



Charles Sturt
University

Welcome to CSU

Speaker: Chelsea Schlink

Director of Business Development Gulbali Institute

Welcome


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I'm lots up
for changing
the world

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Our 2030 University Vision

Australia's leading regional university, advancing the careers of our students, inspiring research excellence and driving regional outcomes with global impact

Our strategic focus areas

Woven throughout the university strategy are key objectives for First Nations students, staff, communities and engagement.



Students

We connect our students with the knowledge and wisdom to shape the world through quality education and engaging experiences.



Research

We collaborate with our partners on research with impact, particularly focusing on agriculture, water and the environment; rural and regional health; and cybersecurity and data science.



People

We are capable, inspired and empowered to deliver excellence by creating a compelling and authentic employee value proposition, developing capability, recognising excellence and developing an employer brand to attract, develop and retain high value talent.



Social responsibility

We engage regionally and globally to drive sustainable prosperity, solidifying our university as an anchor institution in our regions.



Our Research Focus

We want to collaborate with our partners on research with impact.

- Building world-class research institutes (snapshot next slide)
- Supporting and delivering excellence in research.
- Establishing enduring partnerships for societal and commercial impact.
- Developing next-generation leading scholars and researchers..
- All whilst living our values of being – inspiring, insightful, inclusive and impactful
- To support SDG of resilient people, flourishing communities and sustainable environments





Welcome to the
Gulbali Institute



Gulbali Research Institute for Land, Water and Environment



Vision	To be the leading regional provider of impactful research in agriculture, water and environment
Purpose	Research to better understand 'Country' to drive global water, food and ecosystem security
Principles	<ul style="list-style-type: none"> • Uncompromising drive towards research excellence in all aspects of operations • We will engage with, and employ, a collective growth mindset • To be innovative and entrepreneurial in our approaches

Our Programs

 Biosecurity	 Agriculture Innovation	 New Food and Beverages	 Sustainable Aquatic Systems	 Cultural Connection & Environmental Stewardship
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We seek to achieve impactful research that...

Protects our land and wildlife from the arrival of new pests, weeds and diseases	Contributes to sustainability, profitability, and new product creation in the on-farm agricultural sector	Contributes to sustainability, profitability and new product creation in the food and beverage sector	Contributes to the long-term viability and health of our fragile aquatic systems	Helps understand health and sustainability of our land, wildlife and people in a changing environment
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Strategic Priorities

<p>1</p> <p>Help Charles Sturt achieve its Coaldrake Targets Relating to fields of research in agriculture, environmental management and First Nations</p>	<p>2</p> <p>Significantly grow research income Within the agriculture, water and environment space (budget self-sufficiency by 2027)</p>	<p>3</p> <p>Develop research training opportunities Recruitment and completion of HDR students, and development of industry-specific short courses</p>	<p>4</p> <p>Help Charles Sturt achieve commercialisation income Through development of new, research-related, income streams</p>
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Research Programs



Research areas



Agricultural Innovation



Biosecurity



Cultural connection and environmental stewardship



New food and beverage



Sustainable aquatic systems



Executive Leadership Team

Our Major Funding Partners



Australian Government

Australian Centre for
International Agricultural Research



Australian Government
Department of Agriculture,
Fisheries and Forestry



Wine
Australia



International Collaborations Built in 2023



CETYS'-CEVIT- Mexican Wine

Emerging Partner Profile

Country:
Mexico

Strategic focus area(s):
Viticulture and Wine Production

Current Research Budget:
\$US189m (\$AUD294m)

Status update:
Gulbali delegation visited in Sept 2023. Strong support from embassy and others to build links.



2023 Gulbali Institute Outcomes

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Emerging Partner Profile

Country:
Indonesia

Strategic focus area(s):
Fisheries, Water, Agriculture, biosecurity, health, cyber

Current Research Budget:
Rp 10.51 trillion (\$AUD 1billion)

Status update:
Entered into a contract with BRIN for 6 full free paying international students commencing 2024. Also negotiating access to facilities and projects.



2023 Gulbali Institute Outcomes

Charles Sturt University is an Australian University. TEQSA Provider Identification: PRV12018. Charles Sturt University CRICOS Provider Number: 00005F.

Wageningen University

Emerging Partner

Country:
Netherlands

Strategic focus area(s):
Agricultural innovation, digital farming

Current Research Budget:
€378.8 million; (AUD >\$500m)

Status update:
Researcher – Researcher interactions facilitated in One Health, Water, Metabolomics, Circularity and Fisheries



Harper Adams University

Emerging Partner Profile

Country:
United Kingdom

Strategic focus area(s):
Digital ag, livestock production, viticulture,

Current Research Budget:
Ref Reportable £3.17 million (\$AUD6.5m)

Status update:
Series of “getting to know you” workshops have been held. Researcher to researcher exchanges have commenced. Co-funded proposals next.



2023 Highlights & Achievements



Drought-resilient mixed farms:

\$6.23 million for Southern NSW Drought Resilience Adoption and Innovation Hub at Charles Sturt. Six Gulbali Researchers to be led by Dr Shawn McGrath investigating ways that mixed farming systems can be “re-thought” to enhance drought resilience through the trial of [farmlets](#).



Our first academy fellow:

Charles Sturt's Professor Leslie Weston has been elected as a Fellow of the Australian Academy of Science for her work in crop protection and sustainable pest management. The nomination is the first-ever for a CSU employee and is remarkable recognition for a long and successful career with CSU.



Stocky Galaxias breeding:

Gulbali and DEPI lead world-first program to repopulate and release endangered stocky galaxias fish into natural habitat. The work was a three-year research effort largely supported by CSU to breed and reintroduce this threatened species for the first time. The team worked collaboratively with DEPI to “crack the code” for breeding this species in captivity.



Pacific Paravet Training Program:

Led by Gulbali funded by DAFF – 27 representatives from the Pacific region to perform critical training at Wagga Wagga. The work is a significant partnership with DFAT and Indo-pacific partners raising awareness for One Health





The AgriPark is the innovation ecosystem in the heart of the Riverina dedicated to research, curated collaboration and sustainable production.



Innovation
The AgriPark innovation ecosystem connects researchers, industry leaders and Government to tackle the challenges facing the agriculture industry.

Innovation in action →



Research
The **Gulbali Institute** undertakes multi and interdisciplinary research and innovation which focuses on optimising farm systems for performance and sustainability, enhancing the health and resilience of freshwater ecosystems, and promoting biodiversity across landscapes.

Meet our researchers →



Collaboration
The people who drive innovation to meet industry challenges come from a broad range of disciplines, have exceptional leadership skills and the ability to engage in novel collaboration models.

Meet our partners →



Research Facilities
Charles Sturt's Environmental Test Suite, Animal and Veterinary, and Food and Wine research facilities are state-of-the-art and all located at Charles Sturt's Wagga Wagga campus.

See our research facilities →

More than \$50 million invested to revolutionise Australian agriculture

29 FEBRUARY 2024



Charles Sturt University is investing more than \$50 million into projects which will revolutionise the Australian agriculture industry.

- Charles Sturt University will invest more than \$50 million into agricultural research projects and facilities
- The investments are centred on sustainable energy, animal health, agricultural technology and soil health



World class facilities in a regional location

Environmental Test Suite

Charles Sturt's Environmental Test Suite encompasses the entire range of research facilities from the University's commercial farm to world-class laboratories all within a single precinct on the Wagga Wagga campus.



Laboratories



Analytical Equipment



Rhizolysimeter



Phytotron and Growth Chambers



Glasshouses



Field Trial Sites

\$1.59 million for AI and Cyber Futures Institute and Gulbali AgriPark to lead AgriTwins program

6 FEBRUARY 2024



Charles Sturt University will spearhead a new era in Australian agriculture through advanced artificial intelligence (AI) and cybersecurity by leading the AgriTwins project.

- Charles Sturt University's AI and Cyber Futures Institute and Gulbali AgriPark will lead AgriTwins project to address agricultural sector challenges through innovative AI, machine learning and cybersecurity
- The project is a \$1.59 million dollar collaboration between nine industry, four academic partners, and CSIRO to recruit students to specialise in digital twins and agriculture
- AgriTwins will use emerging technologies across various applications, including viticulture disease prediction, carbon emission modelling and advanced crop management

A new era in wine innovation: Charles Sturt research initiates Vineyard of the Future

11 SEPTEMBER 2023



Charles Sturt's 'Vineyard of the Future' program will create a hub for innovation and transformation of the Australian wine industry, in collaboration with industry, with a focus on research and education.

- Charles Sturt to initiate Vineyard of the Future program in 2023
- The program will create a hub for ideation, innovation and transformation and will allow for industry co-design and co-investment in research and education
- It will be showcased at the Henry Machinery Field Days, from Tuesday 19 to Thursday 21 September

AI and Cyber Futures Institute

Building secure, sustainable, responsible, and inclusive technology to maximise human potential and wellbeing.

Research areas



Defence, cyber security,
and biosecurity



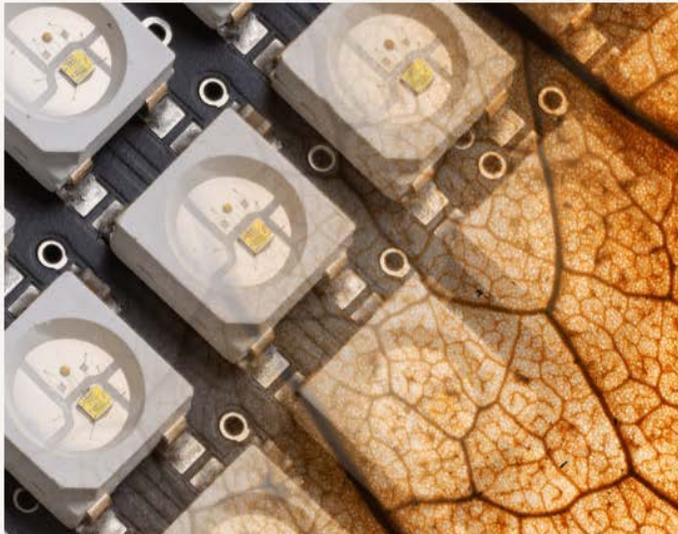
Sustainable behaviours



Smart and resilient supply
chains



Responsible AI



Trailblazer Academy

The AI and Cyber Futures Institute offers a variety of masterclasses of knowledge bites for executive students through its Trailblazer Tech Academy.

This initiative addresses the increasing demand for accessible, flexible, and relevant lifelong learning opportunities suited to active professionals. Our knowledge bites provide micro-sized, modular learning, enabling professionals to quickly gain specific skills and knowledge directly applicable to their career goals.

[View Trailblazer Academy](#) →





Welcome to the Rural Health Research Institute



Research areas



Rural health



First nations health



Global health



Nanotechnology



Charles Sturt
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Thank you

