

Classification	Level 5
Delegation band	Delegations and Authorisations Policy (see Section 3)
Special conditions	Will require to work after hours or weekend Functional Assessment
Workplace agreement	Charles Sturt University Enterprise Agreement
Date last reviewed	July 2024

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About Charles Sturt University

Purpose

The Wiradjuri phrase *yindyamarra winhanganha* means the wisdom of respectfully knowing how to live well in a world worth living in. This phrase represents who we are at Charles Sturt University – our ethos. It comes from traditional Indigenous Australian knowledge, but it also speaks to the vision of the university – to develop and spread wisdom to make the world a better place.

Vision

Charles Sturt University is set to undergo a decade of great reform that will see the university characterised by these key elements:

- An uncompromising drive towards excellence in every aspect of its operations
- A far-reaching strategic re-positioning of teaching, learning, research, and innovation
- A cementing of our position as Australia's pre-eminent rural and regional university

The overarching aim is to consolidate our institution so that it is demonstrably more resilient and sustainable by the end of the decade.

Goals

To deliver on our purpose and vision, the university has three key goals:

- 1. Maintain the university's position in the top five Australian universities for graduate outcomes based on employment and salary
- 2. Embed a culture of excellence across all aspects of the university's operations
- 3. Exponential growth in research, development, and innovation income in our chosen areas, delivering high impact outcomes for regional Australia

Our values

Charles Sturt has a proud history and is fortunate to have an outstanding group of diverse, passionate, and engaged people working with us. Our values of insightful, inclusive, impactful, and inspiring guide our behaviours and ways of working to help us achieve our ethos of creating a world worth living in.

Performance measures

In addition to the principal responsibilities all staff are required to contribute to the success of the university strategy including meeting university's eight key performance indicators:

Our Students	Commencing progress rateStudent experience
Our Research	Research incomeResearch quality and impact
Our People	EngagementAll injury frequency rate
Our Social Responsibility	Underlying operating resultCommunity and partner sentiment

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Office of the Deputy Vice-Chancellor, Research

The Office of the Deputy Vice-Chancellor, Research is responsible for leading Charles Sturt University's research agenda to enhance research impact, output and engagement. This includes research training, partnerships, innovation, and commercialisation. A key focus is the development and implementation of strategies in these areas that increase capability, quality and impact in accordance with the goals of the university. The portfolio also includes First Nations engagement, which is a key area of importance for Charles Sturt.

Research Institutes

To deliver on the university goal of research excellence, the university has established three research institutes, all with a digital and regional focus:

- 1. Gulbali Institute
- 2. Rural Health Research Institute
- 3. Artificial Intelligence and Cyber Futures Research Institute.

Gulbali Institute - Agriculture, Water and the Environment

Charles Sturt University is a community minded organisation with strong links to industry, government and other educational organisations through research and courses. Our vision is to be Australia's leading regional university, advancing the careers of our students, inspiring research excellence and driving regional outcomes with goal impact. We collaborate with our partners on research with global impact. Charles Sturt's research in Agriculture, Water and the Environment (AWE) has been targeted for strategic investment, with the University committed to driving research which has impact across Australia and globally.

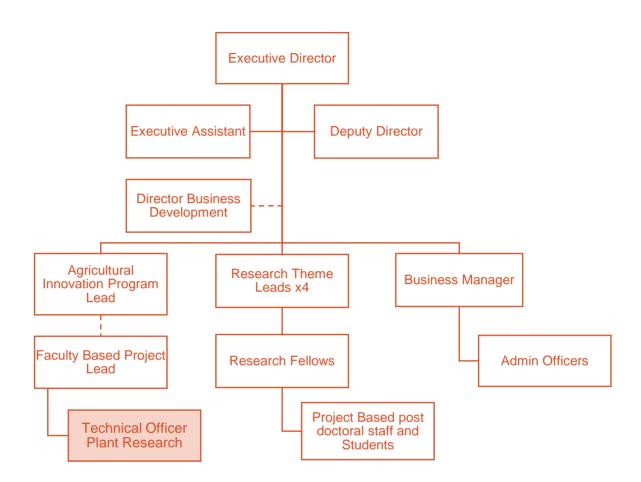
The key pillar of this strategic investment in AWE research is the establishment of the <u>Gulbali Institute</u>. The Gulbali Institute will create integrated AWE research which is grounded in our footprint across the Murray-Darling Basin. The Gulbali Institute will focus on our research strengths in the areas of optimising farm systems for performance and sustainability; and enhancing the health and resilience of freshwater ecosystems. But we also recognise that it is important to recognise that Country is not just about land 'environment' it also includes social and spiritual aspects that influence the mind and the body.

The Institute brings together multidisciplinary research teams, enabling a holistic approach to research that provides solutions that are comprehensive, authoritative, and reflective of our economic, natural and social aspirations. The Institute will focus on research that addresses major national challenges and government, industry, and community strategic imperatives. Our multidisciplinary approach together with the application of an innovation framework, will lead to the translation of research into viable industry partnerships.

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Organisational chart - Gulbali Institute



Reporting relationship

This position reports to: Lecturer, SAEVS

This position supervises: N/A

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Position overview

The Technical Officer will be responsible for managing and assisting research activities as part of a collaborative arrangement between Charles Sturt University and CSIRO to complete a GRDC-funded project: Developing new genetic approaches to decreasing the reproductive frost sensitivity of wheat (GRDC: PROC-9176685). RMR No 104024.

The role of the Technical Officer will be specifically to provide assistance in carrying out research in the glasshouse, plant-growth chambers facilities and field sites at Charles Sturt University.

Principal responsibilities

- Perform plant/soil experiments in glasshouse and plant growth chambers. This includes
 organizing experiments, soil mix preparation, potting up, seeding, applications of pesticide
 and fertiliser, and monitoring plant health.
- Maintain and clean plant growth chambers and glasshouse compartments before and after each experiment.
- Maintain, program and download data from loggers and plant growth chambers management system including the collection, organisation and analysis of data.
- Collect glasshouse and plant growth chamber data and experimental measurements such as germination, emergence, monitoring phenology, crop growth parameters and the harvesting, storing and shipment of plant samples.
- Assist in the collection of specialised plant samples and the measurement of leaf reflectance using a spectroradiometer (Training will be provided) in field and controlled environments.
- Provide advice, guidance, inductions, demonstrations and training for equipment and facility
 users. Liaise with project team members from other organisations (i.e. CSIRO) to coordinate
 the implementation of experiments and data collection.
- Operate standard word processing and data handling software to perform data management, basic statistical analyses, and data presentation.
- Contribute to facility compliance with relevant statutes, regulations, standards, codes of
 practice and CSU policies, procedures, and guidelines. Ensure the work environment is kept
 clean and safe.
- Other duties appropriate to the classification as required.

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Role-specific capabilities

This section comprises capabilities from the Charles Sturt <u>Capability Framework</u> identified as essential or critical for success in this role.

Take action	Weigh up risks and make prompt decisions, backing ourselves and each other (delivery of strategies, projects).
Apply expertise and technology	Apply, develop and share specialist and detailed technical expertise, understanding other organisational disciplines.
Present and communicate information	Speak clearly and fluently, express opinions, make presentations, respond to an audience, show credibility.
Learn and research	Learn rapidly, gather information, understand rapidly, manage knowledge, foster organisational learning
Plan and organise	Set objectives, plan, establish contingencies, manage time, resources and people, monitor progress.
Follow instructions and procedures	Follow procedures and instructions, time keep, show commitment, keep to safety and legal guidelines.

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Physical capabilities

The incumbent may be required to perform the following.

- This position may involve work under harsh conditions in the field within the terms of the
 University's policy of thermal comfort available at http://www.csu.edu.au/division/hr/health-safety-wellbeing/risk-management
- This position will involve regular travel by motor vehicle over long distances within the terms of the University's Driving Hours Policy available at http://www.csu.edu.au/division/hr/health-safety-wellbeing/ohs-management-system
- Consideration should also be given to regular computer-based activities in line with the University's risk management on office and workstation ergonomics available at http://www.csu.edu.au/division/hr/health-safety-wellbeing/risk-management
- The appointee must have sufficient mobility to obtain samples spread across sites within an experimental site and to carry out crop and measurements in field and controlled environment conditions in timely manner.
- The appointee must also be able to operate and carry for short-distances portable equipment used in the study of plants.
- This position may involve work in other environments beyond the CSU campus such off site field
 experiments as well as car and air travel to Canberra and other required locations for project
 meetings and/or to learn new methodologies.
- Perform repetitive and fine manipulation tasks.
- Perform in an accurate and timely manner push/pull, reaching, claiming step ladder, grasping, fine manipulation tasks, including lifting items up to 12-15 kg.
- Possess the physical ability to carry out shelving duties, frequent bending, reaching/stretching, squatting, cleaning, climbing step ladder, and repetitive lifting.

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Selection criteria

Applicants are expected to address the selection criteria when applying for this position.

Essential

- A. Completion of a degree without subsequent relevant work experience as a graduate upon appointment; or completion of an associate diploma with a range of experience, normally including at least 2 years' subsequent relevant work experience; or completion of a certificate or a post-trade certificate and extensive subsequent relevant experience; or an equivalent level of knowledge gained through any other combination of education, training and/or experience.
- B. Demonstrated experience and understanding in conducting agricultural research in plant growth chambers, glasshouse, laboratory, and field-based settings relevant to the Principal Responsibilities outlined above.
- C. Ability to successfully carry out independent and/or team research whilst managing individual workload to meet competing priorities.
- D. Demonstrated ability to handle record keeping and large data sets.
- E. Capability to assist in the operation and maintenance of laboratory (e.g. microscopes, thermal sensors, loggers, etc) controlled environment (e.g. management control systems) and field research equipment
- F. Current pesticide application certificate.
- G. Current NSW Driver's Licence.

Desirable

H. Current First Aid certificate.

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New South Wales



- Capital city- Campus location

