Charles Sturt University

Research communiqué

Research news at Charles Sturt

Autumn 2026

Start

Using the piglet model to advance infant brain development through nutrition research, please read more on p27.

Message from the Deputy Vice-Chancellor (Research)

Welcome to the Autumn edition of the Research communiqué, where we celebrate the achievements and growing impact of research across Charles Sturt University.

In this issue, we showcase the breadth and depth of our research - from climate adaptation and digital agriculture to mental health, biosecurity, community resilience, First Nations knowledge, and international collaboration - and talk about why it matters.

A strong theme throughout this edition is connection: linking research and industry, bridging local challenges with global solutions, and fostering partnerships among our researchers, communities, governments, and collaborators. Across the university, our research continues to generate practical outcomes that strengthen regions, inform policy, support industries, and improve lives.

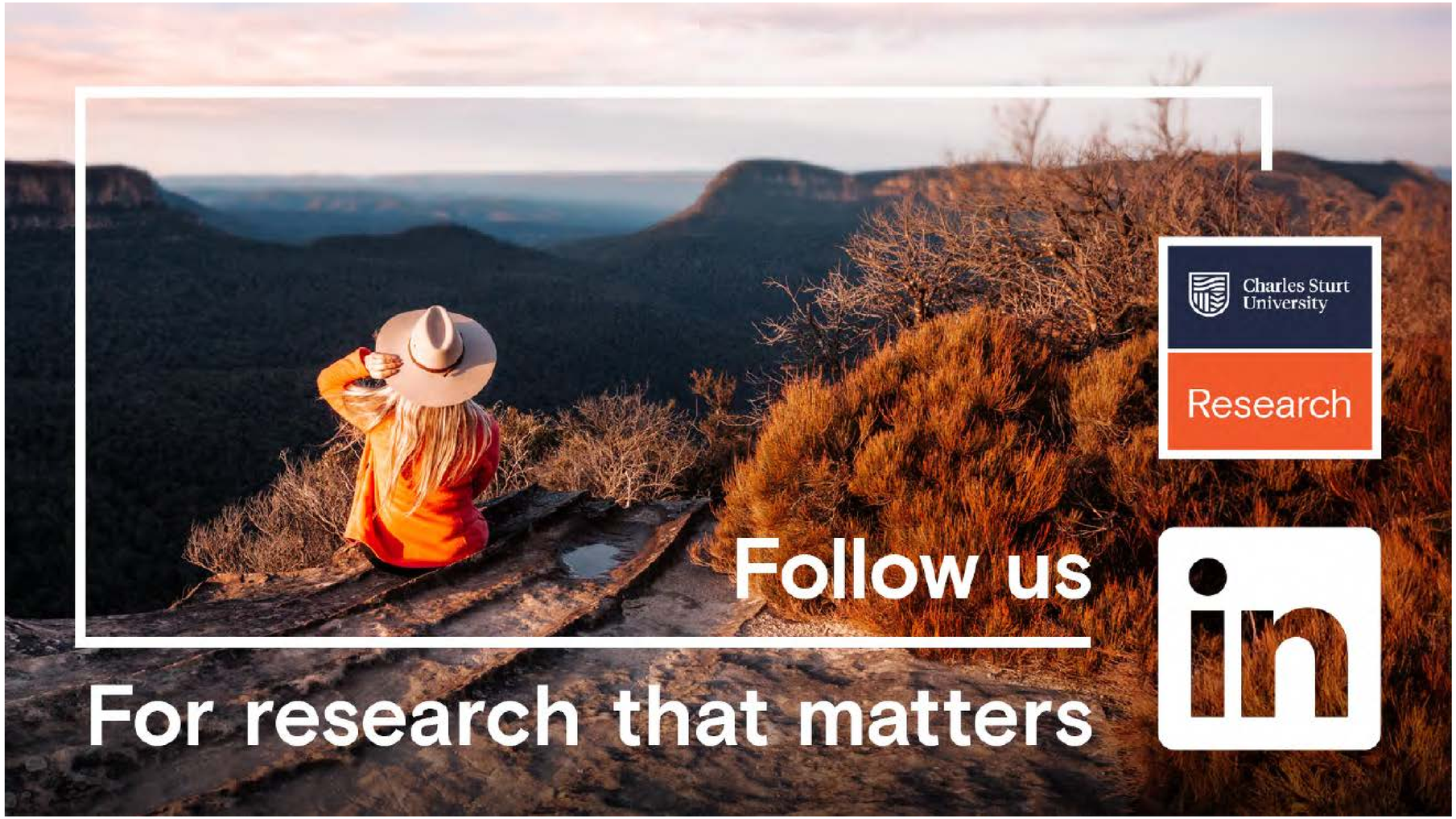
This edition also recognises two important leadership appointments: Pip Grant as Executive Director, Charles Sturt – AgriPark, and Professor Zahid Islam as Centre Director of the AI and Cyber Futures Centre. Their leadership will strengthen our focus on agrifood innovation, artificial intelligence, industry engagement and research translation.

Importantly, this communiqué celebrates the people behind the research - our researchers, professional staff, HDR candidates, institutes, centres, faculties and partners - who continually demonstrate leadership, creativity and commitment in addressing the most pressing challenges facing our communities and industries.

As we continue to strengthen Charles Sturt's research profile, we are also progressing work to refine our university research strategy, which is expected to be ready later this year. This will help sharpen our priorities, strengthen alignment across the university, and ensure our research story is clear, strategic and focused on the difference we make.

Thank you to everyone who contributed to this edition and to the ongoing work that helps position Charles Sturt University as a leader in research that solves regional challenges and drives solutions with global impact.

Professor Neena Mitter
Deputy Vice-Chancellor (Research)
Charles Sturt University



Charles Sturt Research now has a dedicated LinkedIn page. Follow us to stay up-to-date with the latest research and initiatives that deliver regional solutions with a global reach and impact.

Charles Sturt continues to be a global leader in climate action, gender equality and sustainability

Charles Sturt continues to deliver strong outcomes in the Times Higher Education (THE) Impact Rankings, reflecting our commitment to sustainability and all its facets in our university strategy.

THE's Impact Rankings are the only global university rankings that measure progress towards the United Nations 17 Sustainable Development Goals. They evaluate our university programs and initiatives, including research, teaching and learning, partnerships and engagement, and facilities and operations.

Charles Sturt achieved impressive results within individual SDGs, including ranking:

- in the top 1 per cent for SDG 13: Climate Action
- in the top 4 per cent for SDG 5: Gender Equality
- in the top 6 per cent for SDG 10: Reduced Inequalities
- in the top 7 per cent for SDG 6: Clean Water and Sanitation
- in the top 9 per cent for SDG 15: Life on Land.

These results are particularly impressive given increasing competition and participation of global universities in the THE Impact Rankings.

Times Higher Education Impact Ranking 2025

Research performance webpages: why they matter

Charles Sturt University's research has a strong story to tell: research that responds to regional challenges and contributes to solutions with national and global impact. The University Rankings and Sustainable Development Goals resources pages help make that story more visible, consistent and evidence-based.

Together, the research performance webpages provide practical guidance for researchers on two closely connected priorities: strengthening Charles Sturt's performance and visibility in university rankings, and demonstrating how our research contributes to the United Nations Sustainable Development Goals.

The University Rankings page is important because global rankings are influenced by more than research quality alone. They are shaped by research visibility, accurate institutional data, publication records, reputation, employer and academic recognition, and the way universities demonstrate their strengths to external audiences. For example, QS notes that academic and employer reputation are key measures in its rankings methodology, with employer reputation forming part of the employability lens.

For researchers, this means that maintaining accurate research profiles, ensuring publications are correctly attributed, and making research outputs visible are not simply administrative tasks. They contribute to how Charles Sturt is understood by peers, partners, prospective students, employers, government and industry.

The Sustainable Development Goals: Research, Impact and Resources page is equally important because the SDGs provide a shared global language for explaining why research matters. The 17 SDGs, adopted through the United Nations 2030 Agenda, offer an internationally recognised framework for showing how research contributes to areas such as health, climate action, food security, clean water, education, reduced inequalities, sustainable communities and partnerships.

For Charles Sturt, this is particularly valuable. Much of the University's research already aligns strongly with the SDGs through work in agriculture, water, biodiversity, health, education, regional development, First Nations knowledge, social justice and community wellbeing. The SDG resources page helps researchers identify where their work fits, describe their impact more clearly, and connect local and regional outcomes to global challenges.

This matters for rankings as well. The Times Higher Education Impact Rankings assess universities against the SDGs, including research, stewardship, outreach and teaching activities. Universities may submit evidence across the SDGs, with SDG 17 and at least three other SDGs required for inclusion in the overall Impact Rankings table.

These pages are therefore not just information pages. They are practical tools that help researchers:

- improve the accuracy and visibility of their research records
- understand how rankings use data, reputation and impact evidence
- identify priority SDGs connected to their work
- describe research impact in a way that is clear to external audiences
- support institutional reporting, rankings submissions and strategic partnerships
- strengthen Charles Sturt's research reputation nationally and internationally

Importantly, the pages also support a more consistent institutional narrative. When researchers use shared language around impact, SDGs, partnerships and visibility, the University is better able to tell a coherent story about the contribution its research is making across regions, industries, communities and policy settings.

For Charles Sturt, the value of these resources lies in helping researchers connect their individual work to a bigger picture: how research strengthens communities, informs decision-making, supports sustainable development and contributes to global progress.

By using these pages, researchers can help ensure Charles Sturt's research is not only high quality, but also discoverable, understood and recognised. That visibility is essential to building reputation, attracting collaborators, supporting rankings performance and demonstrating the University's distinctive contribution as a regional university with global impact.

Upcoming Provocations Public Lectures

The Provocations Public Lecture Series celebrates Charles Sturt research by bringing bold ideas into the public arena.

The series aims to challenge orthodoxy through new thinking while revisiting past policy ideas and political thought with a fresh perspective.

In 2026, the series will run online at a new time: 12:30–1:30pm AEST.

Speaker:
Matthew Muller
Director, Cool Soil Initiative

Date:
29 July 2026

Time:
12:30–1:30pm AEST

Location: Online

Cost: free

Speaker:
Professor Julian Grant

Date:
30 September 2026

Time:
12:30–1:30pm AEST

Location: Online

Cost: free

Speaker:
Distinguished Professor Jade Forwood

Date:
TBC

Time:
12:30–1:30pm AEDT

Location: Online

Cost: free

Recordings

The illusion of friendship: Why generative AI demands ethical vigilance

In the first Provocations Public Lecture for the year, Professor Zahid Islam explores how generative AI tools such as ChatGPT can create an “illusion of friendship” – and why this raises important ethical questions and risks.

Watch this recording to learn how AI produces human-like responses, why users may form emotional attachments, and what this means for trust, decision-making, and responsible AI use.

Provocations blog

Provocations is a multidisciplinary academic blog run by Charles Sturt University that features contributions from prominent thinkers addressing the grand challenges facing regional Australia and the world. The series challenges orthodoxy through new thinking while also revisiting past policy ideas and political thought. It has no editorial “line” beyond a commitment to enhancing public debate and understanding. The views expressed are those of the author(s).

Why the “5th quarter” could be key to feeding a growing world

In a recent Provocations lecture, Professor Jane Quinn explores how better utilisation of the “5th quarter” – often overlooked livestock byproducts – could play a vital role in strengthening global food systems. As climate pressures and demand rise, her work highlights how unlocking the full value of existing production can enhance efficiency, sustainability, and food security.

Read the blog.

Advancing Australia–Bangladesh agricultural collaboration through climate-smart livestock research

Charles Sturt University research is helping strengthen Australia's agricultural relationship with Bangladesh through a practical, gender-responsive project designed to support smallholder livestock farmers, improve fodder security and build more climate-resilient farming systems.

Led by Professor Cameron Clark from Charles Sturt's Gulbali Institute, the project, **Advancing Australia's Agricultural Relationship with Bangladesh: A Gender-Responsive Fodder Innovation Model**, is funded by the Department of Foreign Affairs and Trade and delivered in partnership with the Bangladesh Livestock Research Institute.

The project responds to a major challenge facing Bangladesh's smallholder livestock sector: reliable access to quality fodder. For many farming households, livestock are central to income, nutrition and day-to-day livelihoods. However, climate pressures, limited feed availability and gaps in extension support can constrain productivity and reduce household resilience.

Building on more than a decade of Australian-Bangladeshi agricultural collaboration, the project applies proven research on Napier grass management to improve feed quality, boost livestock productivity and reduce methane emissions intensity. The approach is deliberately practical and low-cost, designed to support farming communities with solutions that can be adopted and sustained locally.

A key focus of the project is gender equity. Women are often the frontline caretakers of livestock in Bangladesh, yet they have historically had limited access to agricultural extension services, training and knowledge networks. This project places women farmers at the centre of the model by establishing community-based demonstration hubs and developing tailored training programs that support women's participation, confidence and access to evidence-based livestock management practices.

The project also aims to build Bangladesh's institutional capacity for inclusive, evidence-based extension delivery, ensuring the benefits of Australian research expertise can continue beyond the life of the project.

During a recent visit to Bangladesh, Professor Clark met with senior government representatives, including the Minister for Agriculture, the Minister for Livestock and Fisheries, and the Secretary of the Ministry of Livestock and Fisheries. He also heard directly from smallholder farmers about the challenges they face on the ground.

A highlight of the visit was the Australia–Bangladesh Research Showcase, which brought together researchers and partners from Charles Sturt University's Gulbali Institute, the Australian Centre for International Agricultural Research and the University of Adelaide to demonstrate the impact of Australian agricultural programs in Bangladesh.

The visit helped reinforce a shared vision for the future of Australia–Bangladesh agricultural collaboration, with a focus on practical research, stronger local systems and long-term benefits for farming communities.

Why this matters

This project matters because it connects research directly to the needs of smallholder farming families facing climate, productivity and income pressures.

By improving fodder quality and availability, the project has the potential to increase livestock productivity, strengthen household incomes and support more resilient rural livelihoods. By focusing on women farmers, it also addresses a longstanding gap in agricultural extension, ensuring that those who play a central role in livestock care are better supported with training, knowledge and practical tools.

The project also contributes to climate-smart agriculture by supporting practices that can reduce methane emissions intensity in livestock systems. This aligns agricultural productivity with sustainability goals, showing how research can help deliver both economic and environmental benefits.

For Charles Sturt University, the initiative demonstrates the value of applied research that works across borders, builds trusted partnerships and delivers practical outcomes for communities. It also strengthens Australia's role as a values-driven partner in South Asia's agricultural development, supporting a relationship built on shared knowledge, local impact and long-term collaboration.

Dr Ben Stodart
Faculty of Science and Health
Gulbali Institute

Tackling black root rot in cotton production

A new Charles Sturt University research project is working to improve understanding and management of black root rot, a disease that can affect cotton establishment, productivity and long-term crop performance.

Led by Dr Ben Stodart, the project, **Understanding the etiology of black root rot disease in Southern New South Wales**, is being delivered in collaboration with Summit Ag and supported by the Cotton Research and Development Corporation.

The project has received $598,631 in funding and will run from December 2025 to June 2028.

Black root rot, caused by *Berkeleyomyces rouxiae*, remains a challenging disease for cotton growers, particularly in southern New South Wales where cooler conditions, soil type and water management may influence infection and disease severity.

The research will investigate the biological and environmental factors driving black root rot, including the role of temperature, irrigation practices and soil conditions. It will also examine genetic variability within *B. rouxiae*, interactions with soil and cotton microbiomes, host range, and how different cotton varieties respond under disease pressure.

Findings from the project will support the development of integrated and sustainable disease management strategies. These may include bio-solutions such as biofertilisers, plant growth regulators and biocontrol agents, alongside cultural practices including sowing time, crop rotation and variety selection.

The strategies will be tested and validated through desktop review and field-based trials in partnership with industry.

Why this matters

Black root rot can create significant challenges for cotton growers, particularly when environmental conditions favour disease development. By improving understanding of the pathogen and identifying practical management options, this project aims to equip growers with evidence-based strategies they can adopt on farm.

The research will also support resistance breeding programs by generating robust disease response data and contribute to the Australian cotton industry's strategic target of reducing the economic impact of cotton diseases to less than five per cent of production costs by 2028.

By combining scientific expertise with industry collaboration, the project will help build long-term research capacity and support more resilient, productive and sustainable cotton systems in southern New South Wales.

Professor David Watson
Faculty of Science and Health
Gulbali Institute

Using AI to advance biodiversity monitoring for woodland birds

A research collaboration involving Charles Sturt University is helping transform how woodland bird diversity is monitored across south-eastern Australia.

The project, **Automated Acoustic Biodiversity Monitoring for Woodland Birds**, is developing an automated acoustic tool to rapidly assess bird health and diversity in eastern Australian woodlands using birds' unique calls.

Funded through the Australian Government Department of Climate Change, Energy, the Environment and Water's Innovative Biodiversity Monitoring Grant, the project is led by the University of New England and runs from July 2024 to June 2026.

Charles Sturt's Professor David Watson has contributed to the research team developing machine-learning algorithms, known as acoustic recognisers, for 130 key bird species found in south-eastern Australian woodlands.

Using inexpensive acoustic recorders, the system can identify which species are present or absent in a location, such as a farm dam, bushland patch or backyard. With basic training, landholders and community groups could help collect biodiversity data across new locations, expanding the reach of environmental monitoring.

The acoustic recognisers include both day and night species, as the recorders can operate around the clock. They also include indicator species such as Noisy Miners, whose presence can signal reduced bird biodiversity.

By combining artificial intelligence with careful verification, the project has demonstrated strong potential to make biodiversity monitoring more accurate, scalable and cost-effective than traditional human-based monitoring alone.

Why this matters

Monitoring biodiversity across large landscapes is challenging, time-consuming and expensive. Automated acoustic tools can help researchers, landholders and community groups better understand which species are present, where biodiversity is changing, and how ecosystems are responding over time.

This work supports more effective conservation decision-making and could help build a national approach to biodiversity monitoring. Similar acoustic monitoring systems are already being explored in Australia for frogs, bats and insects, highlighting the broader potential of this technology.

Hear more from Professor David Watson in The Gulbali Report podcast.

Murray–Riverina water community joins sell-out Forum

The Murray–Darling Basin has significant expertise in water, rivers, and irrigation, but scientists and natural resource managers don't always gather often enough to discuss their research. On 19 February, the Gulbali Institute hosted a sell-out crowd of over 200 researchers, practitioners, policy leaders, and students on the Charles Sturt Albury–Wodonga campus for the inaugural **Sustainable Rivers Forum** to address this deficit, delivered in partnership with CSIRO.

The Forum gathered national leaders in water management to tackle a defining challenge: how do researchers conserve species, support our communities, and sustain river systems in a changing climate? From biodiversity and fish passage to climate resilience, community engagement, and river engineering and restoration, 12 speakers shared practical science aimed at real-world impact, much of it led by Charles Sturt University.

Powerful keynotes from Natalie Kyriacou OAM on why we do what we do, and CSIRO's David Post on the latest forecasts for climate change in Australia and the Murray–Darling Basin, set the tone for the day.

The Forum demonstrated that the Murray–Riverina region has the technical capability to meet these challenges and is doing substantial work to protect our rivers. The Forum is a step toward building a stronger regional water network grounded in research, science, and policy, ensuring this region plays its part in the national conversation on water. Plans are underway to host a regular event.

Natalie Kyriacou OAM

Richard Yang Fong, Gulbali Research Fellow

From genomics to rivers: Rethinking health upstream

I recently attended the Gulbali Institute Sustainable River Forum (a first for me), and it genuinely shifted how I think about health, genomics, and the environments that sit upstream of both. Coming from #genomics and #NGS in human and animal health, much of my work has focused on detection and response once disease has already emerged.

This Forum pushed my thinking upstream, toward environmental systems that shape health long before pathogens appear. It was an eye-opener for me, reminding me of how much more there is to learn. Discussions about fish conservation, loss of aquatic habitat, and how altered riverine flows in the Murray–Darling Basin affect wetlands and biodiversity were particularly striking. In Australia, water is not just a resource. It regulates ecological function. Changes in flow disconnect wetlands, disrupt fish breeding cycles, and slowly erode ecosystem resilience.

The role of environmental water reserves reframed my understanding of environmental health in an Australian context, something I had limited exposure to during my time in New Zealand. These flows underpin wetland connectivity, aquatic habitat, water quality, and long-term biodiversity, all of which feed directly back into human and animal health. I was also struck by how sediment cores act as environmental archives, preserving evidence of past biodiversity and ecological change under #aDNA. They allow us to learn from what ecosystems once were, and to understand trajectories of change over time. For #eDNA work, this sharpened my awareness of contamination, rigour, and interpretation, especially when working with highly sensitive molecular tools.

Natalie Kyriacou's reflections from Nature's Last Dance captured this journey beautifully, showing how conservation lives at the intersection of science, politics, storytelling, and advocacy. It reinforced for me that evidence alone is rarely enough. How we communicate and contextualise it matters. This forum has expanded how I see my own field and where it can grow. For me, it marks an important step toward a truly integrated One Health approach, connecting genomics, environmental systems, and long-term stewardship. As I move into 2026, it feels like the beginning of a new chapter, with much more to learn and many new connections still to be made.

National industry and research forum seeks opportunities

Gulbali research and professional staff connected with and sought future collaborations at AgriFutures evokeAG 2026, held in Melbourne on 17 and 18 February. The national agricultural industry, researchers, and innovators gathered to explore how Australia could unlock smarter, more sustainable agrifood supply chains, spanning bio-solutions and livestock systems.

The expansive program included sessions that provided practical insights and encouraged collaboration and future opportunities around the themes of Sustainability and Environment, Workforce and Skills Gap, and Economics and Trade.

Gulbali researchers led by Professor Jane Quinn provided updates on biosolutions and livestock programs at Charles Sturt. They also heard directly from industry representatives on the challenges and value-add opportunities across supply chains and aim to continue conversations to understand what this looks like in practice.

Special mention was also made of Charles Sturt PhD student Tiarna Scerri, one of six young researchers who presented her research on the viability of several nucleotide and protein-based treatments that she has designed to target key bacteria that cause mastitis. This is tackling a major challenge for the Australian dairy industry – the growing antimicrobial resistance in mastitis.

Chelsea Schlink, Tiarna Scerri and Professor Neena Mitter

Beef and lamb meat on the block

Beef and lamb meats were on the block during the inaugural **Southern Beef and Lamb School** held at Charles Sturt in Wagga Wagga from 17 to 19 February and organised by Riverina Local Land Services and Charles Sturt University. Around 150 producers, value chain leaders including livestock agents and abattoir managers, government officers, and researchers shared their knowledge across the whole livestock system, from genetics and soils to animal nutrition, markets, and business management.

Organisers noted the openness of producers to learn from one another and adopt evidence-based practices, along with their willingness to get ‘hands on’ with complex challenges faced across the livestock industry. These included how to maximise performance in ever-increasingly difficult and complex climatic and economic conditions, and how to make every dollar count by focusing on healthy, productive livestock, and strong return on investment.

This workshop demonstrated how industry, community, the Gulbali Institute, and Charles Sturt AgriPark could connect research directly with on-farm decision-making to strengthen the future of regional agriculture. Plans are underway to make this a biennial program.

Fish research celebrates 20 years in the Mekong

In February, Gulbali researchers led by Professor Lee Baumgartner celebrated their 20-year journey from the Murray–Darling Basin to the Mekong in Southeast Asia. Twenty years ago in Lao PDR, they built a pilot – a small wooden fishway – based on research findings in the Murray–Darling Basin.

What began as a local engineering idea has grown into a regional infrastructure and education initiative focused on one of the toughest challenges in river management: how to design irrigation systems that allow fish and food production to coexist.

This week, the research team from Australia, Lao PDR, Thailand, Cambodia, and Vietnam met to run the final workshop for the $9.3m **FishTech program**, co-funded by DFAT, ACIAR, and CSU and supported through the Mekong–Australia Partnership.

Scaling Murray–Darling Basin expertise into the Mekong Basin was difficult, but it now shows benefits for communities and over 50,000 households across the region.

This project received further recognition in Vientiane, the capital of Lao PDR, when Gulbali researchers were honoured to speak at the 35-year celebration of collaboration between Australia and Lao PDR through the Australian Centre for International Agricultural Research.

During the ceremony, the Lao PDR government recognised Professor Lee Baumgartner and his team, as well as significant collaborators who have helped protect Laos inland fisheries and food security for millions of people.

Camilla Vote, Deirdre Lemerle, Wayne Robinson, Jarrod McPherson, Craig Boys, Garry Thorncraft, and Tim Marsden were also awarded official Certificates of Honour and Lao PDR Government Labour Medals in recognition of their contributions. Many of these colleagues have been working in partnership with Lao institutions for over a decade.

“In the Mekong region, including Lao PDR, there are 60 million people dependent solely on fish as their primary source of protein and nutrients,” said Professor Baumgartner. “If Lao PDR was to lose its inland fisheries in the same way that Australia had, the loss of nutrition to the local population would be devastating.”

These awards reflect the power of long-term collaboration and the dedication of researchers working side-by-side with regional partners.

More projects are being planned, including one to train local people to design and build fish ladders and another to embed the curriculum into engineering and fisheries courses at universities across the Lower Mekong subregion.

Transforming skin health and cancer care using seaweed extract

Breakthroughs in preventing infectious skin disease and improving outcomes from cancer treatment are emerging from research into a molecule in seaweed found at Jervis Bay on the NSW South Coast.

Gulbali Institute researcher Dr Esther Calcott presented the latest findings from her research at Jervis Bay. The seaweed extract found by Dr Calcott could:

- **Prevent impetigo in remote First Nations communities**, using a non antibiotic approach to strengthen skin and reduce recurrent infections; and,
- **Support cancer patients** by improving oral care and reducing the severity of inflammation and ulceration of mucous membranes during therapies for head and neck cancer.

Read more here:

- *How Local Seaweed Is Rewriting Skin Science*
- *Using Seaweed to Combat Chronic Infection in Remote Australia*

Associate Professor
Ivor Stuart
Gulbali Institute

National Carp Forum / Nagambie Summit

The Murray–Darling Carp Action Summit, hosted by the Victorian Fisheries Authority at Lake Nagambie on 30 April 2026, brought together leaders from government, industry, community and science to progress a coordinated response to carp. The forum reflected growing recognition that carp are a system-level driver of degraded river health, dominating fish biomass in many parts of the Murray-Darling Basin and contributing to widespread habitat decline.

The summit was framed by urgency. Over more than a decade, substantial research and investment, including development of the National Carp Control Plan, have improved understanding of carp impacts and management options. The focus is increasingly on strengthening coordination and implementation pathways, particularly as carp populations continue to expand following large flow events.

In the keynote, Associate Professor Ivor Stuart outlined how carp drive ecosystem degradation through biomass effects on water quality, habitat and native fish. The central message was that carp represent a biomass-driven system constraint: reducing biomass is a critical step in enabling recovery of native fish alongside ongoing investment in environmental flows, habitat and connectivity. The talk emphasised the need to define clear management targets, carp population trajectories, and the use of multiple control tools (e.g. harvest, wetland drying and biocontrol).

The strong response from stakeholders and media coverage reflects a shift toward implementation. Progress will depend on clear targets, continued integration of research and shared responsibility across governments, agencies and communities, with the proposed Carp Action Alliance providing a mechanism to align effort at basin scale.

Keynote – core messages

- Carp biomass drives ecosystem condition and limits native fish recovery.
- Carp control needs clear targets, population trajectories and clear implementation pathways.
- Biocontrol is a key tool within an integrated strategy.
- Coordinated, basin-scale implementation is the next step in carp control and system recovery.

Spotlighting sheep confinement in drought

The summer break allowed Gulbali researchers Drs Susan Robertson and Christine Storer, together with sheep expert Jim Meckiff, to highlight the expanding practice of **sheep confinement during drought**.

They developed a series of 17 podcasts that provide useful, practical, and timely information about confinement feeding for sheep for producers who don't want to read large manuals but have questions on this practice and are looking for evidence-based answers. These audio interviews, together with an associated informative fact sheet, address specific queries from producers arising from workshops hosted by MerinoLink in 2025.

These resources are available through the MerinoLink Climate Smart project webpage and the Gulbali Institute playlist 'Sheep confinement during drought'.

The podcasts and accompanying fact sheet are part of the CSU Climate Smart project supported by the Australian Government through funding from the Climate-Smart Agriculture Program under the Natural Heritage Trust.

This project is the first series to appear on our new Gulbali Institute podcast channel.

The Gulbali Report podcast

Listen to our research impact and commentary at regional, national, and global levels in our new podcast series, The Gulbali Report, on such topics as:

- The future of native fish in the Murray–Darling Basin (with Dr Ivor Stuart)
- The early results of a comprehensive, long-term farming systems trial for southern Australia (Dr Shawn McGrath)
- Future biosecurity concerns including Avian Influenza for Australia's livestock industries and native fauna populations (Dr Ariful Islam)
- Recent developments for comprehensive national environmental monitoring using recorded sounds (Professor David Watson)
- Researching the impacts of online learning on practical skills development for Australian environmental graduates (Dr Anke Frank)

We would love to hear your comments. Contact us at gulbali@csu.edu.au

Nepal adverse childhood experiences study

The **Nepal adverse childhood experiences study** is an international collaborative research project led by the Rural Health Research Institute at Charles Sturt University, in partnership with Nepali organisations including Health and Development Society Nepal, the Health Inequality and Resilience Research Institute, and the Danish Red Cross.

This national-level survey project, involving more than 6,000 participants, examines how childhood adversity, social inequities and psychosocial environments shape mental health outcomes among young people aged 16 to 29 years in Nepal.

What progress has been made?

Fieldwork was completed in December 2025, and the project is now in the data analysis and publication phase.

Analyses have examined the prevalence and clustering of adverse childhood experiences, their associations with depression, anxiety, suicidal behaviours and wellbeing, and the role of protective factors such as social support, resilience and community connectedness.

The project has also strengthened research partnerships and capacity across Nepal and Australia, supporting early-career researchers and contributing to ongoing implementation and policy discussions.

What outcomes or impact are emerging?

Early findings show that nearly two in three participants, 62.4 per cent, reported experiencing at least one difficult or traumatic event during childhood, while around one in ten, 10.4 per cent, reported four or more adverse childhood experiences.

The findings consistently show that childhood adversity is strongly associated with poorer mental health outcomes. Importantly, the research also demonstrates that social support, family connectedness and community-level protective factors can partially buffer these impacts, providing practical targets for prevention and intervention.

The work is contributing to growing recognition of trauma-informed approaches within Nepal's mental health and child wellbeing sectors. It is also informing discussions about school-based interventions, community mental health services and equity-focused policy development in low- and middle-income settings.

Why this matters for Charles Sturt

This program strengthens Charles Sturt's international leadership in mental health, rural health and health equity. It demonstrates the University's capacity to lead culturally responsive, policy-relevant research partnerships in low-resource settings, while advancing evidence that can inform prevention, service development and mental health system strengthening internationally.

The international significance of this work was recognised when a Charles Sturt-led funding application to the Wellcome Trust progressed to the interview stage.

Images captured during field survey activities in rural Nepal, showing engagement with children and families, including children's play and rural household contexts.

Danish maritime workplace violence and mental health research project

The **Danish** maritime workplace violence and mental health research project is an international collaborative research program co-led by Charles Sturt University's Rural Health Research Institute and the University of Southern Denmark, in partnership with the Danish Maritime Authority and Hafnia, an international shipping company.

The project draws on two large maritime workplace violence surveys: a 2023 survey across the Danish merchant fleet involving 3,412 participants, and a 2025 survey of Hafnia crew involving 1,369 participants.

Rather than focusing only on how often workplace violence occurs, the research examines the organisational drivers, psychosocial impacts and inequalities associated with workplace violence at sea.

What progress has been made?

The research team has harmonised the two survey datasets to examine how leadership support, crew relationships, workload fairness, hierarchy and diverse crewing arrangements influence experiences of bullying, harassment, threats, and physical and sexual violence.

The program has progressed from descriptive analysis to advanced modelling of psychosocial risk pathways, organisational determinants and reporting behaviours.

What outcomes or impact are emerging?

Early findings show that workplace violence in maritime settings is strongly shaped by organisational and environmental conditions, rather than individual behaviour alone.

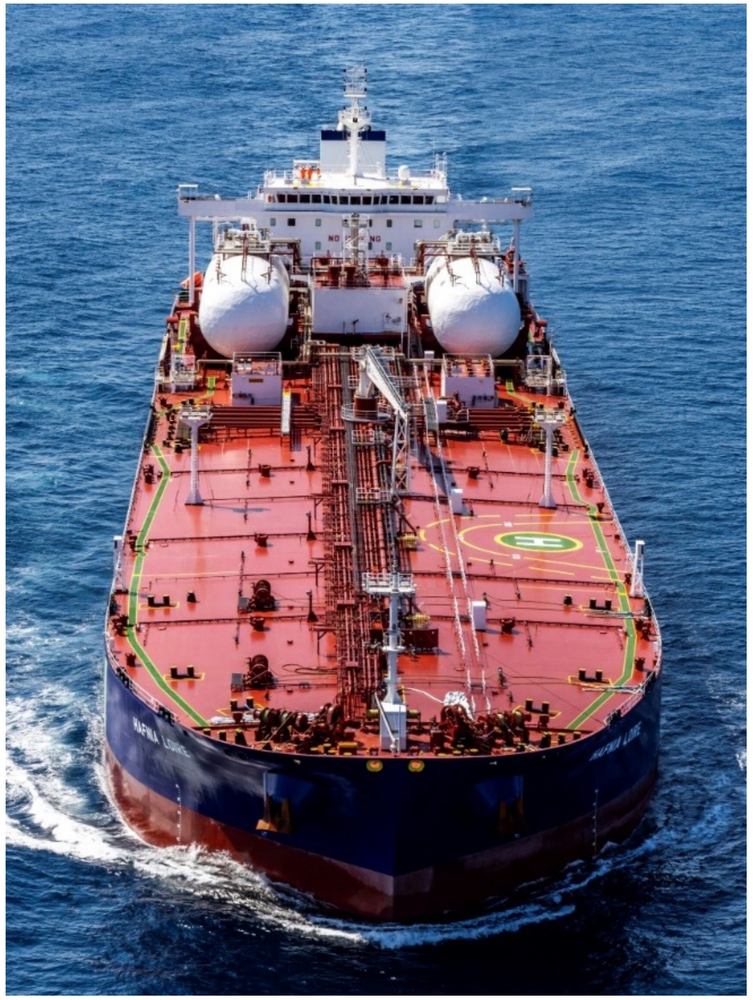
The research has already contributed to Danish maritime legal enforcement reforms and informed international industry standards through International Maritime Organization and International Labour Organization channels. It is also supporting workplace reforms within global shipping organisations, including Hafnia.

The project provides critical evidence to support safer multicultural and gender-diverse crews by strengthening leadership accountability, psychosocial safety systems and reporting pathways.

Why this matters for Charles Sturt

Maritime mental health research in Australia is still emerging, but its relevance is growing.

This collaborative work highlights Charles Sturt's potential to lead future Australian research programs in this area, including internationally collaborative and policy-relevant studies with direct application for maritime organisations, regulators and workplace safety systems in Australia and globally.



Hafnia vessel image sourced from Google.

Embedding cognitive remediation therapy into mental health rehabilitation

The Cognitive Remediation Therapy (CRT) Implementation Research Project is a Medical Research Future Fund–funded translational initiative led by Charles Sturt University's Rural Health Research Institute.

The project is embedding CRT into routine NSW and Queensland public mental health rehabilitation services, rather than delivering it as a standalone or time-limited program.

What progress has been made?

Now in its second year, the implementation trial has moved from planning into active delivery across rural and metropolitan mental health services, including Western NSW, South Eastern Sydney, Illawarra Shoalhaven and Metro-South in outer Brisbane.

CRT is now being embedded within routine inpatient and community rehabilitation settings, supported by clinician training, supervision, governance structures and ongoing monitoring. Early implementation demonstrates the feasibility of delivering CRT across diverse service contexts.

What outcomes or impact are emerging?

Mid-project findings show strong consumer acceptability, high therapeutic alliance and early signs of benefit. Participants have reported improvements in focus, memory strategies and everyday functioning, while quantitative data indicates emerging gains in cognition, adaptive functioning and goal attainment over time.

Clinicians have described CRT as filling a critical gap in non-pharmacological rehabilitation, particularly in supporting consumers' readiness for community living.

The project is also generating important implementation insights. Applying the RE-AIM framework has helped identify systemic barriers, including workforce availability, infrastructure delays and variation in implementation maturity. These findings have broader relevance for other health service implementation projects.

Why this matters for Charles Sturt

This project positions Charles Sturt University as a national leader in translational mental health research, generating policy-relevant evidence to inform service reform.

It demonstrates the University's strength in rural and regional health innovation, strengthens partnerships with public health systems, and showcases Charles Sturt's capacity to lead MRFF-funded research that delivers real-world impact for people with significant mental illness, clinicians and policymakers.

Photo caption: CRT Mid-Project Research Team Meeting with academic and clinician researchers.

L–R: Dr Tebikew Mengist, Ms Alison Bowman, Ms Chloe Gott, Ms Sarah Grattan, Mrs Heidi Gray, Ms Robyn Howard, Dr Nicole Snowdon, Ms Sarah Craig, Professor Julaine Allan, Associate Professor Frances Dark, Ms Jess Apps, Dr Nicole Sugden, Dr Alienor Chauvenet, Ms Leanne Grech and Associate Professor Alfred Wong.

Mrs Heidi Gray, PhD Candidate
RHRI

Professor Julaine Allan
RHRI

Practical strategies for research dissemination and impact from an RCT

Translating research into practice remains a key challenge in rural health. Over the past year, the Rural Health Research Institute (RHRI) has strengthened the national reach of its research on Community Reinforcement and Family Training (CRAFT), ensuring evidence generated at Charles Sturt is informing service delivery, sector conversations, and support for rural families affected by substance use.

Building on a recent randomised controlled trial, the team has prioritised translating research outcomes into meaningful sector engagement across Australia.

The importance of this work was highlighted by a trial participant who, after receiving the results summary, wrote:

“This research is so important and the paper crafted from your study will be so incredibly vital in drawing attention to the need for familiar support systems for people with loved ones in or recovering from addiction…my husband is 2 years sober next week. If you need anything in the future please don’t hesitate to ask. A face, testimonials, advocacy, whatever will help because this study helped my family and ultimately me.”

The project has gained significant national recognition through targeted dissemination efforts. This includes a commissioned article for the Network of Alcohol and Other Drugs Agencies (NADA), where we shared insights on enhancing practice in community-based drug and alcohol services (2025-advocate-september.pdf), and contributing to the National Rural Health Alliance (NRHA) platform to elevate regional perspectives within the national dialogue on rural and remote health services (Supporting the supporters: Helping families navigate substance use – Partyline).

Digital engagement has also been central to the strategy. The project podcast The Other Side of Addiction: Stories from the Family Empowerment Program, featuring clinicians, participants, and researchers, has attracted more than 480 listeners – demonstrating the value of accessible, evidence-informed content for practitioners, students, and community members.

Sector interest in the findings has translated into invitations to deliver training for health staff in New South Wales and Victoria. These workshops will enable research insights to reach frontline workers directly, supporting capability building and fostering the practical implementation of the evidence.

Research findings were also shared through academic and professional channels, including presentations at Rural Innovations Changing Healthcare, NADA, the National Allied Health Conference, and the Australasian Professional Society on Alcohol and Other Drugs (APSAD). These engagements have fostered collaboration, sparked discussion on service innovation, and increased the visibility of Charles Sturt’s contribution to rural and community health research.

Finally, the team made a submission to the parliamentary inquiry into the health impacts of alcohol and other drugs in Australia, ensuring rural perspectives were represented in the national policy conversation.

Collectively, these activities reflect a year of strong impact, with the research reaching practitioners, policymakers, service providers, and national audiences. As the project continues to evolve, the team remains committed to amplifying regional voices and advancing health outcomes through high quality, practice oriented research.

Mrs Heidi Gray

Regional Health Workforce Policy Lab brings sector together to address workforce challenges

Charles Sturt Bloomfield campus, Orange | 5 March 2026

Charles Sturt University partnered with the Central NSW Joint Organisation of Councils to host a Regional Health Workforce Policy Lab at the Charles Sturt Bloomfield campus in Orange, bringing together close to 50 stakeholders from across local government, healthcare, and the broader sector.

Facilitated by Professor Julian Grant, the Policy Lab convened councils, practitioners, and sector leaders to collaboratively identify practical actions to address the ongoing rural health workforce crisis. Charles Sturt participants included Diarmid Kelly, Julia Andrews, Dr Hazel Dalton, and Dr Anayochukwu Edward Anyasodor.

The session featured presentations highlighting innovative approaches already underway in regional communities, as well as collaborative workshops focused on identifying opportunities for collective action and advocacy.

The Policy Lab reflects Charles Sturt's commitment to working in partnership with regional stakeholders to co-design solutions to complex challenges. By bringing together research, policy, and practice, the event supported the development of practical, place-based strategies to strengthen the rural health workforce.

Why this matters

Rural and regional communities continue to face critical health workforce shortages, impacting access to care and long-term community wellbeing. Addressing these challenges requires coordinated, evidence-informed action across sectors.

This Policy Lab demonstrates how Charles Sturt is contributing to solutions—bringing together research, local government, and practitioners to co-design practical strategies that support recruitment, retention, and sustainability of the rural health workforce.

Presentation:

Dalton H, Anyasodor A, Hayes K. (2026) *Rural health workforce – What works for recruitment, retention and sustainability? An evidence review*. Regional Health Workforce Policy Lab. CSU Bloomfield campus, Orange. 5 March 2026

Diarmid Kelly (Charles Sturt), Kate Barker (Central NSW Joint Organisation), Katie McDonell (RDN), Professor Julian Grant (RHRI, Charles Sturt).

Shaping national debate on rural health workforce policy

Dalton, H. & Hayes, K. (2026). One Nation wants to get more doctors in rural areas – but it's got the wrong approach. *The Conversation*. https://doi.org/10.64628/AA.nx77c5tje (4,984 reads at 9/3/26)

Reposted by Charles Sturt news, Rural Health Pro, The Mirage, and more.

- https://news.csu.edu.au/opinion/one-nation-wants-to-get-more-doctors-in-rural-areas-but-its-got-the-wrong-approach
- https://www.linkedin.com/posts/hazel-dalton_one-nation-wants-to-get-more-doctors-in-rural-activity-7433016512615202816-u5Gb?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAZnzFkBmwQUj_Ofwc2AYNAPYRLWh_c1gP4

Related media:

- ABC Riverina Breakfast radio with Sally Bryant – https://www.abc.net.au/listen/programs/riverina-breakfast/breakfast/106394184 Time stamp: 2:11:55–2:19:20

Bundaberg Co-design workshops to develop a Community Action Plan to prevent family and domestic violence during disasters

Dr Hazel Dalton has been working with Queensland University of Technology (QUT) researchers, with Lead Associate Professor Christina Malatzky, Dr Cath Cosgrave and community researcher Gayle Reynolds, and key community stakeholders, to co-design a community-led solution.

This series of workshops enabled the researchers to present a range of evidence (local and lived experience, policy analysis, and an international scoping review) to community stakeholders and draw on their collective lived expertise to determine the next steps and actions.

A final co-design workshop is scheduled for April, with the project expected to be completed by June. The project is funded through Resilient CARE, a federally supported program led by Country to Coast Queensland (CCQ).

Why this matters

Disasters can intensify the risks and impacts of family and domestic violence, particularly in regional communities where services are already stretched. Yet responses are often designed without sufficient input from the communities most affected.

This project places local voices at the centre—bringing together lived experience, research evidence, and community leadership to co-design practical, place-based solutions. It demonstrates how Charles Sturt is working alongside partners to strengthen community resilience and deliver safer outcomes before, during, and after disasters.

This work builds on our previous visit to Bundaberg in October, when we kicked off collaborative meetings and data collection to gather local insights and connect with the motivated community alliance for the prevention of domestic and family violence.

Co-design Workshop, 18 February 2026, Bundaberg.

Dr Hazel Dalton (CSU), Gayle Reynolds (QUT, Wide Bay Kids), Assoc Prof Christina Malatzky (QUT), Dr Cath Cosgrave (QUT). Bundaberg, October 2025

Radio interview highlights collaborative approaches to rural mental health

Dr Hazel Dalton with Guy Murphy, 2NUR FM. Rural mental health and collaborative approaches to community wellbeing. 8 December 2025.

https://omny.fm/shows/wellbeing/dr-hazel-dalton-remote-mental-heath

This interview explored Dr Dalton's work related to collaborative approaches to community wellbeing, deeply connected with her role as Chair of the Rural Behavioural Health Collaborative special interest group of the Global Leadership Exchange.

Conference Presentations

Dr Dalton presented the scoping review findings at the National Rural Mental Health Conference in Hobart in November 2025. These findings are from Phase 1 of the NHMRC – Targeted Research Call grant, led by Prof Russell Roberts, on which she is a Co-Investigator – Consumers and carers as physical healthcare navigators in rural Australia: A randomised trial. She also shared the results of Phase 2c, which explores rural healthcare providers' perspectives on the role of physical healthcare navigators in improving outcomes for people in rural communities with mental health concerns. This was done alongside Lived Experience research assistant and Lived Experience Leadership Team member, Amrita Dasvarma (CSU), at the Equally Well Conference in Adelaide in November 2025.

Dalton, H., West, E., Dasvarma, A., Zirnsak, T., Fehily, C., Rostami, R., & Roberts, R. (2025). *Bridging the gap: review of efficacy and implementation of physical health navigator models*. Abstract from 2025 Rural Mental Health Conference, Hobart, Tasmania, Australia.

Dalton, H., Dasvarma, A., Roberts, R., Allan, J., & Lewis, C. (2025). *Service provider perspectives: Challenges and opportunities of a physical healthcare navigator*. Abstract from 2025 Equally Well Conference, Adelaide, South Australia, Australia. https://equallywell.org.au/resources/service-provider-perspectives-challenges-and-opportunities-of-a-physical-healthcare-navigator/?forum-id=239

The Western Health Research Network Conference (WHRN2025), held on 3–4 November 2025 at Charles Sturt University's Orange campus, provided a vibrant forum for sharing innovative research and strengthening collaboration among health professionals, researchers, and community stakeholders from Western and Far Western New South Wales.

With a record, sold-out attendance of 175 delegates and more than 100 abstract submissions, the conference highlighted both the strong relevance of WHRN to regional communities and the significant impact the Network has had—and will continue to have—across the region. Delegate feedback throughout the event and via the post-conference survey was overwhelmingly positive, reflecting the value of the conference in fostering connection, knowledge exchange, and regional research leadership.

WHRN is strongly supported by Charles Sturt researchers, with Co-Chair Dr Catherine Keniry, Scientific Committee lead Associate Professor Melissa Nott, and committee members Dr Hazel Dalton, Jo Hunter, Karen Paxton and more. WHRN has a broad membership across Western NSW, including the Far West and Western NSW Local Health Districts, the Western NSW Primary Health Network, the University of Sydney School of Rural Health, the Bathurst Rural Clinical School – Western Sydney University, and the Broken Hill University Department of Rural Health.

Home - Western NSW Health Research Network Inc

Professor Zahid Islam Centre Director of the AI and Cyber Futures Centre (AICF)

Professor Zahid Islam appointed Centre Director of the AI and Cyber Futures Centre

Charles Sturt University has appointed Professor Zahid Islam as the new Centre Director of the AI and Cyber Futures Centre (AICF). He began in the role on 21 January 2026.

A highly accomplished data scientist, Professor Islam has more than 150 peer-reviewed publications and a strong track record in securing external competitive funding. He is well known across the university for his research leadership, having led the Data Science Research Unit within the Faculty of Business, Justice and Behavioural Sciences (BJBS) and served as Associate Dean (Research) for more than two years.

In his new role, Professor Islam will lead the strategic direction of the AICF, strengthening interdisciplinary collaboration and advancing Charles Sturt's position in the rapidly evolving fields of artificial intelligence and cyber security. He will continue to serve as Associate Dean (Research), with both roles held at 0.5 FTE.

Reflecting on his appointment, Professor Islam said:

"I'm honoured to take on this role and look forward to working with colleagues and partners to strengthen our research impact and deliver solutions to real-world challenges."

Associate Professor Ibrar Yaqoob

AICF researcher ranked among Australia's Rising Stars of Science

Associate Professor Ibrar Yaqoob is a Principal Research Fellow at the Artificial Intelligence and Cyber Futures (AICF) Centre at Charles Sturt University. In 2025, he was ranked #14 in Australia among the World's Rising Stars of Science and #313 globally by Research.com, and received the 2025 Rising Star of Science Award.

His current research focuses on the application of blockchain, NFTs, and the metaverse across sectors including healthcare, supply chains and logistics, agriculture, Internet of Things (IoT), and smart cities.

His research impact has been recognised through several prestigious international rankings. He was named a Clarivate Highly Cited Researcher for three consecutive years (2021–2023), placing him among the top 0.1 per cent of researchers globally. He has also been listed among the Stanford University–Elsevier World's Top 2 per cent Scientists for six consecutive years (2020–2025) and ranked among the top 0.05 per cent of scholars worldwide by ScholarGPS in 2023 and 2024.

His work has influenced both industry and policy, with citations in patents and policy documents. Many of his publications contribute to advancing the United Nations Sustainable Development Goals.

Ranking reference: Best Rising Stars of Science in Australia 2025/2026 Ranking – *Research.com Ranking*.

Professor Samantha Jakimowicz
Faculty of Science and Health

Ms. Jodie Brabin
School of Nursing, Paramedicine and Healthcare Sciences
Faculty of Science and Health

Dr Sharon Laver
School of Nursing, Paramedicine and Healthcare Sciences
Faculty of Science and Health

Associate Professor Rachel Rossiter
School of Rural Medicine
Faculty of Science and Health

Improving emergency care: evaluating the Patient Experience Officer role

Research from Charles Sturt University is helping shape health policy and improve patient care across New South Wales hospital emergency departments.

A multidisciplinary team from the School of Nursing, Paramedicine and Healthcare Sciences (SNPHS) has delivered a comprehensive evaluation of the NSW Ministry of Health's Patient Experience Officer (PEO) initiative. Spanning both metropolitan and rural emergency departments, the study provides one of the most detailed evidence bases to date on the value of non-clinical roles in high-pressure healthcare settings.

Led by Professor Samantha Jakimowicz, alongside Ms Jodie Brabin, Dr Sharon Laver, and Associate Professor Rachel Rossiter, the research employed a rigorous mixed-methods approach. The study analysed more than 1,000 staff survey responses and incorporated insights from over 80 staff and stakeholders through interviews and focus groups.

The findings offer important insights into the challenges facing emergency departments, including rising patient presentations, extended wait times, and increasing rates of occupational violence. Within this context, Patient Experience Officers were shown to play a critical role in improving both patient and staff experiences.

Staff consistently reported that PEOs contributed to safer, calmer, and more efficient waiting rooms. Clinicians described the role as a "calming presence", helping to manage patient expectations, improve communication, and reduce incidents of aggression. Importantly, PEOs were also found to support patient safety by identifying early signs of deterioration – an unexpected but valuable contribution during periods of high demand.

From a systems perspective, the evaluation highlighted improvements in workflow and teamwork. PEOs supported communication between patients and clinical staff, assisted in locating patients, and helped prepare individuals for the next stage of care. These contributions enabled clinicians to focus on treatment priorities and reduced delays in care delivery.

A key outcome of the project was its direct impact on government decision-making. At the time the evaluation began, the PEO program had been identified for potential discontinuation. The evidence generated by the research team demonstrated the program's value, ultimately supporting the decision to extend and expand PEO funding across New South Wales.

This work highlights the power of applied, multidisciplinary research to drive real-world change. By generating robust, actionable evidence, Charles Sturt researchers are helping to inform policy, enhance patient and staff experiences, and strengthen the delivery of safe, patient-centred emergency care.

Policy Impact

- Research directly informed NSW Government decision-making on the Patient Experience Officer (PEO) program
- Evidence demonstrated the value of PEOs in improving patient safety, staff wellbeing, and emergency department efficiency
- The findings contributed to the decision to extend and expand PEO funding across New South Wales
- Highlights the role of Charles Sturt research in shaping real-world health policy and service delivery
- Showcases how applied, multidisciplinary research can drive measurable system-level change

Using the piglet model to advance infant brain development through nutrition research

Researchers at Charles Sturt University are exploring how key components of human breast milk may support early brain development, vision, and cognition.

Human breast milk contains a wide range of bioactive compounds that support infant growth. Researchers at Charles Sturt University are advancing a new understanding of how key components of human breast milk support early brain development, vision, and cognition.

Human breast milk contains a complex array of bioactive compounds essential for infant growth. Among these are human milk oligosaccharides (HMOs) – the third most abundant solid component – and lactoferrin, an iron-binding glycoprotein with critical roles in immunity and neurodevelopment. While the benefits of each are recognised, their combined effects on early brain development remain largely unexplored.

At Charles Sturt, Professor Wang leads an interdisciplinary team investigating how HMOs, both independently and in combination with lactoferrin, influence brain development, vision, and cognition. The research integrates advanced neuroimaging, behavioural neuroscience, and molecular analysis to uncover the biological mechanisms underpinning early-life nutrition.

The program uses neonatal piglets as a highly relevant translational model. With strong similarities to human infants in brain development, digestive physiology, and nutritional requirements, piglets provide critical insights into early-life nutrition. The work also delivers practical benefits for animal health, growth, and welfare—bridging human health research with agricultural outcomes.

Several Charles Sturt PhD candidates are contributing to this work:

- **Md Mahmudul Amin** is using advanced in vivo neuroimaging to examine how HMOs and lactoferrin influence brain metabolism and microstructure. His research – among the first to explore potential HMO-lactoferrin synergy in neurodevelopment – has been presented at the *Nutrition Society of Australia's 49th Annual Scientific Meeting*.
- **A.A. Dilki Indrachapa Adikari** is investigating how HMOs influence learning, memory, and stress-related behaviours. Her findings show improvements in learning performance, working memory, and cognitive flexibility, particularly under demanding conditions. Her work received the *Second Runner-Up award for Best Long Oral Presentation* at the same conference.

Students and staff working on piglet feeding trials

- **Tanjina Amin** is exploring the molecular mechanisms linking HMOs to vision development and cognitive function. She received the *Highly Commended Student Award* at the Charles Sturt Faculty of Science School of Dentistry and Medical Sciences Poster Muster and has published in the Q1 journal Frontiers in Nutrition.


NUTRITION SOCIETY OF AUSTRALIA

The Nutrition Society of Australia (NSA)
Annual Scientific Meeting

Gold Coast Convention & Exhibition Centre
1 – 3 December 2025

Best Long Oral Presentation Second Runner Up

awarded to

Dilki Adikari Arachchige

for the presentation

Impact of human milk oligosaccharide supplementation on learning and memory ability of piglets in 8-arm radial maze

Professor Victoria Flood
President

Dr Aimee Dordevic
Hon Secretary

Tanjina Amin receiving the Highly Commended Student Award at the Faculty of Science SDMS Poster Muster (29 October 2025)

Why this matters

Together, this research program is strengthening the understanding of early-life nutrition and neurodevelopment, while also supporting improvements in animal health and agricultural productivity. The findings have the potential to inform the development of next-generation infant formulas that more closely replicate the complexity and benefits of human breast milk.

Team: **Professor Bing Wang**, Gulbali Institute, School of Agricultural, Environmental and Veterinary Science (Principal Supervisor, Project lead), **Dr Xiaming Zheng**, Gulbali Institute, School of Dentistry and Medical Sciences, Rural Health Research Institute (Co-Supervisor Project co-lead), **Dr Shaoyu Wang**, School of Dentistry and Medical Sciences, Rural Health Research Institute (Co-Supervisor), **Associate Professor Allan Gunn**, Gulbali Institute, School of Agricultural, Environmental and Veterinary Sciences (Co-Supervisor), **Md Mahmudul Amin**, PhD candidate, School of Agricultural, Environmental and Veterinary Sciences (Project title: Molecular neuroimaging studies of the impact of dietary human milk oligosaccharide supplementation on neurodevelopment and behaviour in piglets), **A.A. Dilki Indrachapa Adikari**, PhD candidate, School of Agricultural, Environmental and Veterinary Sciences, Faculty of Science and Health (Project title: Human Milk Oligosaccharide (HMO) Supplementation on Cognitive Behaviour and Brain Development of Piglets), **Tanjina Amin**, PhD candidate, School of Agricultural, Environmental and Veterinary Sciences, Faculty of Science and Health (Project title: Molecular determinants of human milk oligosaccharides as a bioactive compound for vision development and cognitive behaviour in piglets)

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1. Md Amin, T Amin, AA Dilki, XM Zheng, ZL Chen, B Wang. (2026). Synergistic Action of Human Milk Oligosaccharides and Lactoferrin Enhances Neurodevelopment in Piglets: Evidence from MRS based Metabolic Profiling. **Nutr Neurosci.** Accept 22 Feb.

2. WT Li, A Gunn, XM Zheng, B Wang. (2025) Exploring human milk oligosaccharides: mechanisms linking gut function to cognitive development in human and pig physiology. **Front Nutr.** 12 https://doi.org/10.3389/fnut.2025.1700954

3. T Amin, Md M Amin, Adikari ADI Adikari, YB Ning, XM Zheng, B Wang. (2025). Clinical Evidence and Mechanistic Pathways of Human Milk Oligosaccharide

Charles Sturt leads census shaping the future digital health workforce

Charles Sturt University is helping shape the future of Australia and New Zealand's digital health workforce through a major transnational census led by Professor Kerryn Butler-Henderson, Dr Salma Arabi and Professor Kathleen Gray.

The **Australian and New Zealand Specialist Digital Health Workforce Census** collects critical data on the people working across digital health, including their roles, skills, qualifications, experience, demographics and workforce needs. Since its launch in 2018, the census has gathered insights from more than 2,500 professionals across three waves in 2018, 2021 and 2023.

Led by Charles Sturt, the project uses a consortium model that brings together universities, government, peak bodies and industry partners to build a stronger understanding of workforce size, composition and capability across the sector.

The census has been supported by three competitive grants and has generated more than 20 publications and over 40 presentations. Importantly, its findings have contributed to two Australian Government workforce strategies, demonstrating the value of research in informing policy, planning and education.

The fourth census is now open, giving digital health professionals across Australia and New Zealand an opportunity to contribute to the next stage of workforce evidence and planning.

Why this matters

Digital health is now central to the delivery of modern healthcare, from electronic health records and data systems to virtual care, analytics, cybersecurity, artificial intelligence and digitally enabled models of service delivery.

As health systems become more digitally connected, governments, employers and education providers need reliable evidence about the workforce required to support this transformation.

This Charles Sturt-led census provides that evidence. By mapping the skills, roles and needs of the specialist digital health workforce, the project is helping inform future workforce planning, professional development, education pathways and policy decisions.

It is a clear example of Charles Sturt research contributing to a health system challenge with national and transnational significance.

Protecting persimmon orchards from dieback disease

A Charles Sturt University research project is helping Australian persimmon growers better understand, diagnose and manage dieback disease, a serious threat to orchard health and productivity.

Led by PhD student Darby Taguiam, with Professor Sandra Savocchia, Dr Ben Stodart, Professor Chris Steel and Dr Alison Fuss, the Hort Innovation-funded project, **Diagnosis and management of dieback in persimmon trees**, investigated the complex fungal pathogens associated with dieback in Australian persimmon orchards.

Using morphological and molecular identification, infection assays, glasshouse trials, and control efficacy testing, the research identified several fungal pathogens associated with disease development, including *Neofusicoccum*, *Diaporthe*, and *Neopestalotiopsis* species. These findings represent the first reports of these pathogens in Australian persimmons.

The project has delivered important evidence-based to support future dieback management strategies for the persimmon industry. Fungicide sensitivity trials identified difenoconazole, marketed as Score, as a promising treatment option, while biocontrol testing showed that Serenade® Opti may help suppress disease when applied preventively.

Why this matters

Dieback can lead to tree decline, reduced productivity and increased losses for growers. By improving understanding of the pathogens involved and identifying potential control options, this research provides growers and industry stakeholders with practical knowledge to support healthier orchards, improved productivity and more sustainable long-term production.

This project was funded by Hort Innovation, using the persimmon research and development levy and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

Chris Stillard, President of Persimmons Australia Inc. (left), and Darby Taguiam, PhD Candidate at Charles Sturt University, conducting sample collection for the Persimmon Dieback Project at a commercial persimmon orchard in Barooga, NSW.

Improving First Nations perinatal outcomes through oral iron supplementation

A Charles Sturt University student research project is evaluating whether oral iron supplementation can improve maternal and neonatal health outcomes for First Nations women in the Murrumbidgee Local Health District (MLHD).

Led by Year 4 School of Rural Medicine student Ms Sophie Lotz, with clinical supervision from Ms Kristen Brown, Clinical Nurse Consultant Haematology at MLHD, and academic supervision from Drs Catherine Keniry and Mamun Huda from the School of Rural Medicine, the project focuses on the impact of an oral iron supplementation program delivered through the MLHD Aboriginal Maternal Infant Health Service.

Iron deficiency anaemia during pregnancy is a significant health issue, with potential impacts on both maternal and infant outcomes. While maternal and neonatal anaemia are well documented in the broader literature, there is limited data on iron deficiency in pregnancy among First Nations populations. This project aims to help address that evidence gap.

The study evaluates outcomes for pregnant women in the Aboriginal Maternal Infant Health Service who have a baseline serum ferritin level of less than 30 mcg/L. It will examine whether oral iron supplementation improves maternal indicators such as serum ferritin and haemoglobin levels, while reducing the need for iron infusions and red blood cell transfusions. The project will also consider neonatal outcomes, including birth weight and gestational age, compared with previous pregnancies.

Importantly, the study has been designed in partnership with Aboriginal Health Practitioners, including Aboriginal midwives, and guided by an Aboriginal Steering Committee. Consultation and close engagement with the local Murrumbidgee Aboriginal community have helped ensure the project is culturally sensitive and community-informed.

The project has also been nominated for a Murrumbidgee Local Health District Excellence Award.

Why this matters

This research addresses an important gap in understanding the health impacts of iron deficiency during pregnancy in First Nations populations. By contributing to more evidence-based and culturally responsive care, the project aims to support better maternal and neonatal outcomes and promote health equity for First Nations Australians.

The study has received approval from the Aboriginal Health & Medical Research Council and the Greater Western Human Research Ethics Committee and aligns with the Australian Government's National Aboriginal and Torres Strait Islander Health Plan.

Understanding the journey to diagnosis for young-onset colorectal cancer in rural Australia

A Charles Sturt University School of Rural Medicine student research project is exploring the experiences of people diagnosed with young-onset colorectal cancer in rural and regional Australia.

Led by Year 4 School of Rural Medicine student Mrs Nayma Bilal, with clinical supervision from Dr Rob Knox, Head of Surgery at Western NSW Local Health District, and academic supervision from Drs Catherine Keniry and Indra Choudhury from the School of Rural Medicine, the qualitative study focuses on colorectal cancer diagnosed in people under the age of 50.

Young-onset colorectal cancer is increasing in Australia. However, early diagnosis can be challenging, particularly in rural and regional communities where access to diagnostic services may be limited, and symptoms may initially be attributed to less serious conditions. For many younger patients, delays between first noticing symptoms and receiving a diagnosis can result in more advanced disease and more complex treatment.

Through one-on-one interviews, the study will invite participants who were living in rural or regional Australia when their symptoms began, to share their experiences of recognising symptoms, seeking medical care, interacting with healthcare providers, accessing diagnostic services such as colonoscopy, and navigating surgical management.

By capturing patient perspectives, the research aims to identify common barriers, missed opportunities and points of delay in the diagnostic pathway.

Learn more.

Why this matters

Earlier recognition and diagnosis of colorectal cancer in younger people can improve treatment options, reduce complexity of care and support better outcomes. This research will help build a clearer understanding of the rural patient journey and may inform improvements in referral pathways, diagnostic access and timely surgical care for rural and regional Australians.

Evaluating a rapid paediatric care model for families on the Mid North Coast

A Charles Sturt University School of Rural Medicine student research project is evaluating the Paediatric Acute Review Clinic at Coffs Harbour Health Campus and its impact on hospital-related outcomes and carer experiences.

Led by Year 4 School of Rural Medicine student Ms Siya Garg, with clinical supervision from Drs Stephanie White and Michael McCarron, Head of Paediatrics and Paediatrician at Coffs Harbour Health Campus, Mid North Coast Local Health District, and academic supervision from Drs Mamun Huda and Catherine Keniry from the School of Rural Medicine, the study focuses on an innovative model of care for children needing urgent medical assessment.

Many children with acute illnesses require timely review, but emergency department visits can involve long waits and a stressful environment for families. The Paediatric Acute Review Clinic provides a rapid specialist alternative to the emergency department, offering care in a more appropriate outpatient setting.

The study will evaluate hospital-related outcomes associated with the clinic, including its potential role in reducing unnecessary emergency department presentations and hospital admissions. It will also explore the experiences of carers whose children have accessed the service, providing insight into how families experience this model of care.

Learn more.

Why this matters

Rural and regional health services need effective models that provide timely, specialist care while reducing pressure on emergency departments and hospitals. By evaluating both clinical outcomes and family experiences, this research will provide valuable evidence to strengthen and improve paediatric care pathways in regional communities.

Findings from the study may help guide future improvements to the Paediatric Acute Review Clinic and support the development of effective rural paediatric models of care across the Mid North Coast and beyond.

Examining how travel distance affects colonoscopy preparation in rural NSW

A Charles Sturt University School of Rural Medicine student research project is examining whether longer travel distances affect the quality of bowel preparation for screening colonoscopy in rural NSW.

Led by Year 4 School of Rural Medicine student Joseph Pearce, with clinical supervision from Dr Angus Brown, Rural Surgery, Parkes Hospital, and academic supervision from Drs Catherine Keniry and Mamun Huda from the School of Rural Medicine, the study focuses on patients attending a NSW Modified Monash Model (MMM)-4 hospital.

Effective bowel preparation is essential for a successful colonoscopy. When preparation is inadequate, procedures may fail and need to be rescheduled, delaying diagnosis and treatment and placing additional pressure on health services. International research suggests that patients who travel longer distances to hospital may be more likely to have poorer bowel preparation quality, but this relationship has not previously been investigated in an Australian rural setting.

This mixed-methods study combines a retrospective audit of electronic medical records from 2021 to 2025 with patient interviews. The quantitative component will examine the relationship between travel distance and bowel preparation quality, measured using the Boston Bowel Preparation Score. The qualitative interviews will explore patient experiences, including barriers to successful preparation and the types of support that may help.

The study will also consider how failed initial procedures may affect future healthcare engagement and patient outcomes.

Learn more.

Why this matters

For rural and remote patients, long travel distances can create additional barriers to accessing timely and effective healthcare. By identifying whether travel distance contributes to poorer bowel preparation and failed colonoscopy procedures, this research may help inform practical improvements such as better patient education, pre-admission support, telehealth check-ins, and transport assistance.

The findings could support more effective screening pathways, reduce delays in diagnosis and treatment, and improve colonoscopy success rates for rural Australians.

Understanding child and adolescent mental health across Australia

A cross-disciplinary Charles Sturt University research project is examining the factors that shape child and adolescent mental health across Australia, with a particular focus on geographic disparities, family influences, health behaviours and service access.

The study brings together researchers from the School of Rural Medicine and the Rural Health Research Institute, including Dr Mamun Huda, Dr Riaz Uddin, Dr Indra Choudhury, Dr Md Parvez Mosharaf, Dr Ali Ahmed, Associate Professor Rachel Rossiter and Dr Catherine Keniry.

Mental health during childhood and adolescence plays an important role in shaping wellbeing across the life course. However, many Australian children experience mental health challenges that are influenced by where they live, their family circumstances, health behaviours and access to support.

Using nationally representative data from the Longitudinal Study of Australian Children, the study will investigate the prevalence, developmental trajectories and key determinants of child and adolescent mental health. It will explore how family circumstances, parental mental health, health-related quality of life, social and environmental factors, and behaviours such as diet, sleep and substance use influence mental health outcomes.

The project will also examine help-seeking behaviours, service access and unmet need, with a particular focus on differences between rural and urban communities.

Why this matters

Children and adolescents in rural and regional areas may face different barriers to mental health support, including access to services, workforce availability and broader social determinants of health. By identifying the factors that influence mental health outcomes and service use, this research will help inform more targeted, practical and equitable strategies to support children and young people across Australia.

The findings will contribute to a stronger evidence base for improving mental health outcomes, reducing unmet need and supporting children regardless of where they live.

Exploring GP involvement in ADHD psychostimulant prescribing

A Charles Sturt University School of Rural Medicine student research project is exploring the attitudes and experiences that influence General Practitioner (GP) involvement in psychostimulant prescribing for Attention Deficit Hyperactivity Disorder (ADHD) in primary care.

The qualitative study is being conducted by Year 4 medical student Bryce Lacey, in collaboration with Dr Sarah Mollard, HealthPathways Clinical Editor Lead and Medical Educator at Healthy North Coast. Associate Professor Rachel Rossiter from the School of Rural Medicine serves as the academic supervisor.

Recent changes in NSW have expanded the role of GPs in ADHD management, including continuation prescribing and the upcoming endorsed prescriber pathway. These changes aim to improve access to timely diagnosis and treatment, reduce pressure on specialist services and support more accessible models of care.

However, the expanded role also brings new clinical responsibilities and challenges for GPs. This study uses semi-structured interviews with GPs practising within the Healthy North Coast and North Coast PHN footprints, including GPs who currently prescribe psychostimulants and those who do not.

The research will explore GP perspectives and experiences of ADHD management, confidence in diagnosis and prescribing, perceived barriers and enablers, and the role of training, guidelines and health system supports in everyday practice.

Learn more.

Why this matters

Improving access to ADHD diagnosis and treatment is an important priority, particularly in communities where specialist services may be limited or difficult to access. Understanding GP experiences will help identify what support is needed to ensure ADHD care in primary practice is safe, sustainable and responsive to the needs of both clinicians and patients.

The findings may inform future education programs, clinician supports and models of care to strengthen ADHD management in primary care settings.

Parkinson's disease research journey highlights the value of persistence and collaboration

A Charles Sturt University inter-school research team has completed a long-running project exploring Parkinson's disease, ageing, rurality and health service use in New South Wales.

The project brought together researchers Associate Professor Patricia Logan, Dr Peter Micalos, Associate Professor Alfred Wong, Associate Professor Marguerite Bramble and Dr Shanna Fealy, with the final peer-reviewed article published on 12 May 2026. What began as a conversation over coffee in 2017 ultimately led to a series of open-access publications in Q1 journals.

The research used data from the Sax Institute's **45 and Up Study**, linked with Pharmaceutical Benefits Scheme and Medicare Benefits Schedule data, to better understand the experiences and health service use of people living with Parkinson's disease. The team explored areas including medication use, mental health status, medical service use, ageing and rurality.

The project was not without challenges. The team navigated unsuccessful external grant applications, complex ethics and data approvals, large linked datasets, COVID-era access limitations, annual licensing requirements, and lengthy journal review processes. Despite these barriers, the researchers persisted, supported by faculty and school funding, university open-access publication support, and strong collaboration across disciplines and campuses.

The final article examined the impact of ageing and rurality on the use of medical services in Parkinson's disease using linked 45 and Up Study and Medicare Benefits Schedule data. It completes a body of work that also included studies on Parkinson's disease medications by location in NSW, mental health status in Parkinson's disease, and a systematic scoping review of Parkinson's disease prevalence in regional, rural and remote Australia.

Why this matters

Parkinson's disease experiences in rural and regional communities are not always well understood. By using large-scale linked data, this research provides valuable evidence on health service use, medication patterns, mental health and rurality among people living with Parkinson's disease.

The project also demonstrates the importance of persistence, interdisciplinary collaboration and institutional support in delivering research outcomes. Its journey highlights the realities of working with complex health datasets and the value of long-term commitment to research that can inform better understanding of regional health needs.

Project contact: Dr Peter Micalos

Charles Sturt leads census shaping the future digital health workforce

Charles Sturt University is helping shape the future of Australia and New Zealand's digital health workforce through a major transnational census led by Professor Kerryn Butler-Henderson, Dr Salma Arabi and Professor Kathleen Gray.

The Australian and New Zealand Specialist Digital Health Workforce Census collects critical data on the people working across digital health, including their roles, skills, qualifications, experience, demographics and workforce needs. Since its launch in 2018, the census has gathered insights from more than 2,500 professionals across three waves in 2018, 2021 and 2023.

Led by Charles Sturt, the project uses a consortium model that brings together universities, government, peak bodies and industry partners to build a stronger understanding of workforce size, composition and capability across the sector.

The census has been supported by three competitive grants and has generated more than 20 publications and over 40 presentations. Importantly, its findings have contributed to two Australian Government workforce strategies, demonstrating the value of research in informing policy, planning and education.

The fourth census is now open, giving digital health professionals across Australia and New Zealand an opportunity to contribute to the next stage of workforce evidence and planning.

Learn more.

Why this matters

Digital health is now central to the delivery of modern healthcare, from electronic health records and data systems to virtual care, analytics, cybersecurity, artificial intelligence and digitally enabled models of service delivery.

As health systems become more digitally connected, governments, employers and education providers need reliable evidence about the workforce required to support this transformation.

This Charles Sturt-led census provides that evidence. By mapping the skills, roles and needs of the specialist digital health workforce, the project is helping inform future workforce planning, professional development, education pathways and policy decisions.

It is a clear example of Charles Sturt research contributing to a health system challenge with national and transnational significance.

Dr Sabrina Syed
School of Education
Faculty of Arts and Education

A strong start: research momentum in education at Charles Sturt

Since joining Charles Sturt University in January 2025, Dr Sabrina Syed, Lecturer in the School of Education, has built a strong and rapidly expanding research profile, engaging in important discussions in higher education, teaching practice, and education technology.

Supported by dedicated research time, Dr Syed has quickly translated her work into high-quality outputs, publishing three peer-reviewed journal articles (two Q1 and one Q2 publications), while also progressing with several new research projects.

A significant achievement is her sole-authored Q1 publication in the International Journal of Research & Method in Education, which introduces an innovative approach to qualitative data collection in narrative inquiry. The study provides new methodological insights for researchers across education and the social sciences, enhancing methods for understanding lived experiences and storytelling in research.

Dr Syed is also the first author of a Q1 publication in the *Australasian Journal of Educational Technology*, developed in collaboration with colleagues including Professor Elena Prieto, Professor Susan Ledger, and Ms Claire Bates. This research evaluates the use of simulated teaching environments (SimTeach) as an alternative to traditional classroom observations, providing evidence-based insights into how technology can improve teacher education and support more flexible, scalable training models.

In addition, Dr Syed co-authored a Q2 publication with Dr Kathleen Smithers in *Cogent Education*, which examines the Australian honours student experience. The paper proposes a new conceptual framework for understanding research supervision, offering practical insights to strengthen student support and supervision practices in higher education.

Dr Syed's research focuses on learner needs, motivation, and the role of educational technology in shaping effective teaching and learning environments. Her work is characterised by strong collaboration – both within Charles Sturt and with national and international partners – enhancing the reach, relevance, and impact of her research.

Together, these achievements reflect a strong start to Dr Syed's research career at Charles Sturt, contributing to the university's commitment to innovative, research-informed education and improved student outcomes.

Associate Professor Sam Bowker and Melinda Bowker with the shadow puppet screen by Essam Ali – Photograph by Campbell Cole, 2025.

'The Soldier' sewn by Hany Mahmoud, drawn by Associate Professor Sam Bowker, photograph by Timothy Crutchett, 2025.

Shadow puppetry brings stories to life at the Chau Chak Wing Museum

Following their contribution to the Shams El-Nessem Egyptian Cultural Festival in 2025, Associate Professor Sam Bowker (Art History & Creative Arts, Charles Sturt University) and award-winning singer Melinda Bowker – who collaborate as Green Beetle – were invited back to the University of Sydney for a week of research engagement at the Chau Chak Wing Museum in January 2026.

The program featured a series of public lectures, performances, and hands-on workshops, showcasing their creative practice research in shadow theatre and storytelling. Lecture topics included Myth and Legend in Shadow Theatre, The Tentmakers of Cairo, and an English-language storytelling session inspired by the hakawati tradition of oral storytelling in Arabic cafés.

The workshops invited participants to explore their creativity by designing and crafting original shadow puppets. These works were then brought to life in a collaborative performance, accompanied by Melinda Bowker's voice and harmonium. Drawing on the Museum's collections, the performances explored themes such as *Underwater, Into the Sky, Myths & Legends, and Beetles & Bugs*, culminating in a reimagined version of The Tortoise and the Hare, in which the tortoise learns to fly.

This engagement builds on a broader body of creative practice research led by Associate Professor Bowker. Two recent exhibitions further highlight this work:

- The Shadow and the Maker

  Leeton Museum and Art Gallery (November 2025–January 2026)

- Myths of the Green Beetle

  Eastern Riverina Arts, Wagga Wagga (October 2025)

Developed in collaboration with Egyptian tentmakers and Lecturer in Creative Industries, Timothy Crutchett, these exhibitions showcase an interdisciplinary approach to storytelling, integrating shadow theatre, printmaking, poetry, textiles, puppetry, and hand-drawn design.

Why this matters

Together, these projects highlight how creative practice research can engage diverse audiences, connect cultures, and bring traditional storytelling methods into contemporary contexts.

A journey through research and language at Freiburg

A recent international research visit has strengthened Charles Sturt University's global engagement in Islamic studies, highlighting the value of collaboration, cultural exchange, and interdisciplinary scholarship.

Dr Hakan Coruh, from the Centre for Islamic Studies and Civilisation at Charles Sturt University, undertook a research visit to the University of Freiburg – one of Germany's oldest and most prestigious institutions, founded in 1457. With a rich intellectual legacy that includes influential thinkers such as philosopher Martin Heidegger, Freiburg continues to be a leading centre for humanities research.

During his visit, Dr Coruh was based in the University's Oriental Studies Seminar, within the Islamic Studies division led by Professor Johanna Pink. The centre is internationally recognised for its work on the *Global Qur'an Translation Project*, a major research initiative exploring how the Qur'an has been translated and interpreted across diverse linguistic, cultural, and historical contexts.

Dr Coruh's time at Freiburg was marked by strong international collaboration and scholarly exchange. He participated in the centre's research colloquia and engaged with leading researchers from across Europe and beyond, contributing to ongoing discussions in Qur'anic studies and Islamic intellectual history.

A key outcome of this collaboration is an upcoming special issue of the *Australian Journal of Islamic Studies*, co-edited by Dr Coruh alongside Dr Mykhaylo Yakubovic (University of Freiburg) and Professor Peter G. Riddell (SOAS, University of London). The special issue brings together contributions from an international conference, offering new perspectives on Qur'anic interpretation, hermeneutics, and the development of Islamic scholarship across regions including Central Asia, Turkey, and Southeast Asia.

In parallel with his research activities, Dr Coruh undertook intensive German language training at the Goethe-Institut, strengthening his ability to engage with German-language scholarship and further enhancing the international reach of his work.

This experience reflects a holistic approach to academic development – combining research, publication and language acquisition – and reinforces Charles Sturt's commitment to globally connected, high-impact scholarship.

Dr Coruh acknowledged the support of the 2025 Tri-Faculty Research Scheme, as well as Professor Matthew Winslade and Professor Mehmet Ozalp, whose support enabled this international engagement.

Why this matters

- Strengthens Charles Sturt's global research partnerships, connecting Australia with leading institutions in Europe
- Advances understanding of Qur'anic interpretation across cultures, supporting more inclusive and globally informed scholarship
- Showcases the value of international collaboration in producing high-quality research outputs, including Q2 journal publications
- Builds research capability through language and cultural immersion, enabling deeper engagement with global scholarship
- Reinforces Charles Sturt's commitment to research with international relevance and impact

Industry partners co-design strategies to strengthen rural mental health workforce

A Charles Sturt University-led collaboration with industry partners is addressing one of regional Australia's most pressing challenges: building and sustaining a resilient rural mental health workforce.

The pilot study brought together researchers from Charles Sturt's School of Social Work and Arts and School of Psychology with partners including The Peregrine Centre, StandBy Support After Suicide, and The Healthy Communities Foundation Australia.

The project has produced a practical, evidence-based framework to support non-government organisations (NGOs) in improving recruitment, retention, and staff wellbeing across regional New South Wales.

Rural mental health services continue to face significant workforce shortages, with many organisations struggling to attract, support, and retain staff in demanding and often isolated environments. Barriers such as limited resources, workforce burnout, and challenges in maintaining safe and supportive workplaces directly impact service delivery and outcomes for rural communities.

Through a co-designed, industry-engaged approach, the research identified key strategies that enable organisations to build stronger, more sustainable teams. These include:

- Being active and visible within local communities
- Building supportive workplace cultures grounded in trust
- Recruiting for fit as well as capability
- Managing risk in complex service environments
- Supporting individual growth alongside team cohesion

These focus areas informed nine practical strategies outlined in Figure 1 that organisations can implement immediately to enhance workforce stability and wellbeing.

Funded by NSW Health through The Peregrine Centre under the Rural Mental Health Partnership Grant, the project has already secured additional support for a second phase—demonstrating strong sector demand and impact.

Why this matters

This work highlights how Charles Sturt research is translating into real-world solutions, equipping organisations with the tools to better support their workforce—and ultimately improve mental health outcomes for rural communities.

Reference

Short, M., Rush, E., Dixon, E., Ivory, N., Bonner, M., Ansell, S., Hemsted, J., & Cotter, G. (2025). Industry Partners' Summary of Research, Impact and Resources Report: Effective recruitment, retention, and wellbeing of non-government organisation rural mental health staff: A pilot study. A Recruitment, Retention Researchers publication. Link: 10.26189/ff886dfc-4b4c-4531-b706-e015e01094fe

Reimagining schools for belonging through play, voice, and wellbeing

Associate Professor Brendon Hyndman from Charles Sturt University's Faculty of Arts and Education has brought nearly two decades of research on children's play and wellbeing to a global audience through his recent TEDx talk, *Reimagining Schools for Belonging*.

Delivered at TEDx Albury-Wodonga and now publicly available, the talk translates Brendon's extensive body of research into a compelling vision for how school environments can better support children's sense of belonging, voice, and wellbeing.

Translating research into real-world impact

Brendon's research spans school playground design, children's agency in outdoor environments, recess policy, teacher perspectives on play, and the health and social outcomes of active school spaces. His work has contributed to international collaborations, including the Global Recess Alliance, Play Australia, and research insights from schools across 25 countries.

The TEDx talk brings these strands together, highlighting how everyday school environments—particularly informal and outdoor spaces—play a critical role in shaping children's learning, wellbeing, and social development.

Rethinking school environments

The talk explores several key themes:

- Belonging as a foundation for learning and wellbeing
- Play as a driver of social connection, confidence, and physical health
- The role of schoolyard design and policy in enabling or limiting student voice
- The need for integrated, research-informed approaches to support children's rights and experiences

Together, these insights challenge traditional approaches to schooling and call for more holistic, inclusive, and evidence-based models of education.

Why this matters

At a time of growing concern around student wellbeing, engagement, and equity, this research highlights the importance of designing school environments that support the whole child—not just academic outcomes.

By demonstrating how play, space, and student voice intersect to influence wellbeing and learning, the work provides practical insights for educators, policymakers, and school leaders seeking to create more inclusive and health-promoting learning environments.

Engaging audiences beyond academia

The TEDx platform has enabled this research to reach educators, policymakers, and communities beyond academia, supporting broader conversations about the future of schooling.

This work reflects Charles Sturt's strength in education and community-focused research, demonstrating how evidence can inform practice, shape policy discussions, and improve outcomes for children and young people.

Watch the full TEDx talk.

Associate Professor
Belinda Cash
Faculty of Arts and Education
University Lead, Manna Institute,
School of Social Work and Arts

Strengthening rural mental health through national collaboration

As a founding partner of the Manna Institute, Charles Sturt University continues to play a central role in strengthening rural and regional mental health research across Australia. This contribution is highlighted in Manna's recent evaluation summary, which highlights significant progress in building a nationally connected, impact-focused research network.

The evaluation demonstrates Manna's success in fostering collaboration across universities, health services, community organisations, and lived experience experts, with more than 200 affiliates representing 31 institutions. Since its establishment, the Institute has supported a growing portfolio of collaborative projects and initiatives, helping address the complex and place-based mental health needs of rural, regional, and remote communities.

A key achievement has been the strengthening of research capacity across the sector. Manna has supported higher degree research candidates and early- and mid-career researchers through targeted programs, mentoring, and collaborative opportunities. Charles Sturt has played a significant role in these efforts, contributing to initiatives that strengthen the regional research workforce and support locally led, impactful research.

The evaluation also highlights progress in research translation and engagement. Manna has facilitated connections between researchers, policymakers, and service providers, supporting the uptake of evidence into practice. These partnerships are critical in ensuring that research leads to tangible improvements in service delivery and outcomes. Charles Sturt researchers have been actively involved in this work, reinforcing the university's focus on applied, community-informed research.

Importantly, the findings point to Manna's growing national profile and influence. The Institute has established itself as a key platform for shaping rural mental health priorities, advocating for investment, and elevating the voices of regional communities within the broader mental health landscape. For Charles Sturt, involvement in Manna continues to provide valuable opportunities for collaboration, funding, and sector engagement.

For more information about the evaluation, view the March edition of Trunk Line newsletter

Why this matters

Through its leadership in the Manna Institute, Charles Sturt University is strengthening its position as a national leader in rural and regional health research.

This work delivers real-world impact – building research capacity, informing policy, and improving mental health outcomes in the communities Charles Sturt serves.

From global policy to future practice: Charles Sturt shaping social development on the world stage

Charles Sturt University Professor Manohar Pawar is contributing to global efforts to advance social development, engaging in high-level policy dialogue at the United Nations and inspiring the next generation of social work practitioners internationally.

In February 2026, Professor Pawar participated as a delegate of the International Consortium for Social Development (ICSD) at the 64th Commission for Social Development at the United Nations in New York.

The Commission brought together global leaders to address the theme of "*Advancing social development and social justice through coordinated, equitable and inclusive policies*". Discussions focused on critical challenges, including poverty, inequality, employment, and the role of civil society, with strong emphasis on implementing the Doha Political Declaration through coordinated national and international action.

As part of this global forum, Professor Pawar curated, moderated, and presented at the ICSD side event, "*Implementing the Doha Political Declaration: Exploring strategies for cross-sector collaborations and integrated approaches*".

The event was opened by Her Excellency Ambassador Yojna Patel, Deputy Permanent Representative of India to the United Nations, who highlighted progress in poverty alleviation, women-led development, and international cooperation.

Bringing together global experts, the session explored actionable strategies to address interconnected challenges including poverty, inequality, conflict, and climate change. Key priorities included:

- Advancing dignity and equity through collective action
- Strengthening international partnerships and cooperation
- Developing inclusive, integrated policy approaches, including a new eco-social contract
- Addressing global financing gaps and reforming financial systems
- Leveraging digital technologies to accelerate social progress

The discussions also highlighted the importance of decolonising research, recognising the role of social workers as frontline contributors, and building stronger coalitions between policy, practice, and research to drive transformative change.

In addition to leading the side event, Professor Pawar contributed to several Commission sessions and side events, reinforcing the importance of coordinated, cross-sector responses to global social challenges.

In closing the ICSD session, Professor Pawar proposed the establishment of **a World Social Development Day** to strengthen global awareness and commitment to the Doha Political Declaration.

Professor Manohar Pawar at the 64th Commission for Social Development, New York.

Extending this international engagement, Professor Pawar also visited Northern Michigan University (USA), where he addressed social work students and staff on the future of the profession.

Drawing on a historical perspective, he encouraged a shift away from nation-state competition towards a more unified global approach—one that ensures equitable access to social security, healthcare, and education. He also inspired students to consider careers in international social work, reinforcing the importance of globally connected practice.

Why this matters

This work demonstrates Charles Sturt University's growing influence in global social development – contributing to international policy dialogue while shaping future practitioners. It reflects the university's commitment to advancing inclusive, collaborative solutions to complex challenges, from regional communities to the global stage.

Professor Manohar Pawar addressing staff and students at Northern Michigan University.

From global voice to global action: Charles Sturt shaping social development at the United Nations Summit in Doha

Charles Sturt University Professor Manohar Pawar has played a significant role in advancing global conversations on social development at the **Second World Summit for Social Development**, held in Doha, Qatar, from 4–6 November 2025.

In the lead-up to the Summit, the United Nations invited global contributions to the question: *"What does social progress mean to you?"*

Professor Pawar's response was selected from hundreds of submissions and featured internationally as part of the campaign.

His statement emphasised equity, sustainability, and global cooperation:

"Social progress means ensuring universal access to social protection, health, education and employment and environmental sustainability. It also means decolonisation, altering and creating new institutions, preventing domination by a few countries and building a united world to prosper together."

This contribution helped shape global dialogue ahead of the Summit, which reaffirmed international commitments to poverty eradication, decent work, social integration, and translating commitments into action.

At the Summit, Professor Pawar contributed across multiple high-level engagements.

He was invited as a panellist in a United Nations solutions session titled:

"Turning Global Commitments into Local Impact: Financing for a Just and Inclusive Transition."

In this session, he highlighted the urgent need to align global financing systems with social justice outcomes, noting that meaningful progress requires both resource mobilisation and stronger public awareness of the social development agenda. He also reiterated the importance of establishing a **World Social Development Day** to mobilise action across communities, institutions, and governments.

Professor Pawar also curated and moderated a solutions-focused session titled:

"Accelerating Social Development: Solution-Focused Research, Advocacy, and Practice—From Copenhagen to Beyond the Doha Declaration."

The session—competitively selected by the United Nations—was developed through the International Consortium for Social Development, where Professor Pawar served as President from 2017 to 2025.

Bringing together leading researchers, policymakers, and United Nations representatives, the session highlighted evidence-based pathways to achieving universal social protection. Discussions emphasised that while cash transfers are important, they must be complemented by broader systems of support, institutional reform, and coordinated policy approaches.

Complementing this work, Professor Pawar also curated an international exhibition titled *"Understanding Social Development: From Awareness to Action."*

The exhibition, also competitively selected by the United Nations, showcased key ideas in social development and highlighted leading research centres, including Charles Sturt University's **Social Work and Social Development Research Alliance.**

Through interactive displays, presentations, and visual materials, the exhibition engaged global audiences in exploring the meaning, scope, and impact of social development. It provided a platform to showcase Charles Sturt's research strengths and contributions to international social development scholarship.

Why this matters

From shaping global narratives to convening international expertise and showcasing research on the world stage, this work demonstrates Charles Sturt University's growing influence in global social development. It highlights the University's role in connecting research, policy, and practice to drive inclusive and sustainable solutions to complex challenges worldwide.

Ignatius Chida, Professor Manohar Pawar and Dr Trish Mackey at the Exhibition.

Charles Sturt Professor advances global dialogue on environmental justice and intergenerational solidarity

Professor Manohar Pawar has contributed to regional and global dialogue on climate and social development through invited keynote and workshop presentations at the 28th Asia-Pacific International Conference on Social Work, held in Colombo, Sri Lanka.

The conference, themed *Social Work Responses to Climate Change and Other Environmental Issues*, brought together academics, practitioners, and policymakers from across the region. It was jointly organised by the Sri Lankan Association of Professional Social Workers, the National Institute of Social Development, the Asia Pacific Association of Social Work Education, and the International Federation of Social Workers (Asia Pacific).

In his keynote address, *The Role of Social Work in Environmental Justice and Resilience*, Professor Pawar explored the complex intersections between climate change, social systems, and human wellbeing. He examined the concepts of environmental justice and resilience – alongside environmental injustice and vulnerability – to better understand how climate change impacts both ecological and social systems.

While acknowledging the importance of mitigation and adaptation strategies, he identified four critical challenges shaping global responses:

- navigating contested evidence and political perspectives
- setting and meeting meaningful climate targets
- sharing responsibility and resources through a solidaristic approach
- ensuring fairness and justice in decision-making

Professor Pawar emphasised that, despite these complexities, practical and ethical action must prevail. A “commonsense” approach – grounded in responsibility, care for others, and environmental stewardship – offers a pathway forward.

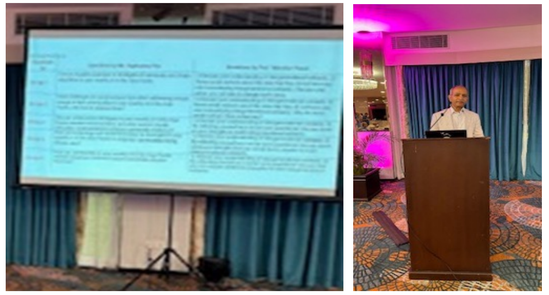
As part of the conference program, Professor Pawar was also invited to contribute to a preconference workshop, *Strengthening Intergenerational Solidarity for the Future in the Asia-Pacific Region*. Here, he called on social workers to take a stronger leadership role in environmental movements, positioning intergenerational solidarity as central to addressing climate challenges.

Drawing on global examples, he highlighted the Chipko Movement in India – a non-violent, community-led initiative where local communities, particularly women, protected forests by embracing trees to prevent deforestation. He also pointed to environmental leadership emerging across the Asia-Pacific region, spanning diverse fields including nursing, journalism, environmental science, and Indigenous activism.

Professor Pawar challenged the profession to reflect on its role, asking why social workers – despite strong commitments to human rights, equity, and social justice – are not more visibly leading environmental action. He emphasised that while individual and family-level support remains critical, collective action and movement-building can drive impact at scale.

Why this matters

As climate change intensifies, the need for integrated social and environmental responses is growing. This work highlights the critical role social workers can play – not only in supporting individuals and communities, but in leading collective action, shaping policy, and strengthening intergenerational solidarity to build more sustainable and equitable futures.



Professor Manohar Pawar speaking at the preconference workshop.

Charles Sturt Professor outlines future directions for international social work at global conference

Charles Sturt University Professor Manohar Pawar has contributed to international dialogue on the future of social work as a plenary speaker at the 36th Council of International Fellowship (CIF) International Conference, held in Mumbai, India.

The conference, themed "*International Relations in a Changing World: Way Forward for Social Work*", was hosted by the Tata Institute of Social Sciences and CIF India from 9–13 November 2025, bringing together global practitioners, scholars, and policymakers.

In his plenary address, Professor Pawar outlined key priorities for advancing international social work and social development in an increasingly complex and interconnected world.

He emphasised the importance of:

- Enabling and empowering the role of social workers
- Strengthening commitment to quality practice
- Advancing a more unified global approach through universal access to social protection, healthcare, and education

Highlighting persistent global inequalities, Professor Pawar noted that nearly half of the world's population lacks access to social protection, many children remain excluded from education, and access to quality healthcare remains uneven. Addressing these fundamental challenges, he argued, is central to achieving the **Sustainable Development Goals** and shaping the future of social work.

Professor Pawar called for strengthened global collaboration and sustained commitment to inclusive systems that support vulnerable populations and promote long-term social development outcomes.

Why this matters

This plenary engagement highlights Charles Sturt University's leadership in shaping international social work discourse. It reinforces the University's contribution to advancing global conversations on equity, inclusion, and sustainable development through research, education, and professional practice.

Professor Manohar Pawar speaking at the 36th CIF international conference, TISS, Mumbai, 10th November 2025.

Dr Natalie Thompson
School of Education
Faculty of Arts and Education

Dr Jacquie Tinkler
School of Education
Faculty of Arts and Education

Dr Ryan Al-Natour
School of Education
Faculty of Arts and Education

Distinguished Professor Sharynne McLeod
Faculty of Arts and Education
Rural Health Research Institute
Children's Voices Centre

Dr Nick Ruddell
School of Indigenous Australian Studies
Faculty of Arts and Education

Associate Professor Cate Thomas
School of Social Work and Arts
Faculty of Arts and Education

Rethinking the purpose of education: Research-led conversations shaping inclusive classrooms

The challenge

Education systems worldwide are experiencing swift change – from the rise of generative artificial intelligence to increasing inequality and mounting pressures on teachers and students.

Educators are being asked not only to teach curriculum but also to support student wellbeing, inclusion, and democratic participation in a complex and rapidly evolving society.

These challenges are especially evident in regional and rural communities, where teachers often encounter extra barriers like workforce shortages and limited access to professional learning.

The research

Researchers at Charles Sturt University's School of Education are investigating ways to make education systems more inclusive, equitable, and responsive to modern challenges.

Their work examines areas such as:

- inclusive and disability-affirming classrooms
- antiracist pedagogy and social justice in education
- children's voices and participation in learning
- the role of generative AI and digital technologies in education
- community-based and culturally responsive education models.

This research aims to better understand how schools can support diverse learners and strengthen education systems for the future.

Translating research into action

In 2025, Charles Sturt researchers put this research into practice through *What Are Schools For?*, a free eight-part online seminar series aimed at sparking a national conversation about the purpose of education.

Led by researchers including Dr Natalie Thompson, Dr Jacquie Tinkler, Dr Ryan Al-Natour, Distinguished Professor Sharynne McLeod, Dr Nick Ruddell, and Associate Professor Cate Thomas, the series explored topics such as:

- generative AI and human agency in education
- antiracist pedagogy
- intersectionality in classrooms
- listening to children's voices
- community-based education models
- disability-affirming approaches to complex learning behaviours.

The seminars aimed to be accessible to educators, students, and community members across Australia, especially those working in regional and remote areas.

The impact

The series drew nearly 1,000 registrations from across Australia and abroad, bringing together teachers, researchers, students, and

community members in a collective discussion about the future of education.

By translating research into accessible public dialogue, the seminars helped educators:

- reflect on the broader purpose of schooling
- explore inclusive approaches to teaching and learning
- engage with emerging challenges such as generative AI in classrooms.

Session recordings and resources continue to enhance professional learning for educators beyond the live events.

Looking ahead

The seminar series has strengthened connections among researchers, educators, and communities, helping ensure that research insights inform real-world classroom practice.

As an annual initiative, the seminar series will return in 2026, continuing to build momentum and foster collaboration across the sector.

Resources from the seminars are being made publicly accessible to support ongoing dialogue and professional learning in schools across Australia.

Supporting the next generation of researchers through the Graduate Certificate in Research

Charles Sturt University's Graduate Certificate in Research is helping early-stage researchers take their first important steps towards higher degree research.

Over two days in May, students in the Graduate Certificate in Research participated in an online colloquium as part of the candidate endorsement process. Supported by their supervisors, students presented their research proposals and project intentions, gaining valuable experience in explaining their ideas, responding to academic feedback, and learning from the research approaches of their peers.

The colloquium was coordinated by Dr Lorraine Gaunt, Course Director, Research Pathways, with Subject Convenors Dr Nick Ruddell and Dr Richard Liu, and supported through the leadership of Professor Sarah O'Shea. The program sits within the Faculty of Arts and Education portfolio and provides an important pathway for students who may go on to undertake PhD study.

Professor Matthew Winslade, Associate Dean Research in the Faculty of Arts and Education, said the quality of the presentations was very high, with students demonstrating strong preparation and engagement.

The sessions also created a valuable community of practice, bringing together students, supervisors and subject coordinators in a supportive online environment. Students were given 10 minutes to present their research and then faced two questions from Dr Nick Ruddell and Dr Richard Liu where they had to respond and justify their decisions. For students at the beginning of their research journey, the opportunity to present, observe others, and receive critical feedback helps build confidence, broaden their understanding of research styles, and strengthen their readiness for future higher-degree research.

Dr Gaunt said the team had "high hopes for many of these students to transition to PhDs in the coming years."

Why this matters

Strong research pathways are essential to building Charles Sturt's future research capability. Programs such as the Graduate Certificate in Research help identify, support and develop emerging researchers, while also strengthening supervisory relationships and research culture across the University.

By giving students a structured and supportive way to test and refine their ideas, the program is helping create a pipeline of future HDR candidates who are better prepared to contribute to research that matters to our regions, communities and beyond.

Hannah Greig
HDR candidate
Faculty of Business, Justice and Behavioural Sciences

Amplifying young voices in out-of-home care

New research from Charles Sturt University is bringing critical attention to the lived experiences of young people in out-of-home care – centring voices that are often missing from research and policy discussions.

Hannah Greig, a Higher Degree Research (HDR) student in the School of Psychology, has published her first article from her doctoral research in the Q1 journal Child Abuse & Neglect. The study, *"Don't stand up on unlevel ground": Care leavers' experiences of out-of-home care*, explores the long-term impacts of care systems from the perspectives of those who have experienced them firsthand.

Hannah's earlier honours research examined the perspectives of care workers and professionals supporting young people with cognitive disability in out-of-home care. However, this work highlighted a critical gap: the absence of the voices of young people themselves.

Her PhD addresses this gap by focusing on the experiences of young people in care. Despite facing significant challenges in securing ethical and institutional approvals – common in sensitive research contexts – Hannah has successfully progressed her work and achieved early publication in a leading international journal.

In this study, Hannah conducted in-depth interviews with seven care leavers, whose accounts provide powerful insights into life within the care system. The findings highlight how short-term and inconsistent care arrangements can undermine young people's need for stability, meaningful relationships, and a sense of participation in their own lives.

A key strength of Hannah's research is its commitment to inclusive and culturally informed approaches. Her work has involved consultation and collaboration with First Nations communities, with three of the study participants identifying as First Nations.

Hannah is now extending this research by interviewing young people currently in out-of-home care, with further findings expected to contribute to improved policy, practice, and support systems.

This research highlights the importance of listening to lived experience in shaping more effective and compassionate care systems, reinforcing Charles Sturt University's commitment to research that drives meaningful social impact.

Why this matters

- Brings forward the voices of young people in out-of-home care, which are often missing from research and policy
- Highlights how instability in care systems impacts wellbeing, relationships, and long-term outcomes
- Provides evidence to inform more consistent, child-centred care practices and policy reform
- Supports more inclusive and culturally responsive approaches, including engagement with First Nations communities
- Reinforces the importance of lived experience in shaping better support systems for vulnerable young people

Supervisory team

- Associate Professor Andrew McGrath, School of Psychology, Faculty of Business, Justice and Behavioural Sciences
- Associate Professor Rachael Fox, School of Psychology, Faculty of Business, Justice and Behavioural Sciences
- Professor Linda Deravin, University of Southern Queensland

Reference

Greig, H., McGrath, A., Fox, R., & Deravin, L. (2026). "Don't stand up on unlevel ground": Care leavers' experiences of out-of-home care. *Child Abuse & Neglect, 173*, 107934. https://doi.org/10.1016/j.chiabu.2026.107934

Professor Mark Nolan
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AGSPS and CLJ researchers shaping law reform

Research from Charles Sturt University's Australian Graduate School of Policing and Security (AGSPS) and Centre for Law and Justice (CLJ) is influencing law reform at both state and national levels.

Recent debate in the New South Wales Legislative Council on the *Crimes Amendment (Countering Violent Extremism) Bill 2026 (NSW)* directly drew on research by Associate Professor Emma Colvin and Associate Professor Kristy Campion, with one study quoted at length during parliamentary discussions on defining "violent extremism" and shaping proposed grooming and recruitment offences. (See pp. 79–80 of the NSW Legislative Council Hansard for 4 Feb 2026.

The Hon Damien Tudehope described their research as two "insightful studies into the pathways through which vulnerable people, including children, become involved in violent extremism", highlighting its relevance to contemporary policy challenges.

At the national level, Professor Mark Nolan and Dr Samantha Jones contributed to the Independent National Security Legislation Monitor (INSLM) review of the definition of terrorism. Professor Nolan subsequently provided oral testimony on 10 March 2026 as part of this review, with findings to inform the INSLM's final report due in 2026.

Professor Nolan has also contributed to international policy discussions through an invited presentation at Dongguk University in Seoul, examining the inclusion of "mental harm" within the legal definition of terrorism, alongside leading international scholars and practitioners.

Critically, this research has informed federal legislative reform. Drawing on the work of Associate Professors Campion and Colvin, Professor Nolan led a submission to the Parliamentary Joint Committee on Intelligence and Security during its inquiry into the *Combatting Antisemitism, Hate and Extremism Bill 2026 (Cth)*. In a consultation process that received 475 submissions in three days, his submission provided a clear, evidence-based case for addressing the grooming and recruitment of vulnerable individuals into extremist activity (see: submission 42, Submissions – Parliament of Australia).

This contribution supported the introduction of new grooming offences, now enacted under the *Criminal Code Act 1995 (Cth)*, aligning federal law with contemporary patterns of extremist recruitment.

Alongside these policy contributions, researchers have played an active role in public debate during a period of heightened national focus on extremism and antisemitism. Dr Samantha Jones has contributed extensive expert commentary across national and international media, helping inform public understanding of extremist behaviour and policy responses.

Why this matters

This work demonstrates Charles Sturt's role in translating research into policy impact – informing legislation, strengthening national security frameworks, and shaping responses to complex societal challenges.

Policy Impact

- Research cited in NSW Legislative Council Hansard, informing debate on countering violent extremism
- Evidence contributed to national review processes, including the INSLM Defining Terrorism Review
- Oral testimony delivered to INSLM (March 2026) informing forthcoming national recommendations
- Research informed a Parliamentary Joint Committee inquiry, supporting new federal grooming offences
- Demonstrates direct impact on Commonwealth legislation (Criminal Code Act 1995)
- Extensive national and international media engagement, with Dr Samantha Jones contributing to multiple outlets including AAP, 7 News, The Canberra Times, Bloomberg Insight, and international networks

Business School hosts global ethics conference in regional Australia

Charles Sturt University's Business School hosted the 15th Australasian Business Ethics Network (ABEN) Annual Conference and Higher Degree by Research (HDR) Workshop from 26–28 November 2025 at its Bathurst campus. The event marked a significant milestone for ABEN, being the first time the conference was held in regional Australia, and highlighted Charles Sturt's dedication to extending national and international scholarly engagement beyond metropolitan locations.

Focused on the theme *"On the Road" – ethical and sustainable decision-making in a disruptive era*, the conference attracted about 90 delegates from across the Asia-Pacific region and Europe. Besides Australia, participants from countries such as China, Japan, New Zealand, Norway, and Southeast Asia attended, with a mixed format allowing strong in-person participation alongside virtual attendance. Charles Sturt's Business School staff contributed as presenters, organisers, and volunteers.

Over three days, the program offered a wide range of scholarship opportunities, with more than 50 presentations held both on campus and online. A dedicated HDR workshop supported emerging scholars through professional development activities and student presentations, reinforcing ABEN's role in building capacity for early-career researchers. Attendance by HDR candidates increased notably, thanks to external funding from the UK-based Society for the Advancement of Management Studies.

The conference featured several impactful sessions. A keynote by Professor Clive Hamilton explored ethical responsibility in the Anthropocene from a systems perspective, while an interactive international session led by Dr Isabel Rimanoczy challenged attendees to rethink common assumptions about leadership, sustainability, and collective responsibility. Another session with Professor Brendon Lyon critically assessed regulatory frameworks in accounting and auditing, highlighting ongoing ethical vulnerabilities and governance challenges.

Cultural engagement and connection to place were integral to the conference experience. Delegates participated in a Welcome to Country and smoking ceremony led by Wiradyuri Elder Uncle Jade Flynn, setting the tone for the conference. Additionally, social activities showcasing the Bathurst region included guided ecological walks and visits to Mount Panorama/Wahluu and the National Motor Racing Museum.

Supported by extensive, collegial staff collaboration, ABEN 2025 successfully integrated rigorous academic debate, research training, cultural learning, and regional engagement, positioning Charles Sturt University as a key contributor to contemporary business ethics discourse.

Why this matters

Hosting the Australasian Business Ethics Network Conference in Bathurst positions Charles Sturt University as a global convenor of ethical leadership and sustainability conversations – grounded in regional Australia.

It strengthens international research networks, builds HDR capability, and reinforces the university's role in translating research into real-world impact across business, policy and society.

ABEN participants

Eco-walk on Boundary Road Reserve

ABEN Committee members

Charles Sturt academic contributes to global dialogue on meritocracy and workplace diversity

Charles Sturt University Associate Professor Cliff Lewis has contributed to international discussions on workplace diversity as part of the University of Canterbury Business School's Thought Leadership Series in Ōtautahi, Christchurch.

Joining a panel of global experts, Associate Professor Lewis explored the paradox of meritocracy, challenging how merit is defined, recognised, and valued.

He highlighted how dominant understandings of achievement often reflect narrow, Western perspectives, and how social and structural barriers can influence who is able to demonstrate and be recognised for their merit. He also noted that merit is not assessed equally, with research and contributions from marginalised groups more likely to be questioned or undervalued.

The discussion emphasised the need for more inclusive approaches to recognising diverse forms of knowledge and contribution.

Why this matters

This engagement reinforces Charles Sturt University's role in shaping global conversations on equity, diversity, and inclusion.

Unlocking the value of lactoferrin for health and the dairy industry

Charles Sturt researchers are working with dairy industry partners to improve the extraction of lactoferrin – one of the most valuable bioactive proteins found in milk.

Lactoferrin is naturally abundant in human milk and plays key roles in immunity, inflammation regulation, and brain development. Its antimicrobial, antiviral, and immunomodulatory properties have made it a highly sought-after ingredient in nutraceuticals and premium dairy products. However, efficiently isolating lactoferrin from bovine milk remains a significant technical challenge.

Professor Wang's research group is addressing this challenge by developing more efficient and sustainable extraction methods. As part of this work, PhD candidate Jaishree Ravindran is investigating how lactoferrin can be optimally isolated and purified using ion-exchange chromatography.

Her research examines how processing variables—such as elution strategies, milk source (raw versus pasteurised skim milk), and resin characteristics—affect protein yield and purity. The work also considers lactoperoxidase, a valuable by-product, ensuring a holistic approach to protein recovery.

Improving lactoferrin extraction has significant implications for the dairy industry, with potential to increase efficiency, reduce waste, and enhance economic returns in large-scale production.

Beyond bovine milk, Jaishree is also analysing lactoferrin and lactoperoxidase levels in goat milk across different stages of lactation. By examining colostrum, transition, and mature milk – as well as the influence of parity – her research is generating new insights into protein dynamics in Australian goat milk and opportunities for value-added products.

Her work has already identified processing conditions that enhance protein recovery and improve separation efficiency – important steps toward industry application.

Jaishree recently presented her research at the XVII International Lactoferrin Conference in Mazatlán, Mexico (November 2025), where she received the **Genevieve Spik Award for the quality and impact of her work.**

Through this research, Charles Sturt is helping unlock the full value of lactoferrin—advancing human health, supporting sustainable dairy processing, and enabling innovation in high-value food products.

Jaishree Ravindran


XVII INTERNATIONAL CONFERENCE ON LACTOFERRIN.
STRUCTURE, FUNCTION & APPLICATIONS.
Mazatlán, Sinaloa, México, 09 - 13 November, 2025

THE GENEVIEVE SPIK AWARD

The International Scientific Committee on Lactoferrin hereby expresses its sincere appreciation to

RAVINDRAN Jaishree

"Develop innovative methods for optimising bovine milk lactoferrin production using an ion exchange process"

has been selected for the GENEVIEVE SPIK AWARD at the XVII International Conference on Lactoferrin, held in Mazatlán, Sinaloa, Mexico from November 9 th to 13 th , 2025

Sincerely,
On behalf of the International Scientific Committee on Lactoferrin

Prof. Dr. Bo Lonnerdal
President of the International Scientific Committee of Lactoferrin

Prof. Dr. Nidia León-Sicairos
Chair of the XVII International Conference on Lactoferrin

Professor Geoff Currie
Physics and Nuclear Science discipline, School of Dentistry and Medical Sciences
Faculty of Science and Health

Global recognition for Charles Sturt nuclear medicine research

Charles Sturt University's research excellence in nuclear medicine continues to gain strong global recognition, with Professor Geoff Currie AM ranked among the world's leading researchers in medical imaging, radiology, and artificial intelligence.

Professor Currie is part of Charles Sturt's emerging Physics and Nuclear Science discipline within the School of Dentistry and Medical Sciences – an area of growing strategic focus for the university.

Professor Currie's work has been recognised through multiple international benchmarking systems that assess research impact, quality, and influence. According to ScholarGPS, which evaluates more than 12.5 million scholars worldwide, he is consistently ranked in the top 0.1 per cent globally across all fields, with even stronger performance in specialised areas including medical imaging, radiology, and artificial intelligence.

His standing is further reinforced through inclusion in Stanford University–Elsevier's "World's Top 2 per cent Scientists" rankings for five consecutive years (2021–2025). In 2025, Professor Currie achieved his highest ranking to date, placing in the top 0.15 per cent globally across all subfields and in the top 0.04 per cent worldwide for nuclear medicine and medical imaging – ranking second in Australia in this discipline.

This sustained recognition reflects both the scale and impact of his research contributions. In 2025 alone, Professor Currie authored multiple publications in leading Q1 and Q2 journals, advancing knowledge across key areas including:

- Precision theranostics and radiopharmaceutical therapies
- Artificial intelligence in nuclear medicine and medical imaging
- Sustainability in nuclear medicine practice
- Prostate cancer detection and cardiovascular imaging

Working in collaboration with national and international partners – including adjunct colleagues Professor Eric Rohren, Professor Elizabeth Hawk, Professor Hosen Kiat, and Charles Sturt PhD candidate Peter Tually – this research is helping shape the future of nuclear medicine.

Notably, several publications explore the growing role of artificial intelligence in clinical imaging, including its potential benefits as well as ethical considerations, biases, and limitations. Other work focuses on emerging theranostic approaches, which combine diagnostic imaging and targeted therapy to enable more personalised and effective treatment pathways.

Together, this body of work positions Charles Sturt at the forefront of innovation in nuclear medicine and medical imaging. It also reinforces the university's commitment to delivering research that drives clinical advancement, informs global practice, and improves patient outcomes.

Sean Hayward
Faculty of Science and Health

Understanding the science of heat: new insights into capsaicin in food

New research from Charles Sturt University is shedding light on how capsaicin – the compound responsible for the heat in chilli peppers – affects taste, perception, and potential health outcomes.

A recent study led by Honours student Sean Hayward, under the supervision of Dr David J. Leaver and Dr Andrea Crampton from the School of Dentistry and Medical Sciences, has been published as an open-access article in *Food Science & Nutrition*. The systematic review explores the relationship between measured capsaicin levels in foods and the sensory experiences they produce.

Capsaicin is widely recognised for its distinctive "heat", typically measured using the Scoville Heat Unit (SHU) scale. The study confirms that higher concentrations of capsaicin generally align with higher SHU values. It also highlights links between capsaicin exposure and physiological responses, as well as individual sensitivity to taste and chemesthetic sensations—the sensory experiences associated with irritation, temperature, and texture.

However, the research reveals a more complex picture. Despite clear links between capsaicin concentration and SHU ratings, there is no consistent relationship between measured capsaicin levels and how individuals perceive heat or sensory intensity. This variability suggests that factors beyond simple concentration—such as individual biology, food composition, and sensory interactions—play a significant role in how capsaicin is experienced.

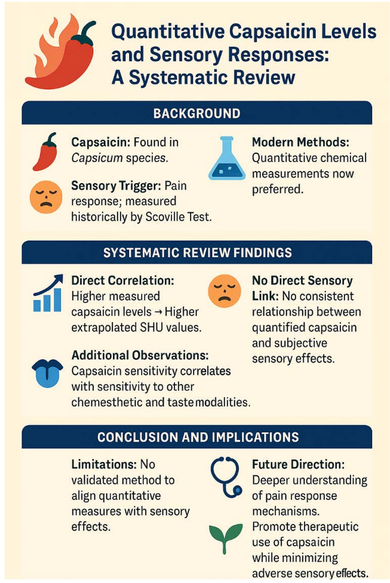
These findings point to the limitations of the traditional SHU scale and highlight the need for more advanced, quantitative approaches to understanding food sensory properties. The research suggests that emerging technologies, including machine learning and electronic "tongue" and "nose" systems, could help standardise the measurement of chemesthetic responses in the future.

Beyond flavour, capsaicin has growing relevance in health and medicine. It has been associated with a range of therapeutic benefits and is already used clinically—for example, in treatments for neuropathic pain. However, the pain response triggered by capsaicin consumption can limit its broader adoption.

By improving understanding of how capsaicin is perceived and how this response can be influenced, the research opens new pathways for developing food-based and therapeutic applications. This aligns with the growing "Food is Medicine" movement, where dietary compounds are explored for their potential to support health and wellbeing.

Why this matters

This work highlights Charles Sturt University's contribution to innovative food science and health research, combining sensory science, technology, and clinical insight to better understand how what we eat affects how we feel.



Did you know?

- The heat in chilli peppers comes from capsaicin, a compound that activates pain receptors—not taste buds.
- The Scoville Heat Unit (SHU) scale measures chilli "heat", but it doesn't always reflect how spicy a food feels to different people.
- Two foods with the same capsaicin level can be experienced very differently depending on individual sensitivity and food composition.
- Capsaicin is used in medicine, including treatments for neuropathic pain.
- Emerging technologies like AI and electronic "tongue" and "nose" systems could one day replace the traditional SHU scale.

Dr Annette Traise
School of Nursing, Paramedicine and Healthcare Sciences
Faculty of Science and Health

Advancing kidney care: new evidence highlights the role of exercise in chronic disease

In 2026, the School of Nursing, Paramedicine and Healthcare Sciences was very proud to announce that Dr Annette Traise completed her PhD. Annette is one of only a handful of dual-registered Paramedic-Pharmacists, so she brings a truly unique offering to Charles Sturt.

Annette's doctoral program focused on the impact of exercise on patients with chronic kidney disease (CKD). She undertook a staged research program, beginning with a scoping review, followed by two systematic reviews and meta-analyses of randomised controlled trials, all of which have been published. Her work evaluated the effects of exercise across the CKD continuum, including pre-dialysis populations and those receiving renal replacement therapy.

Her findings provide high-quality evidence that exercise training significantly improves aerobic capacity, functional performance, and both physical and mental quality of life. Importantly, her analyses demonstrated favourable effects on cardiometabolic and inflammatory markers, as well as kidney function indices such as eGFR and cystatin-C.

The evidence Annette generated suggests that early implementation of structured exercise may slow CKD progression in those diagnosed in earlier stages. In dialysis populations, supervised moderate-intensity aerobic and resistance training was shown to be safe, feasible, and clinically beneficial.

Beyond efficacy, Annette identified important gaps in implementation and equity of access. CKD disproportionately affects marginalised communities, yet structured exercise programs remain inconsistently embedded within kidney care pathways. Her research directly addresses this gap, providing robust, synthesised evidence to inform guideline development, strengthen clinical practice, and support more equitable access to structured exercise interventions.

Annette plans to translate her research into an evidence-based guideline, embedding exercise as a routine adjunct therapy within CKD management. Her future research will focus on accessibility, scalability, and equity, positioning her as a strong and emerging leader in translational kidney care research.

Over five years as an academic at Charles Sturt, Annette has demonstrated strong research productivity, methodological depth, and growing national impact. Annette's research reflects a clear commitment to advancing patient-centred kidney care through rigorous, translational research.

Congratulations to Dr Annette Traise, PhD!

From Charles Sturt to Ghana: developing the first speech and language assessment for Ghanaian children

A PhD with global impact

Charles Sturt University graduate Dr Josephine Ohenewa Bampoe has achieved a significant milestone in speech-language pathology, developing the first validated speech and language assessment tool for Ghanaian English-speaking children.

Josephine arrived in Albury in 2022 to begin her PhD with a clear goal: to address a critical gap in clinical practice in Ghana. Her research has since delivered a practical tool that will directly support speech and language therapists working with children across the country.

A journey of leadership and innovation

Josephine's path to Charles Sturt reflects a strong commitment to advancing speech and language therapy in Ghana.

After completing her undergraduate studies at the University of Ghana, she was selected as a teaching assistant in the Department of Linguistics. She then received a scholarship from Ghana's Ministry of Health to pursue a Master of Science in Speech-Language Pathology at City, University of London.

Returning to Ghana, Josephine played a crucial role in establishing the country's first university master's degree in speech and language therapy at the University of Ghana, laying the groundwork for professional training in the field.

Research translating into real-world practice

Josephine's PhD, completed within Charles Sturt's School of Allied Health, Exercise and Sports Science, focused on the development of the Bampoe Ghanaian English Speech and Language Assessment, known as B-GESLA.

The tool has now been published, with the first copies being distributed to Ghana for use in clinical practice. This marks a significant step forward for culturally appropriate assessment in speech-language pathology.

Her work goes beyond tool development, incorporating culturally responsive and ethically grounded approaches, stakeholder perspectives, and rigorous testing and evaluation.

International recognition

Josephine's thesis received outstanding feedback from leading international experts in speech-language pathology, who recognised its originality and global significance.

Examiners described the research as a "substantive and original contribution to knowledge", highlighting:

- the development of the first culturally responsive formal assessment tool for Ghanaian children
- a replicable framework for assessment development in Majority World contexts
- the integration of clinician co-production and culturally grounded methodologies.

The research was also recognised for its broader relevance to multilingual and under-resourced settings globally, advancing both theory and clinical practice.

Why this matters

Access to culturally appropriate assessment tools is critical for accurate diagnosis and effective intervention in speech and language therapy.

By developing a tool grounded in local language, culture, and clinical context, Josephine's research addresses a longstanding gap in Ghana's health system and contributes to more equitable care for children.

The work also provides a model that can be adapted in other countries, supporting global efforts to improve speech-language services in diverse and underserved communities.

Continuing impact

Josephine graduated from Charles Sturt University at the Albury ceremony in April and is continuing her work to advance the field of speech and language therapy in Ghana.

Her research exemplifies the power of applied, practice-driven research to create meaningful, real-world impact - improving outcomes for children, strengthening professional practice, and contributing to global health equity.

Why this matters for Charles Sturt

This research highlights Charles Sturt University's leadership in regionally focused research with global relevance.

By supporting culturally responsive and practice-driven innovation, the university is strengthening its contribution to global health equity while reinforcing its expertise in allied health, community wellbeing, and research translation.

Recognised Excellence in Radiography Education Research

Bismark Ofori-Manteaw was awarded Best Poster (Medical Imaging) at the ASMIRT 2026 Conference in Hobart for his work titled "*Shaping the future educator: Discovering students' motivation for academic careers in medical radiation science.*"

The poster highlights an important and timely conversation within the medical radiation science (MRS) profession on how to attract, support, and sustain the next generation of educators. The work explores students' motivations for pursuing academic careers and identifies key factors that influence their interest in teaching and educational roles.

The findings underscore the need for clearly defined academic career pathways, strong mentorship structures, and early exposure to teaching and academia within radiography training programs. By addressing these areas, the study advocates for proactive strategies to build a sustainable and well-prepared academic workforce in MRS. This work forms part of the Teaching Innovation in Radiography Research Group and reflects a collaborative effort involving colleagues across Charles Sturt University and other Australian institutions. It highlights the growing importance of educational research in shaping the future of the profession and strengthening workforce development in medical radiation science.

Translating vaping research into community support

Charles Sturt University researchers are helping regional communities respond to growing concerns about vaping among young people.

On 10 June, Charles Sturt will host a community **Youth Vaping Information Event** in Wangaratta, bringing together researchers, health professionals, young people, parents and carers to share evidence-based information and practical support.

The event is a collaboration between researchers from the School of Nursing, Paramedicine and Healthcare Sciences — Associate Professor Jessica Biles, Dr Andreia Schineanu, Myra Sookraj-Baran and Associate Professor Pauletta Irwin — in partnership with Gateway Health.

The session will translate current research findings into accessible information for the community, focusing on vaping, its health impacts, and practical approaches to vaping cessation. It will also provide an opportunity for families and carers to ask questions and better understand how to support young people.

Why this matters

Vaping among young people is a growing public health concern, including in regional communities. By bringing research directly to the community, this event demonstrates how Charles Sturt researchers are helping turn evidence into practical action, supporting informed decisions, prevention and healthier futures for young people.

Charles Sturt researcher contributes to ARC Discovery Project tackling financial crime

Charles Sturt University researcher Dr Jamie Ferrill, Senior Lecturer in Financial Crime Studies (AGSPS), is part of a successful ARC Discovery Project (2026 round) addressing critical challenges in financial sanctions and transnational crime.

The project, "*Financial Sanctions: Identifying Sanctioned Persons and Their Assets,*" is led by The Australian National University and brings together a collaborative team from seven institutions, including Charles Sturt University, the University of Sydney, La Trobe University, Macquarie University, Queen's University, and the Royal United Services Institute.

Funded with $529,137, the project will examine how financial sanctions are implemented in Australia, with a focus on identifying sanctioned individuals and their assets across key economic sectors. The research aims to deliver innovative, evidence-based approaches to strengthen Australia's capacity to apply sanctions effectively in coordination with international partners.

In parallel, the research also addresses a significant and emerging challenge in financial crime: trade-based money laundering (TBML) – a method increasingly recognised as a major vulnerability in global financial systems.

Using the illicit tobacco trade as a case study, the project will explore how criminal networks exploit weaknesses in trade systems to facilitate both illicit trade and money laundering. This approach enables researchers to uncover patterns of criminal behaviour that are often hidden within legitimate trade flows.

The study will:

- Map vulnerabilities across illicit tobacco supply chains
- Identify regulatory gaps and enforcement challenges
- Develop integrated risk assessment frameworks for financial crime

By examining how criminal networks operate across interconnected systems, the research will generate coordinated policy responses that strengthen Australia's trade infrastructure, enhance border security, and disrupt organised crime.

The project has been developed in close collaboration with key government and enforcement agencies, including the Australian Border Force, AUSTRAC, NSW Police, and the Illicit Tobacco Taskforce, ensuring strong alignment with national priorities.

The team: Dr Jamie Ferrill, Associate Professor Anton Moiseienko (The Australian National University), Professor Louis de Koker (La Trobe University), Professor Saskia Hufnagel (The University of Sydney), Professor Colin King (The University of Sydney), Associate Professor Doron Goldbarsht (Macquarie University), Dr Milind Tiwari (Charles Sturt).

Why this matters

This research positions Charles Sturt University at the forefront of efforts to combat complex financial crime. By strengthening Australia's capacity to identify and disrupt illicit financial activity, the project contributes to national security, economic resilience, and more effective global cooperation.

$1.7 million NHMRC grant to strengthen cultural safety in regional health services

A Charles Sturt University-led research collaboration has secured $1.7 million in National Health and Medical Research Council (NHMRC) funding to address structural violence and improve cultural safety for Aboriginal and Torres Strait Islander health professionals in regional New South Wales.

The project, Unsafe Workplaces, *Unsafe Care: Addressing Structural Violence in Regional New South Wales Health Services*, is part of the NHMRC's Targeted Call for Research: Aboriginal and Torres Strait Islander Health – Addressing Violence for Safer Families and Communities, which is investing $6.7 million nationally to improve family safety and wellbeing.

Led by Professor Faye McMillan AM, the multidisciplinary research team brings together partners from Charles Sturt University, University of Technology Sydney, University of New South Wales, RMIT, University of Canberra, Western NSW Local Health District, NSW Ambulance, and Marathon Health.

Addressing a critical gap in the health system

Despite national commitments, Australian health systems remain structurally and culturally unsafe for many Aboriginal and Torres Strait Islander health professionals. Experiences of racism, marginalisation, and the cumulative burden of "colonial load" contribute to burnout, distress, and workforce attrition – undermining both staff wellbeing and the quality of care.

This five-year project will focus on embedding cultural safety across regional health services through three key initiatives:

- Establishing Cultural Governance Advisory Groups
- Delivering co-designed cultural safety training for middle managers
- Developing a Community of Practice model to support Aboriginal and Torres Strait Islander health professionals

Delivered in partnership with health services across regional New South Wales, the project will ensure solutions are co-designed, implemented, and evaluated in line with Aboriginal and Torres Strait Islander governance and community priorities.

Why this matters

Cultural safety is a critical determinant of health – shaping access, trust, engagement, and outcomes for Aboriginal and Torres Strait Islander peoples.

This research directly addresses national priorities to reduce violence and improve safety for Aboriginal and Torres Strait Islander healthcare workers, while strengthening the capacity of regional health systems to deliver culturally responsive care.

It also highlights the importance of addressing systemic and structural barriers – particularly within middle management – to achieve sustained, sector-wide change.

Research with real-world impact

By working closely with health services and communities, the project will deliver evidence-based models that can be scaled nationally, supporting safer workplaces, stronger workforces, and better health outcomes.

This funding success reinforces Charles Sturt's leadership in regionally focused, community-led research that drives meaningful change for Aboriginal and Torres Strait Islander communities.

Team: CIA - Prof Faye McMillan AM; CIB - Assoc Prof Jessica Biles; CIC - Dr Shanna Fealy; CID - Prof Rhonda Wilson; CIE - Assoc Prof Brett Biles; CIF - Dr Oliver Higgins; CIG - Mr Troy Pietsch; CIH - Dr Rashidul Alam Mahumud; CII - Mr Luke Marks.

Associate Investigators: Ms Mandy Debenham, Ambulance Service NSW; Mr Simon McDonald, Charles Sturt University; Ms Shirlena Gallagher, Western NSW Local Health District; Ms Lesa Towers, Western NSW Local Health District; Mr Rhys Callaghan, Charles Sturt University.

Project Partners: Charles Sturt University, University of Technology Sydney, University of New South Wales, RMIT, University of Canberra, Western NSW Local Health District, NSW Ambulance, Marathon Health.

Kathryn Hindle
School of Social Work and Arts
Faculty of Arts and Education
Australian Centre for Christianity and Culture

Dr Monica Short
School of Social Work and Arts
Faculty of Arts and Education
Australian Centre for Christianity and Culture
Gulbali Institute

Research exploring social solutions for young people experiencing loneliness and social isolation

New research from Charles Sturt University is contributing to global efforts to better understand and address loneliness among young people.

Led by Charles Sturt alumna Kathryn Hindle and co-authored with Dr Monica Short, the study – published in *The Palgrave Handbook of Global Social Problems* – highlights practical, evidence-based "social solutions" that strengthen connection and belonging for young people aged 15–24.

The research identifies key protective factors, including strong family relationships, a sense of belonging at school, and mentoring connections. It also shows that accessible, low-cost interventions, such as peer support, volunteering, and community engagement, can significantly improve wellbeing, resilience, and life satisfaction.

By translating evidence into practical insights, this work provides a scalable framework for social workers, educators, and policymakers to embed connection-based approaches into practice and policy.

Persistent gaps in addressing youth social isolation

Despite growing awareness, the research confirms that loneliness and social isolation among young people remain widespread and often under-addressed.

A key challenge is the lack of consistent, evidence-based interventions tailored specifically to young people aged 15–24. Without targeted strategies, many young people continue to experience disconnection, with impacts both mental and physical health.

The findings highlight the risk that, without intentional investment in social connection, these issues will continue to affect individual wellbeing and broader community resilience.

A clear pathway for policy and practice

This research points to a clear opportunity: embedding "social solutions" into systems that support young people.

From mentoring programs and school-based belonging initiatives to community and cultural engagement, the study shows that strengthening everyday connections can deliver meaningful, scalable impact.

For Charles Sturt University, this work reinforces the importance of socially engaged research that informs practice, shapes policy conversations, and delivers tangible benefits for communities.

Why this matters

This research highlights Charles Sturt University's strength in socially engaged, impact-driven research that addresses real-world challenges facing regional and global communities. It demonstrates Charles Sturt's leadership in translating social work research into practical solutions that can inform policy, strengthen services, and improve outcomes for young people.

For more information, please contact Dr Monica Short: mshort@csu.edu.au

Reference

Hindle, K., & Short, M. (2026). *Exploring Social Solutions for Young People Experiencing Loneliness and Social Isolation. In The Palgrave Handbook of Global Social Problems.* Palgrave Macmillan, Cham.

Stacey Jones
School of Education
Faculty of Arts and Education

Bridging the gap: from classroom practice to teacher education

For Stacey Jones, Senior Workplace Learning Coordinator in the School of Education at Charles Sturt University, the transition from school-based partner to academic has been driven by a clear purpose: better preparing future teachers for the realities of the classroom.

Drawing on years of collaboration between the Charles Sturt Bathurst campus and Denison College, Stacey – together with co-author Associate Professor Deborah Clarke – has translated this work into research that addresses one of the most persistent challenges in teacher education: “praxis shock”, the gap between theory and real-world teaching practice.

Their recently published article in the *Australian Journal of Teacher Education, Enhancing Pre-Service Teachers' Preparedness for Professional Experience Placement and Employment: Authentic School-University Partnership Opportunities*, forms the first of five papers within Stacey’s doctoral research. The study captures the outcomes of a five-year partnership funded by the New South Wales Department of Education, designed to move beyond traditional lecture-based approaches.

At the core of the initiative is a shift toward authentic, practice-based learning. School principals and teachers were embedded directly into university tutorials, co-designing and delivering learning experiences that reflect the realities of contemporary classrooms. Pre-service teachers participated in mock job interviews, “classroom takeovers” and school immersion days – well before their formal professional placements.

The results demonstrate a significant impact on student preparedness and confidence. One participating principal observed that students “look ready, they sound ready”, reflecting broader findings that all surveyed participants reported a deeper understanding of professional teaching standards.

By immersing students in realistic teaching scenarios, the program encourages a shift from passive learning to active professional identity development, equipping graduates with the skills, confidence, and adaptability needed in early career teaching.

Now a permanent member of the Charles Sturt academic community, Stacey is focused on embedding these evidence-based approaches across initial teacher education programs. The work highlights the value of strong school-university partnerships in delivering high-quality, practice-informed education.

This research reinforces Charles Sturt University’s commitment to producing graduates who are not only qualified but genuinely classroom-ready, capable of meeting the evolving demands of the teaching profession.

Dr Monica Short
School of Social Work and Arts
Faculty of Arts and Education
Australian Centre for Christianity and Culture
Gulbali Institute

Charmaine Nicoll
Canberra Health Service, Assistant Director of Allied Health, MHJHADS
Co-author

Building social work research capacity to strengthen health services

Evidence now informing investment in allied health research capacity and workforce reform

A collaboration between Charles Sturt University and Canberra Health Services is demonstrating how research can be embedded directly into frontline practice.

Led by Dr Monica Short, the initiative brought together a multidisciplinary team spanning academia and health services. The research team included Charmaine Nicoll, Alison McDonald, Rosy Winter, and Mary Woodcock (Canberra Health Services), Catherine Spence (Australian Catholic University, student researcher at the time), and Professor Nick Brown (University of Canberra and Canberra Health Services).

Together, the team worked across the entire health service to build research capability through a structured, two-phase approach. The first phase comprised 10 targeted workshops delivered by Dr Short, while the second phase involved a mixed-methods study evaluating the initiative's impact.

The results are compelling. When barriers such as limited time, confidence, and resources are addressed through practical support – including mentoring and protected research time – practitioners are significantly more likely to engage in research.

This is already translating into real-world impact, with Canberra Health Services using the findings to advocate for increased investment in allied health research capacity and to embed practitioner perspectives into organisational decision-making.

Persistent barriers to practitioner-led research

Despite strong interest from practitioners, the study confirms that a lack of time, limited confidence, and insufficient resources continue to constrain research participation across the health workforce.

Without structured support, valuable frontline insights risk being excluded from research, limiting the ability of health systems to fully understand and respond to complex patient and community needs.

A scalable model for workforce and policy reform

This work provides a practical, evidence-based model for embedding research capability within health services – one that can be adopted and scaled across jurisdictions.

Why this matters:

Strengthening practitioner-led research ensures that those closest to patients help shape the evidence base, leading to more responsive, effective, and locally relevant healthcare.

Policy and practice impact:

The findings are already influencing internal policy discussions within Canberra Health Services, supporting the case for protected research time and sustained capability building. More broadly, the model offers a pathway for integrating research, workforce development, and service improvement across the health sector.

Sector recognition

The initiative has received strong endorsement from sector leaders:

"Dr Monica Short and her team's timely work … has given us the evidence base we need to advocate internally … for the quarantined time and resources for Allied Health research capacity."

— Philip Keightley, Staff Specialist, Academic Unit of Psychiatry & Addiction Medicine, Canberra Hospital; Clinical Senior Lecturer, Australian National University, School of Medicine and Psychology

"Huge congratulations to the team."

— Dr Jo Morris, Interim General Manager, Canberra Hospital

“Fabulous to see as I’ve heard about this work over the years.”

— Rosalyn Stanton, Director, Research Mentorship, Supervision and Education Programs; Adjunct Associate Professor, University of Canberra

“An awesome outcome … so timely.”

— Associate Professor Dr Denise Riordan, Director of Clinical Services, MHJHADS; Clinical Associate Professor, Australian National University Medical School

“A thought-provoking article … promoting more social work research participation.”

— Bruno Aloisi, General Manager, Mental Health, Justice Health, Alcohol and Drug Services

Reference

Short, M., McDonald, A., Nicoll, C., Woodcock, M., Winter, R., Spence, C., & Brown, N. (2025). Building Social Work Practitioner Research Capacity in a Health Service: An Inquiry. *Australian Social Work*, 1–18. https://doi-org.ezproxy.csu.edu.au/10.1080/0312407X.2025.2587737

One question sparks a new field of study

A single question – *whose information counts?* has led to a world-first contribution to Information Science at Charles Sturt University.

Dr Niloofar Solhjoo, Lecturer in the School of Information and Communication Studies, has published *Multispecies Information Science* with Routledge – an edited volume that establishes a new direction for the discipline by exploring how information is created, shared, and experienced across human and non-human worlds.

The project originated at the 2023 Association for Information Science and Technology Annual Meeting in London, where Dr Solhjoo convened the first academic panel dedicated to the "multispecies turn" in information studies. The discussion brought together leading international scholars, including Jenna Hartel, Christopher Lueg, and Steve Fuller, and sparked debate on how information systems shape – and are shaped by – interactions with other species.

Recognising a gap in the field, Dr Solhjoo led the development of an edited volume bringing together global contributors to explore emerging questions around ethics, design, and information flows in shared ecosystems. Supported by Charles Sturt's Tri-Faculty New Staff Establishment Scheme, the project also involved collaboration with internal and external peer reviewers.

Published in February 2026, *Multispecies Information Science* bridges theory and practice, providing a foundation for future research, teaching, and professional practice. The work was showcased at the RAILS 2025 conference and during the 50th anniversary celebrations of the School of Information and Communication Studies at Charles Sturt's Sydney campus.

This research reflects a growing shift in how information is understood—expanding the discipline to consider more-than-human perspectives, while aligning with Charles Sturt's values of ethical engagement, inclusion, and connection to place.

Why this matters

Information Studies has traditionally focused on how humans create and use information, often overlooking how information exists and flows in the wider living world. A multispecies perspective challenges this anthropocentric focus by recognising that humans exist within complex, entangled systems that include animals, environments, and technologies. It reconsiders whose knowledge and experiences are recognised within our systems and curricula and encourages the development of approaches that acknowledge the agency and significance of other species in the ecosystems we share, including those around Charles Sturt University.

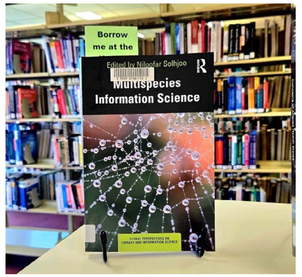
This work positions Charles Sturt University at the forefront of an emerging global research field – expanding how information, technology, and ethics are understood in a rapidly changing world. In doing so, multispecies information science not only advances theoretical understanding but also fosters more inclusive, responsible, and ecologically attuned practices.

By shaping new directions in Information Science, it strengthens the university's research reputation, supports interdisciplinary collaboration, and contributes to conversations about sustainability, ethics, and our shared future.

Reference

Solhjoo, N. (Ed.). (2026). *Multispecies information science*. Routledge.

Multispecies Information Science first panel, organised by Dr Solhjoo at the ASIS&T 2023 Annual Meeting in London, marking the beginning of the project.



The published book on display at the Bathurst Campus Library, Charles Sturt University, March 2026.

Multispecies Information Science second panel with Australasian contributors of the book, organised by Dr Solhjoo at RAILS 2025 in Sydney, marking a key milestone and the culmination of the project.

Charles Sturt Professor leads global scholarship in social development

Charles Sturt University Professor Manohar Pawar continues to shape global discourse in social development through his role as Founding Editor-in-Chief of *The International Journal of Community and Social Development (IJCSD)*.

The first issue of Volume 8 has now been published, bringing together international research addressing some of the most pressing social development challenges.

The issue features a diverse collection of articles spanning global contexts, including:

- The Doha Political Declaration of the Second World Summit for Social Development (United Nations General Assembly, 2026 – open access)
- Climate-sensitive social protection in Jordan
- Inequality and structural bias in higher education in India
- Community–state dynamics in rural electrification in Indonesia
- Environmental governance and sand mining regulation in India

Together, these contributions reflect the journal's focus on advancing critical, globally relevant scholarship that informs policy and practice.

Professor Pawar's editorial for this issue is also available open access, continuing his leadership in shaping scholarly dialogue on inclusive and sustainable social development.

Why this matters

Through editorial leadership of a globally recognised journal, Charles Sturt University is contributing to the production and dissemination of knowledge that informs international policy, research, and practice. This work strengthens the university's position as a thought leader in addressing complex social challenges across diverse global contexts.

Dr Jodie Kleinschafer
School of Business
Faculty of Business, Justice and Behavioural Sciences

Associate Professor Maree Bernoth
Three Rivers Department of Rural Health
Faculty of Science and Health

Associate Professor Elyce Green
Three Rivers Department of Rural Health
Faculty of Science and Health

Professor Larissa Bamberry
School of Business
Faculty of Business, Justice and Behavioural Sciences

Professor Andrew Hall
Gulbali Institute

Professor Julaine Allan
Rural Health Research Institute

A growing challenge for rural aged care

New Charles Sturt University research is revealing how extreme heat is quietly but significantly disrupting the delivery of home care services across rural and regional Australia.

Conducted over three years in partnership with BaptistCare, the study provides critical new insights into how climate change is affecting aged care workers and clients in regional New South Wales—where services are already under pressure and demand continues to grow.

Hidden impacts on frontline workers

The research highlights the physical and psychological toll of heatwaves on aged care workers, who are delivering essential services in increasingly harsh conditions.

Staff reported fatigue, dehydration, and other symptoms of heat stress, while still prioritising client care over their own wellbeing – highlighting the dedication and resilience of the workforce and the risks they face.

In rural settings, these pressures are intensified by workforce shortages, long travel distances, and limited resources, highlighting a gap in how climate impacts on staff are acknowledged in aged care policy and practice.

Practical solutions for a changing climate

In response, the research team worked closely with BaptistCare staff, clients and managers to co-design practical, evidence-based solutions.

The project delivered a suite of more than 60 strategies and resources, including guidance on heat policies, staff training, environmental assessments, client information, and safety checklists, to support safer and more sustainable service delivery.

These tools are immediately applicable across the aged care sector, providing organisations with clear pathways to strengthen workforce wellbeing while maintaining continuity of care.

Why this matters

This research highlights a critical and emerging challenge at the intersection of climate change, workforce wellbeing, and regional service delivery.

As Australia expands home care services to support an ageing population, and summers continue to intensify, the conditions in which care is delivered are becoming more extreme—particularly in rural and regional communities.

The findings show that without adaptation, climate pressures threaten to undermine workforce sustainability, service quality, and the ability of older Australians to age safely in place.

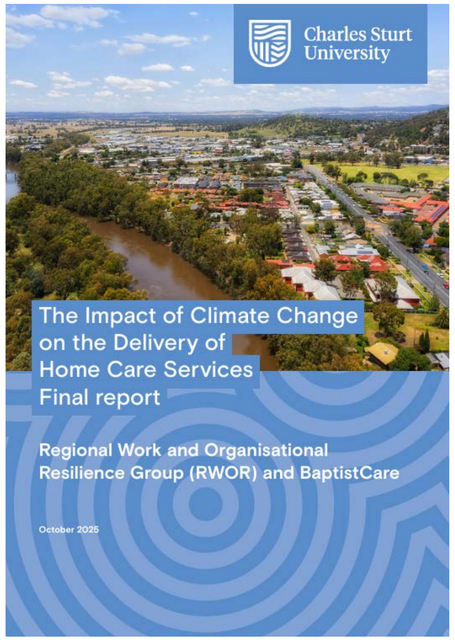
By offering practical, evidence-based solutions, this research helps aged care providers and policymakers integrate climate resilience into service models, workforce planning, and national reform agendas.

Research translating into real-world impact

This collaboration demonstrates Charles Sturt's leadership in addressing complex regional challenges through industry-engaged research.

By working directly with providers, the project is not only shaping policy discussions but also delivering practical solutions – helping protect the workforce, maintaining essential services, and ensuring older Australians can age safely in place despite a changing climate.

Read the report.



Dr David J. Leaver
School of Dentistry and Medical Sciences
Faculty of Science and Health
Gulbali Institute

Cutting away at cancer

New research involving Charles Sturt University is advancing the development of next-generation cancer therapies, targeting key biological mechanisms that drive tumour growth.

Dr David J. Leaver, Senior Lecturer in Biochemistry in the School of Dentistry and Medical Sciences, is a contributing author on a newly published open-access paper in the *Journal of Medicinal Chemistry*. The study explores a class of compounds designed to inhibit KAT6A, an enzyme known to play a critical role in cancer development.

KAT6A is part of a group of proteins that regulate gene expression through epigenetic processes. When dysregulated, these proteins can drive the growth and survival of cancer cells. Targeting KAT6A has therefore emerged as a promising strategy for developing more precise and effective cancer treatments.

The paper provides a comprehensive overview of recent advances in KAT6A inhibitor discovery, including detailed analysis of how different chemical structures influence potency, selectivity, and activity in cells. It also introduces new classes of inhibitors, including novel compounds reported for the first time, supported by structural biology insights that reveal how these molecules interact with their target.

Importantly, the research extends beyond laboratory studies to examine how these compounds perform in biological systems. The team reports on in vivo activity, pharmacokinetics, and safety profiles, providing critical evidence to support further development toward clinical use.

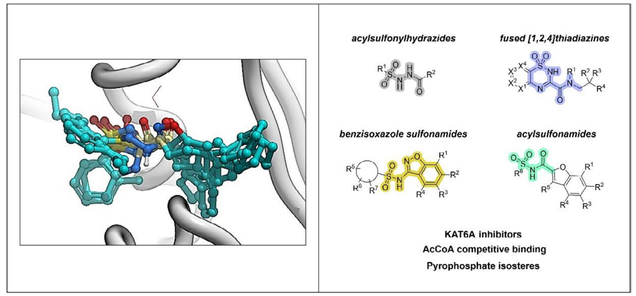
Dr Leaver's contribution builds on earlier foundational work demonstrating that KAT6A is a druggable target, including his role in the development of early inhibitor compounds. This research has helped pave the way for translation into clinical settings.

A key milestone in this field is the development of the KAT6A inhibitor PF-07248144, which has progressed through Phase 1 clinical trials and is now in Phase 3 trials as a possible treatment for breast cancer. This progression represents an important proof of concept for targeting KAT6A as an epigenetic therapy, particularly for metastatic breast cancer.

Together, these advances highlight the growing potential of precision, targeted therapies in oncology. The work contributes to a global effort to develop treatments that are more effective, more selective, and better tailored to individual patients.

Why this matters

This research underscores Charles Sturt University's contribution to cutting-edge biomedical discovery, with the potential to inform future cancer therapies and improve patient outcomes worldwide.



Dr Praneel Titheradge
School of Allied Health, Exercise and Sports Sciences
Faculty of Science and Health

Re-examining a century of VO_2max science

New research involving Charles Sturt University is challenging one of the most widely accepted concepts in exercise physiology, prompting a re-evaluation of how scientists and practitioners understand human performance.

Dr Praneel Titheradge, Lecturer in Exercise and Sports Sciences at Charles Sturt University, is a co-author on a recent publication in Frontiers in Physiology that revisits the origins of maximal oxygen uptake (VO_2max) – a cornerstone measure of cardiovascular fitness.

The paper is the first in a four-part international series examining how VO_2max theory developed between 1920 and 1961. Drawing on detailed archival analysis, the study questions the long-standing assumption that a VO_2 plateau – a levelling-off in oxygen uptake during maximal exercise – is required to confirm a valid VO_2max measurement.

For decades, this concept has been widely taught and applied across clinical testing, elite sport, and research. However, the study reveals that the original evidence underpinning this assumption was based on limited data and experimental designs that may not support such universal conclusions.

The research revisits the foundational work of Nobel Prize recipient A.V. Hill, whose early 20th-century experiments helped establish the VO_2max concept.

Figure 1 revisits A.V. Hill's original 1923 running experiments, reproducing the time-course and intensity-response data that helped establish the concept of VO_2max. When examined carefully, the figure demonstrates that while VO_2 increased predictably with running speed, the apparent "levelling-off" occurred only within isolated constant-speed bouts and not across increasing exercise intensities. This distinction reveals how early interpretations conflated *VO_2 kinetic* responses with true physiological limits

Figure 2 extends this critique by separating individual participant data that were historically pooled together. When viewed individually, only a minority of participants show any evidence of a VO_2 plateau, while most continue to demonstrate rising oxygen uptake with increasing exercise intensity. This visual re-analysis highlights how aggregating participant data created the illusion of a universal plateau response, reinforcing an assumption that was never robustly supported by evidence.

Together, these findings point to how early methodological limitations and data interpretation shaped a scientific assumption that has persisted for decades. The research argues that this historical oversight continues to influence modern testing protocols, verification criteria, and debates about the limits of human performance.

The implications are significant for exercise scientists, clinicians, and sports practitioners, particularly those involved in cardiopulmonary testing, athlete monitoring, and health assessment. Future papers in the series will explore how advances in continuous exercise protocols and gas-analysis technologies have further shaped understanding in this field.

Why this matters

Dr Titheradge's contribution to this international collaboration highlights Charles Sturt University's growing research strength in exercise science and physiology, and its role in advancing evidence-based practice that challenges established thinking.

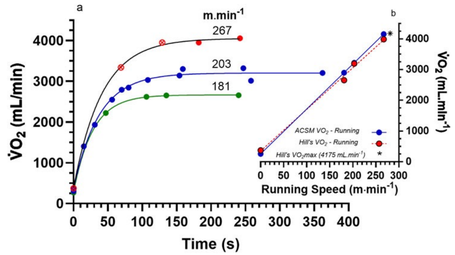


Figure 1

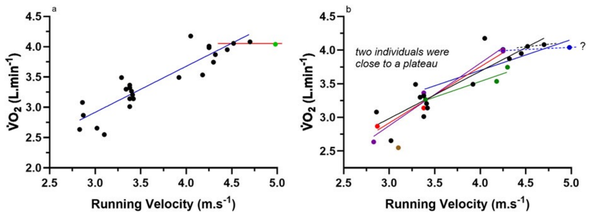


Figure 2

Dr Sallie Yea
School of Agricultural, Environmental and Veterinary Sciences
Faculty of Science and Health

Tracing survival for families of exploited migrant workers

Research from Charles Sturt University is shedding new light on the human impact of labour exploitation in global fishing industries – moving beyond working conditions to examine the effects on families left behind.

Dr Sallie Yea, from the School of Agricultural, Environmental and Veterinary Sciences, is part of an international research collaboration investigating the experiences of migrant fishers from the Philippines and Indonesia working on industrial fleets across the Asia-Pacific.

While exploitation in these industries is widely documented – including wage theft, excessive working hours, unsafe conditions, and abuse – this research highlights less visible but equally significant dimensions of harm.

One key finding reveals how migrant workers lose control over their employment conditions during complex, multi-country migration journeys. As workers transit across borders, labour brokers and intermediaries can alter contracts, impose new conditions, and introduce financial penalties. These practices can trap workers in cycles of debt bondage and coercion, limiting their ability to leave exploitative situations.

Published in the *Annals of the Association of American Geographers*, this work extends policy debates by demonstrating how vulnerabilities emerge not only at the point of employment but also throughout the migration process.

A second major focus of the research examines the experiences of families left behind when migrant workers lose contact or are unable to send income home. Through in-depth interviews with wives and mothers in the Philippines, the research reveals how labour exploitation reverberates across households.

The findings show that families often face deepening financial insecurity, with women – and sometimes children – forced into hazardous or precarious work to survive. In addition to economic strain, families experience significant emotional distress due to prolonged periods of uncertainty and a lack of communication.

Published in Environment and Planning A: Economy and Space, this research highlights the broader social and human costs of labour exploitation, extending beyond individual workers to entire family networks.

Together, this work challenges narrow definitions of exploitation and calls for more comprehensive policy responses that address both labour conditions and the wider impacts on families and communities.

The next phase of the project will examine violence, injury, and deaths among migrant fishers, further contributing to research and policy discussions on protecting vulnerable workers and their families.

This research underscores Charles Sturt University's contribution to globally relevant, socially impactful research that addresses complex issues of labour, migration, and human rights.

Why this matters

- Exposes the human cost of exploitation, showing how abuse of migrant workers devastates entire families—not just individuals
- Calls for stronger protections across global labour supply chains, particularly in high-risk industries like fishing
- Highlights critical gaps in policy, including the need to protect families left behind, not just workers overseas
- Provides evidence to support urgent reform of recruitment practices and cross-border labour governance
- Amplifies the need for ethical responsibility from governments, industry, and consumers
- Positions Charles Sturt research at the forefront of tackling modern slavery and labour injustice

Pip Grant appointed Executive Director, Charles Sturt – AgriPark

Charles Sturt University is pleased to announce the appointment of Pip Grant as Executive Director of Charles Sturt – AgriPark, marking an important step in advancing the university's role in agricultural innovation and regional development.

Pip brings more than 15 years of experience across the agrifood sector, with expertise spanning research, development and extension (RD&E) strategy, agritech commercialisation, rural community engagement, and investment facilitation. Her career has focused on bridging the gap between innovation and adoption - ensuring that research delivers tangible benefits on the ground.

Most recently, Pip served as Chief Executive Officer of Riverine Plains, one of Australia's leading farmer-led innovation organisations. In this role, she led large-scale innovation programs, strengthened pathways to adoption, and supported commercial innovators in validating solutions within real-world farming systems, delivering measurable impact for regional communities.

Pip's appointment signals the next phase for AgriPark as a hub for collaboration - bringing together researchers, commercial innovators, industry partners, and investors to accelerate the journey from idea to impact.

Based in Wagga Wagga and a Charles Sturt alumna, Pip is deeply connected to the region and its agricultural communities. She is passionate about strengthening productivity and sustainability by linking leading innovation to rural industries, landholders, supply chains, and communities.

Her leadership will play a critical role in positioning AgriPark as a national leader in agrifood innovation - supporting Charles Sturt University's commitment to research that solves regional challenges and delivers global impact.

Charles Sturt University strengthens India–Australia collaboration in Agri-Tech and climate-smart agriculture

Charles Sturt University has helped launch a major new India–Australia Agri-Tech partnership aimed at advancing climate-smart agriculture, digital farming and sustainable food systems across both countries.

The initiative was formally launched through bilateral workshops held in Bengaluru and Hyderabad, bringing together leaders from government, research, industry, start-ups and farmer networks to explore the future of technology-enabled agriculture and horticulture.

The partnership is being led collaboratively by Charles Sturt University, Research and Innovation Circle of Hyderabad (RiCH) and Bengaluru Science and Technology Cluster (BeST), with support from the Australian Department of Foreign Affairs and Trade through the Centre for Australia-India Relations.

A major highlight of the Hyderabad workshop was the formal signing of the Memorandum of Understanding between the partner organisations, in the presence of H.E. Philip Green, High Commissioner of Australia to India, which officially established the framework for long-term collaboration in smart agriculture, digital farming and AgTech innovation.

The Bengaluru workshop was organised with BeST and hosted by the Centre of Excellence for Farmer Producer Organisations (CoEFPO), while the Hyderabad workshop was organised with RiCH and hosted by Professor Jayashankar Telangana State Agricultural University (PJTAU).

Representing Charles Sturt University, Professor Michael Friend and Jonathan Medway joined international collaborators and AgTech partners to strengthen Indo-Australian research, innovation and farmer engagement networks.

Discussions focused on how emerging technologies — including artificial intelligence, drones, IoT-enabled farming systems, remote sensing and digital agriculture platforms — can support more resilient, productive and sustainable food systems.

The partnership will support bilateral AgTech testing and validation across diverse farming systems, strengthen farmer capability through demonstrations and knowledge exchange, create opportunities for student mobility and skills development, and accelerate commercialisation pathways for emerging agricultural technologies. Seed funding to establish the partnership has been provided by the Centre for Australia-India Relations, with funding to be utilised to demonstrate the importance of the partnership in order create the case for ongoing co-investment.

The collaboration also links Charles Sturt's Global Digital Farm and AgriPark capabilities with India's rapidly expanding AgTech ecosystem, creating new opportunities for research translation, startup collaboration and sustainable farming innovation.

Why this matters

This partnership strengthens Charles Sturt University's growing international research and innovation networks and reinforces the University's leadership in digital and sustainable agriculture.

By connecting researchers, industry, governments and farmer organisations across Australia and India, the initiative will help accelerate the development and adoption of climate-resilient agricultural technologies that deliver practical outcomes for farmers, industry and regional communities.

EvokeAg 2026

Charles Sturt University had a highly visible and engaging presence at evokeAG 2026 in Melbourne on 17 and 18 February. This year's event brought together a broad mix of staff, with research teams from Gulbali and AgriPark, as well as key business development leads, all contributing to engagement at the Charles Sturt stand. This representation strengthened conversations during the two days and helped showcase the full depth of capability across the university. EvokeAG 2026 featured more than 1,400 delegates, 80 speakers, and over 50 sessions focused on agrifood technology, climate resilience, and innovation.

The event provided a valuable platform for Charles Sturt to reinforce its role as a national leader in regional innovation, applied research, and industry partnership. Throughout the event, the team highlighted work underway in areas including bioSolutions, the Cool Soil Initiative, the Vineyard of the Future, livestock supply chains, and digital connectivity across agriculture. These displays demonstrated the university's strength in real-world validation and testing, commercialisation support and on-farm innovation.

Connect and collaborate session

Charles Sturt University also delivered a Connect and Collaborate session titled "Unlocking the agrifood supply chain for bio solutions and livestock". The session was MC'd by Ben Van Delden, Managing Director of Delco Agrifood, with presentations from Professor Neena Mitter, Deputy Vice-Chancellor Research at Charles Sturt University, and Matthew Muller, Director of the Cool Soil Initiative at Charles Sturt University's AgriPark.

The session featured industry panels, including:

- Dave McKeon, Head of Thomas Elder Sustainable Agriculture at Elders
- Dr Maria Trainer, Executive Director of Science and Assurance at the Australian Pesticides and Veterinary Medicines Authority
- Dr Joe McMeniman, Group Manager of Sustainability at Meat and Livestock Australia
- Kevin Jenkinson, Manager of Feedlot Continuous Improvement at JBS Australia
- Irene Sobotta, Group Manager of Strategy and Planning at Integrity Systems Company.

The session brought together researchers, industry partners and technology providers to explore opportunities to accelerate the adoption of biological solutions and enhance livestock and supply chain innovation.


The AgriPark stand at evokeAG

Connect and collaborate sessions

AgriPark/Gulbali staff attendees

Meat and Livestock Australia Data Capability Program

Meat and Livestock Australia (MLA) and Charles Sturt University have partnered to launch the NextGen Data Capability Program. This $2.4 million initiative aims to build data and digital capability for the red meat industry while providing Charles Sturt students with direct experience of real industry data and opportunities. The program aligns with MLA's broader work under the 2030 Strategic Plan, centred on improving how data and artificial intelligence are used across the supply chain. MLA contributes industry systems and practical use cases, while Charles Sturt brings expertise in data science, engineering, analytics, and AI.

Around fifteen Charles Sturt students will participate in the program over the next two years. Each student will be assigned to a specific MLA data use case and supported by MLA staff and university supervisors. The work will feed into existing MLA projects, and students will share progress through regular showcases. The program focuses on applied, real-world challenges. Current priority data use cases include:

- Lifting production efficiency while keeping product quality stable
- Identifying opportunities for higher returns through growth and value optimisation
- Using AI to generate insights from research libraries
- Calculating carbon footprints per animal
- Using customer insight analytics to enhance products and operations

For Charles Sturt, the partnership helps develop graduates who can combine agricultural knowledge with advanced data skills, aligning with workforce needs in regional areas. For MLA, the program provides additional capacity to accelerate the delivery of the data strategy while building a pipeline of future talent.

A joint steering committee will oversee the program. Quarterly showcases and a research component will also be included to review the impact of the partnership model. Outcomes are expected to include new analytics resources, business cases, and contributions to initiatives such as the Australian Agricultural Data Exchange. For further information, please contact Stephanie Fowler, Program Manager, Digital Livestock AgriPark.

From left: Irene Sobotta – Group Manager, Strategy & Planning ISC; Professor Neena Mitter – Deputy Vice-Chancellor Research, Charles Sturt University; Jo Quigley – Chief Executive Officer, ISC; Mark Bourne – Acting Executive Director, AgriPark

Farm

The Charles Sturt farms at Wagga and Orange continued to progress under the integrated model that supports commercial operations alongside teaching and research. Engagement among students, researchers, and industry partners increased over the period as the new operating structure became fully functional.

At the Ruminant Research Complex, the sheep feeding facility was commissioned and completed its first rotation of Charles Sturt-owned lambs from December to February. The second cattle rotation entered the beef precinct in January, following the precinct's operational start in September 2025. Infrastructure improvements also progressed during this period, with the Jabiru sheep yard project nearing completion and the Bourgault air cart delivered just before Christmas.

Harvest on the Wagga farm proceeded smoothly, with yields exceeding expectations despite challenging seasonal conditions. In the commercial cattle herd, pregnancy testing was conducted in early January, with 70 per cent confirmed pregnant following artificial insemination. The new Merino sheep flock also arrived ahead of Christmas, with joining starting in late January as part of the refreshed breeding direction for the sheep enterprise.

These developments reflect the ongoing evolution of Charles Sturt's farm operations and the growing value they provide as integrated teaching, research, and commercial environments.

The 2025 canola harvest at Dhulura.

The new sheep yards at Jabiru.

Vineyard of the Future

The Vineyard of the Future program has progressed with support from industry and technology partners, including the establishment of a new vineyard at the Dhulara precinct, completed in December 2025. The new high-tech vineyard asset will enable the development of long-term viticulture innovation programs by Charles Sturt University, Wine Australia, and industry.

The new vineyard site provides a controlled environment for evaluating new technologies, data systems and management approaches under warm-climate conditions. It includes a mix of heat-tolerant varieties, cooler-climate comparators, and first-generation CSIRO disease-resistant varieties. This mix enables benchmarking to assess performance under future climate scenarios.

The vineyard has been equipped with a comprehensive monitoring suite, including soil moisture probes, a weather station, and plant water index sensors, as well as automated, fully electric spraying, slashing, and herbicide equipment, to support teaching and research. Data is streamed to the Australian Agriculture Data Exchange to support real-time decision-making across irrigation, water use, pest and disease management, sustainability indicators, and carbon-related metrics. The data hub is designed to integrate wider wine industry datasets to support investment, operational, and research decisions.

While the first commercial harvest is anticipated in 2028, the establishment phase is critical to developing future-ready grape varieties and production systems. The Vineyard of the Future is positioned as a key platform for testing, validating, and demonstrating innovations with potential for sector-wide adoption.

Planting of the new trial block

Cool Soil Initiative

Annual report update

The Cool Soil Initiative Impact Report shows strong growth and progress. The program now supports over 110 farmers across 36,000+ hectares and nearly 500 paddocks, its largest reach yet, driven by expansion into new regions and deeper engagement with existing growers.

This growth is matched by increased adoption of climate-smart practices. Legume rotations now cover about one-third of hectares, and around 70 per cent of paddocks have applied lime in the past five years, indicating broad, system-wide changes rather than isolated actions.

A key strength is “practice stacking”, with 95% of hectares adopting at least two climate-smart practices and over 80% adopting three or more. This highlights the program’s maturity, strong farmer commitment, and growing credibility in advancing resilient, sustainable agriculture.

Projects

Asahi

Charles Sturt University has completed the first stage of a partnership with Asahi Beverages to measure carbon emissions from barley used in major beer brands. Working with nine growers in the Wimmera through the Cool Soil Initiative, researchers collected farm data to produce tailored emissions reports, identifying key emission sources and informing decision-making. The results highlighted practices that already reduce emissions, such as better fertiliser use, reduced soil compaction, and improved soil health, while helping growers prepare for future reporting requirements and plan further reductions. For Asahi, the project provided clearer insight into emissions associated with the 75,000 tonnes of barley it sources annually, supporting its preparation for Scope 3 reporting and improving understanding of supply chain impacts. The partnership strengthens connections between growers and brewers and reinforces Charles Sturt University’s role in advancing sustainable agriculture.

Society for Precision Agriculture Australia

The team has started a new project, Fostering Adoption of Variable Rate Fertiliser Application for Improved Nutrient Use Efficiency, funded by the Society of Precision Agriculture Australia and the Grains Research and Development Corporation (GRDC). The project involves growers and advisers from across Australia, with Charles Sturt University acting as the central data host and providing expertise in carbon accounting to track changes in crop emissions intensity.

The project aims to accelerate the adoption of variable rate fertiliser technologies by providing real-world evidence of their impact on nutrient use efficiency, fertiliser inputs, and crop emissions outcomes. Thirteen advisors and 39 growers will participate nationally, creating strong opportunities for peer learning and knowledge sharing among advisors as variable rate strategies are implemented and evaluated in commercial farming systems.

As the project starts this season, initial collaboration and data collection will focus on identifying where precision nutrient management can deliver both economic and environmental benefits. The results and learnings will be shared progressively with industry through project updates, adviser networks, and broader grower extension activities.

Webinars

The Cool Soil Initiative has launched a three-part webinar series, led by Dr Cass Schefe, to help growers and supply chain partners apply practical, science-based approaches to soil management, nutrition, and productivity.

The first webinar, “Making soil tests pay their way”, focused on improving the value of soil testing through better sampling, interpretation, and management. It covered nutrient analysis, soil acidification, lime use, aluminium impacts in low-pH soils, and how soil data can guide decisions to boost yields and soil health.

The second webinar, “Nitrogen management in a risky climate”, explored strategies to optimise nitrogen use and manage seasonal risk. Key topics included utilising legume nitrogen, deep soil testing, improving fertiliser timing and placement, addressing nutrient limitations, and considering inhibitors to reduce losses.

Overall, the series translates soil science into clear, actionable steps to improve farm performance and ensure long-term sustainability.

Renewables in Agriculture

RenCoE transition

The Renewables in Agriculture Centre of Excellence (RenCoE) has transitioned to full management by AgriPark Charles Sturt University. This change strengthens the Centre's long-term positioning as a strategic platform supporting renewable energy, resilience, and low-emissions outcomes for Australian agriculture.

Established in 2024, RenCoE was created to address emerging challenges in energy security, emissions reduction, and the adoption of renewable technologies in regional and agricultural systems. The Centre has advanced this work through initiatives such as the AgriRenewables Innovation Challenge, delivered in partnership with the Race for 2030 CRC, and continues to work closely with industry to test, validate, and demonstrate renewable energy and energy efficiency solutions.

This will help Charles Sturt enhance industry relationships, streamline delivery, and strengthen its leadership in applied agricultural innovation. With AgriPark coordinating administrative and strategic functions for RenCoE, it will create clearer alignment and expanded collaboration opportunities.

APPN

Annual forum

The Charles Sturt APPN team recently travelled to La Trobe University in Melbourne to attend the annual forum of the Australian Plant Phenomics Network. The network brings together nodes from eight universities and a state department across Australia to share updates, coordinate national capability, and discuss emerging priorities in plant phenomics.

The forum provided an opportunity for the Charles Sturt node to present on operations, innovation and impact, and to connect with partner institutions working across the national phenotyping infrastructure. William Salter, Director of the node at the University of Sydney, presented on work from 2025 using the APPN drone and infrastructure. At the stand, we had APPN drones on display and met with researchers and agronomists to discuss how APPN could enhance their research.

At the forum, the team received updates on projects underway across the network and was advised of several newly funded strategic initiatives under the National Collaboration Research Infrastructure Strategy (NCRIS). Charles Sturt will lead a major new project focused on assessing crop phytotoxicity using hyperspectral drones, in partnership with the University of Queensland and the University of Sydney. The team will also contribute to two additional successful projects – Hyperspectral Excellence, led by the University of Sydney, and a crop and trait calibration project coordinated by the APPN central team.

These projects align with the broader national investment in advanced mobile phenotyping technologies and consistent sensing platforms that support large-scale crop improvement, agronomic innovation, and digital agriculture.

Participation in the forum strengthened Charles Sturt's role in the national network and reinforced the University's leadership in field phenotyping, digital imaging, and data-driven crop research. It also provided a valuable opportunity for staff to engage with partners, share insights, and contribute to a coordinated national effort to accelerate plant science research.

Charles Sturt University's APPN team

Participants at the annual forum

Network site visit

The APPN team recently travelled to Narrabri for a Strategic Initiative Funds (SIF) Rhizo site visit for the project "thinking outside the Rhizo box". The visit was hosted by the local APPN Narrabri team, William Salter, Bryn Collyer, and Connor Cassidy. Participants included researchers Tao Hu and Supriyo Shafkat Ahmed from The Australian National University APPN node, alongside our own Nelson West and Neelesh Sharma from the Charles Sturt University node.

The visit featured a guided farm tour and a practical, hands-on demonstration of the minirhizotron systems, allowing the team to see firsthand how root imagery is collected on site. The day wrapped up with a hybrid project meeting that brought together contributors from USYD, ANU, and the central data team to discuss updates and share perspectives. Opportunities like this to collaborate across nodes play a key role in delivering real NCRIS impact.

Neelesh Sharma, Nelson West, Tao, William and Supriyo Shafkat

William showcasing root imaging on the farm tour

Southern NSW Drought Resilience Adoption and Innovation Hub

A strong start to the year

The year has begun at pace for the Southern NSW Innovation Hub, with a strong focus on delivering its extended program through to June 2027. The hub is hosted by its lead partner Charles Sturt University, and receives funding from the Australian Government's Future Drought Fund.

As conditions tighten across parts of New South Wales, the need for timely insights, strong partnerships and practical support is more important than ever. From Drought Adoption Officers to the Early Insights Dashboard and Drought Resilient Mixed Farming Systems, the Hub's focus is on ensuring that communities have the tools and information they need to act.

You're encouraged to stay connected, engage with the opportunities ahead and be part of the collective effort to strengthen drought resilience across southern New South Wales. Read the Hub's 2025 Impact Report to find out more about its achievements and projects.

Stay connected: News from Southern NSW Innovation Hub

First Nations Engagement Group established

A First Nations Engagement Group has been established for the Southern NSW Innovation Hub, with an initial cohort of members now confirmed.

The group has been formed to strengthen how the hub listens, learns and works with First Nations communities across southern New South Wales.

It will provide guidance on culturally appropriate engagement, help shape project design and delivery, and ensure First Nations knowledge and perspectives are embedded in our work on drought resilience and innovation.

This marks an important step in deepening relationships and ensuring hub programs are informed by those with a strong connection to Country and community.

Why this matters

Embedding First Nations knowledge and perspectives strengthens the relevance, impact and cultural integrity of our work – supporting more effective, inclusive and sustainable solutions for regional communities.

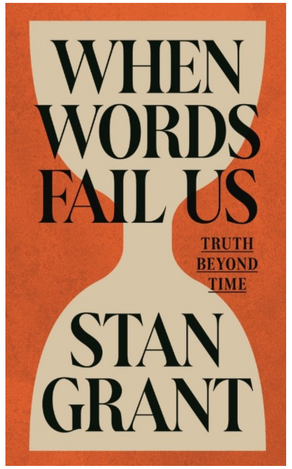
Read more: First Nations - Southern NSW Drought Resilience Adoption and Innovation Hub

New publications highlight the depth of scholarship and public dialogue

Yindyamarra Nguluway continues to foster thoughtful, respectful engagement across disciplines, with three significant new publications from our academic community exploring history, democracy, and the role of truth in contemporary society.

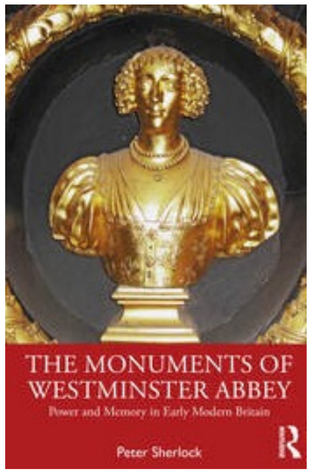
This year features significant works from Distinguished Professor Stan Grant and Professors Peter Sherlock and Dominic O'Sullivan – each engaging in vital conversations on identity, memory, and the future of democratic societies.

Recent and upcoming publications



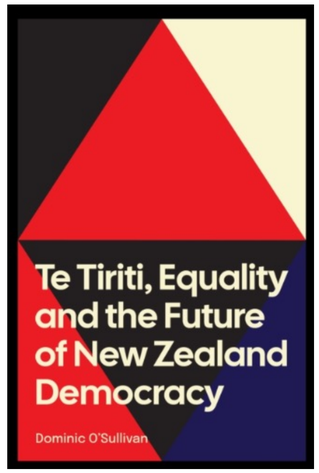
When Words Fail Us: Truth Beyond Time (UNSW Press, 2026)

In this timely new work, Professor Stan Grant explores the challenges of communication in a divided world, inviting us back to the principles of Yindyamarra – respect, humility, and deep listening. Drawing on philosophy and culture, from Plato to Simone Weil to Radiohead, the book calls for a more considered and compassionate way of engaging with one another.



The Monuments of Westminster Abbey: Power and Memory in Early Modern Britain (Routledge, 2025)

In this significant work, Professor Peter Sherlock explores the monuments of Westminster Abbey as spaces of memory, identity, and reflection. Through a Yindyamarra lens of respectful engagement with the past, the book examines how commemoration—from royal tombs to Poets' Corner—has been shaped by historical change, and how these practices continue to influence our understanding and memory.



Te Tiriti, Equality and the Future of New Zealand (Auckland University Press, 2026)

In this major work, Professor Dominic O'Sullivan reconsiders the meaning and future of Te Tiriti, challenging conventional interpretations and offering a more inclusive vision of democracy. Grounded in a Yindyamarra approach – respect, balance, and listening across perspectives – the book explores how rangatiratanga and kawanatanga can work together to support meaningful and culturally grounded political equality, and a shared future shaped by all.

Engaging audiences through public events

These publications are being shared through public events that reflect Yindyamarra Nguluway's commitment to dialogue grounded in respect, critical inquiry and truth-telling.

A recent book launch for Professor Sherlock was held at St Paul's Cathedral on 5 March, with Professor Catherine Kovesi from the University of Melbourne providing the launch address. A further event was held in Canberra on 8 May, featuring Distinguished Professor Stan Grant.

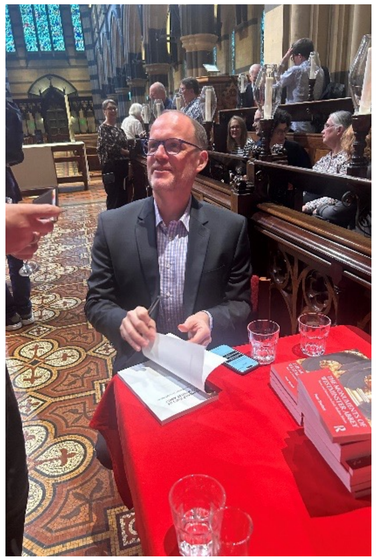
Yindyamarra Nguluway was also highlighted through a major public event on the Bathurst campus, co-hosted by Charles Sturt University and Bathurst Regional Council. The event welcomed Distinguished Professor Stan Grant for a powerful public lecture and marked the launch of his newest book, When Words Fail Us: Truth Beyond Time, by Vice-Chancellor Professor Renée Leon.

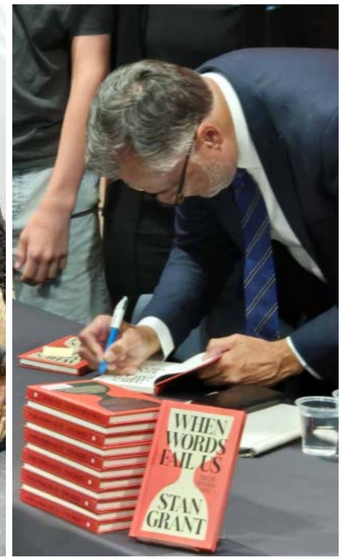
More than 300 people attended the evening, which created an important space for the university and wider Bathurst community to reflect, listen and engage in conversations about truth, belonging and the future we want to shape together.

Grounded in respect, humility and walking together, the event reflected the values at the heart of Yindyamarra Nguluway and its role in strengthening Charles Sturt's engagement with community, Country and truth-telling.

Why this matters

Together, these works demonstrate the strength of Yindyamarra's intellectual community and its contribution to conversations that matter – locally, nationally, and globally. Through scholarship and public engagement, they reflect a shared commitment to exploring complex ideas with openness, respect, and a willingness to listen.



From regional roots to global impact: Children lead dialogue with UN changemakers

Charles Sturt University has showcased the power of child led research and regional voices on the global stage through a highly successful World Children's Day event hosted by the Children's Voices Centre (CVC). The online session on World Children's Day, 20 November 2025, brought together more than 200 participants from across regional Australia to witness a unique dialogue between children and young people and Charles Sturt alumnus David Ohana, now the Chief Communications and Marketing Officer at the United Nations Foundation in Washington, DC.

In a dynamic reversal of traditional roles, a panel of young interviewers took the lead – asking David Ohana thoughtful, probing questions about his journey from growing up in regional Australia to working in international advocacy and humanitarian leadership. Their questions ranged from how he navigated career challenges to what young people can do to influence decisions that affect their futures. The exchange offered an authentic demonstration of how children's perspectives can illuminate global issues in ways that adults often overlook.

The event, *From Regional Roots to Global Impact: Kids Interview UN Changemaker David Ohana*, also highlighted the Children's Voices Centre's world leading research program under Distinguished Professor Sharynne McLeod. Associate Professors Tamara Cumming and Kathy Cologon shared examples of recent child led studies that inform policy, shift practice, and strengthen community inclusion. Their work positions children as collaborators in research, rather than passive subjects, embodying an approach that continues to gain traction internationally.

Mr Ohana emphasised the value of regional perspectives in global conversations, noting that lived experience outside large metropolitan centres can foster resilience, creativity, and community-driven problem-solving qualities that are increasingly vital in international leadership. His reflections reinforced one of the Centre's core messages: that children, regardless of geography, have the capacity to contribute meaningfully to global dialogue.

For researchers, the event offered a live demonstration of participatory methodologies in action. The children's confident questioning and the depth of their engagement showed the tangible outcomes of research that prioritises children's agency and communication. Audience feedback highlighted the event's ability to bridge research, community practice, and international engagement in a way that was both rigorous and deeply human.

The session concluded with an invitation to ongoing collaboration across sectors to ensure children's insights are not only heard but also embedded in decision-making. The success of the event underscores Charles Sturt University's leadership in child-centred research and its commitment to supporting young people in regional communities to influence the world around them.

Why this matters

This work demonstrates how child-led research can directly influence policy, practice, and global dialogue. By equipping young people – particularly those in regional communities – with the confidence and platforms to contribute, Charles Sturt is helping shape more inclusive, responsive and future-focused decision-making at all levels.

Listen to the recording.

From regional voices to the global stage: Charles Sturt research at the United Nations

Charles Sturt University's CVC has taken child-led research to the global stage, with Associate Director Associate Professor Kathy Cologon presenting at the United Nations World Down Syndrome Day Conference in New York in March 2026.

Presenting alongside Tim Cologon, Associate Professor Cologon shared insights from research with young children, including those with Down syndrome, highlighting their strong desire for inclusion, friendship, and belonging.

Using creative, inclusive methods, the research revealed that children do not want to change who they are – they want to be accepted and valued. Their perspectives challenge assumptions about disability and emphasise the need for more inclusive environments and attitudes.

Why this matters

This work demonstrates the global impact of Charles Sturt's research, amplifying children's voices and shaping more inclusive communities.

Children's Voices Conference 2026: Creating a more inclusive world for children

Researchers, practitioners, and educators from around the world are invited to engage with the latest thinking in child-centred research at the Children's Voices Conference 2026 (CVC2026), hosted by Charles Sturt University's Children's Voices Centre.

This interdisciplinary international conference provides a platform to share innovative methods, critical theories, and collaborative approaches that support social justice in early childhood and across the broader sector. Bringing together a global community of researchers and professionals, the conference will highlight emerging evidence and real-world applications that are shaping practice and policy.

Participants can expect to engage with leading international researchers, explore new approaches to working with children, families, and practitioners, and deepen their research and critical analysis capabilities. The conference is designed to foster meaningful dialogue and connection across disciplines, strengthening collaboration and knowledge exchange at a global scale.

In line with Charles Sturt University's commitment to "for the public good", CVC2026 is free to attend and present. Delivered in a fully online, asynchronous format, the conference ensures accessibility for participants across time zones and regions, enabling broad participation without barriers.

CVC2026 reflects Charles Sturt's leadership in child-centred research and its ongoing commitment to amplifying children's voices in research, policy, and practice – locally, nationally, and internationally.

Click the Children's Voices Conference 2026 to:

- Register to attend the free online conference (1–3 September 2026)
- Submit an abstract (by 11 May 2026)
- Children are invited to have their say about belonging by creating an artwork, postcard, or podcast

Felicity Laurence (CET and Charles Sturt PhD student), Dr Terry McCarthy, and Distinguished Professor Sharynne McLeod

Mapping children's speech across Tasmania to inform practice and policy

A major research partnership between Charles Sturt University and Catholic Education Tasmania (CET) is making strong progress, with more than 785 students already involved. Led by Distinguished Professor Sharynne McLeod, this large-scale study—described in the field as a "speech census"—is generating valuable, population-wide insights into children's speech development. The findings will support earlier detection of speech difficulties and enable more targeted, evidence-based support for children in schools.

The complexity of large-scale, in-school research

Conducting assessments across multiple schools involves logistical challenges, from coordinating schedules to accurately tracking participants in busy classroom environments. These complexities highlight the importance of strong collaboration with educators and the need for flexible, responsive research approaches in real-world settings.

The work also extends beyond schools into system-level engagement. Meetings with Catholic Education Tasmania's executive leadership team – including Interim Executive Director Dr Terry McCarthy and Deputy Executive Director Matt Jones – provided an opportunity to share early insights from the research and reinforce the importance of listening to parents' concerns to better support children's communication needs.

Ground-level insights that bring research to life

Fieldwork continues to offer rich and memorable insights into school environments. Highlights from the Tasmania visits included a surprise classroom visit from a baby deer, enthusiastic participation from children – including one determined student who returned three times for assessment – and the discovery of Charles Sturt's treehouse speech sound poster in use in a school speech room.

These moments underscore the deep connection between research, practice, and community, and reflect the tangible reach of the university's work – from classroom walls to system-level leadership conversations.

The treehouse poster was on the wall in the speech room at a school

Strengthening partnerships to shape future research

Charles Sturt University continues to build strategic partnerships with government, with Associate Professor Kathy Cologon and Distinguished Professor Sharynne McLeod joining a cohort of New South Wales universities in discussions with the NSW Department of Education. The meeting explored research opportunities to support children across early childhood education and care, signalling strong alignment between university research and government priorities.

Navigating complexity at scale

Supporting children across a system of this scale presents ongoing challenges. The NSW Department of Education oversees more than 1.2 million learners, 94,000 teaching staff, 47,000 support staff, over 2,200 schools and principals, and 6,000 early childhood education and care services. Translating research into meaningful, system-wide impact requires coordination, adaptability, and sustained collaboration across multiple stakeholders.

Opportunity to influence practice at scale

The scale of the NSW education system also presents a powerful opportunity. Charles Sturt researchers are well-positioned to provide evidence that informs policy, strengthens practice, and improves outcomes for children across the state. These conversations mark an important step towards research that not only advances knowledge but also delivers tangible impact at scale.

Climate Adaptation Survey

What will life for Australians be like on a heating planet?

Understanding how Australians are preparing for a warming future

The challenge

What will life in Australia look like on a heating planet?

As climate change accelerates, Australians are increasingly confronted with complex decisions about where to live, how to protect their homes and what the future holds for their families. Yet, until now, there has been limited national insight into how people are thinking about – and preparing for – these changes.

The research

A first-of-its-kind national survey, commissioned and analysed by Clive Hamilton, is providing a detailed picture of how Australians are responding to life on a warming planet.

Conducted with nearly 2,000 participants by Roy Morgan Research, the survey explores Australians' views and experiences across a wide range of issues, including:

- expectations of future temperature increases
- direct experiences with extreme weather events
- changes people are making to their homes
- concerns about food security by mid-century
- perceptions of social stability and potential disruption.

The research also examines how climate change is influencing deeply personal decisions – such as whether to have children – and where Australians believe it will be safest to live in the future.

Importantly, the survey compares responses from the general population with those living in high-risk areas affected by floods and bushfires, offering insight into how lived experience shapes climate awareness and preparedness.

Translating insight into action

The findings have been released through a series of research papers, each focusing on a critical aspect of climate adaptation, including:

- public anxieties about climate change
- protecting homes and infrastructure
- climate-related migration within Australia
- intergenerational concerns and family decision-making
- responsibility for climate insurance
- perceptions of safety across regions.

Together, these papers build a comprehensive evidence base to inform policy, community planning and future research.

Why this matters

This research positions Charles Sturt University at the forefront of national conversations about climate adaptation and resilience.

By capturing Australians' responses to climate change, the university provides critical insights to shape policy, boost community preparedness and enable evidence-based decision-making.

Learn more.

Professor Peter Sherlock

Professor Stephen Sherlock appointed Executive Director of the Australian Centre for Christianity and Culture

Professor Stephen Sherlock has been appointed to the ongoing role of Executive Director of the Australian Centre for Christianity and Culture. He expressed his gratitude for the support of the Centre's Board, Bishop Mark Short and the Anglican Diocese of Canberra and Goulburn, as well as Deputy Vice-Chancellor (Research), Professor Neena Mitter, and Charles Sturt University.

This role is combined with Yindyamarra Nguluway, and Professor Sherlock looks forward to working with the Centre's small but exceptional team to build strong synergies across their shared mission of advancing wisdom for the common good. Together, the work draws on the ancient wisdom of Christianity and the Wiradjuri concept of yindyamarra—values that are deeply needed across communities, nationally and globally.

Enhancing academic exchange between Australia and China

Professor Wayne Hudson from the Australian Centre for Christianity and Culture has recently returned from a four-month appointment at Beijing Foreign Studies University (BFSU), further strengthening academic and cultural exchange between Australia and China.

Professor Hudson holds the inaugural Colin Mackerras Chair in Australian Studies at BFSU, a role established to deepen understanding of Australia within China and foster ongoing collaboration between institutions.

Building global understanding through scholarship

During his time in Beijing, Professor Hudson taught two master's-level courses while also engaging in a wide range of academic and cultural activities. His visit included travel to nine cities and presentations at five conferences, contributing to international dialogue on Australian studies and cross-cultural engagement.

Reflecting on the experience, Professor Hudson described the appointment as both professionally rewarding and personally enriching.

“My four months in China were sensational. Apart from teaching two MA courses, I visited nine cities and spoke at five conferences.

“I now hope to publish text based on my experiences and to promote new forms of cooperation between our countries.”

Strengthening international partnerships

The appointment highlights the important role of academic exchange in building mutual understanding and strengthening relationships between Australia and China.

Through teaching, research engagement, and public scholarship, Professor Hudson's work contributes to a broader effort to enhance global awareness of Australian perspectives and to foster new opportunities for collaboration.

Continuing engagement

Professor Hudson will return to BFSU for a further four-month appointment later this year, continuing his commitment to advancing international academic partnerships and dialogue.

This ongoing engagement reflects Charles Sturt University's contribution to global scholarship and its role in fostering meaningful international connections through research and education.

Annual HG Brennan Lecture and Workshop

Bringing disciplines together to address complex challenges

The Australian Centre for Christianity and Culture (ACC&C) brought economists and theologians together for its third annual HG Brennan Lecture and Workshop in January, creating a valuable space for interdisciplinary dialogue on complex societal challenges.

Delivered by Michael Brennan, CEO of economic policy think tank e61, the lecture explored how economics and theology can work in complementary ways. While economics focuses on efficient means to achieve societal goals, theology offers critical insight into the formation of values, virtue, and the common good – particularly in a time of increasing social fragmentation and pressure on institutions.

A two-day workshop on inequality extended these conversations, with contributions from leading scholars across economics, theology, and social thought. Discussions highlighted the value of integrating diverse perspectives to better understand and respond to real-world challenges.

The challenge of bridging different ways of thinking

Despite shared concerns about issues such as poverty and inequality, meaningful dialogue between economists and theologians remains difficult. Differences in methodology –particularly the economist's focus on means versus the theologian's focus on ends – can limit integration and shared understanding.

The workshop also reinforced the complexity of inequality as a policy and societal issue, with no simple or unified solutions emerging.

A key insight: the role of values in shaping outcomes

A central insight from the lecture was that economics, by design, does not shape or critique human desires – it assumes them. In contrast, theology offers frameworks for understanding and forming those desires, particularly through concepts of virtue and moral responsibility.

This highlights an important gap in contemporary policy thinking: without attention to values and the common good, even the most efficient systems may struggle to deliver meaningful societal outcomes.

Why this matters for Charles Sturt

This work reflects Charles Sturt University's commitment to addressing complex regional and global challenges through interdisciplinary, values-informed research.

By convening conversations across disciplines, the ACC&C is helping position Charles Sturt as a leader in public discourse – bringing together diverse perspectives to inform policy, strengthen institutions, and contribute to more cohesive and resilient communities.

It also reinforces the university's role in shaping not just knowledge, but the ethical and social frameworks that support sustainable impact.

Supporting research excellence across Charles Sturt

The Research Integrity Advisor Network (RIAN) has strengthened its reach across the university, with Research Integrity Advisors now available in every Faculty and Research Institute.

RIAN brings together a network of experienced and approachable researchers who provide guidance and support on research integrity and ethics. The network is available to all Charles Sturt staff, students, and members of the university community.

How RIAN can support you

- Guidance on responsible research practices
- Advice on ethical research and compliance obligations
- Support with research conduct concerns
- Help navigate uncertainties in the research process
- A confidential and collegial point of contact

Get in touch

Not sure who to contact?

Email researchintegrity@csu.edu.au, and your enquiry will be directed to the appropriate Adviser.

Learn more

Find out more about the Research Integrity Adviser Network here:

https://www.csu.edu.au/research/integrity-ethics-compliance/research-integrity/advice/research-integrity-advisor-network

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Research Integrity Committee reviews

Research Integrity Committee reviews ensure that your research adheres to fundamental ethical principles, protecting participants and maintaining the integrity of the research field. This review process is a cornerstone of responsible scientific inquiry.

At Charles Sturt, the following research project reviews are required.

Human Research Ethics Committee (HREC)

If your research involves human participants, their data, or their tissue, you will need HREC review. HREC reviews applications that involve surveys, interviews, focus groups, access to data containing human information, administering physiological treatments, collecting and/or using organs, tissues, or fluids, and clinical trials of medications, devices, or treatments. If your research explores human experiences broadly, such as interactions with others or changes to the environment, including autoethnographic and ethnographic research, you will likely need HREC review. More HREC information here.

Indigenous Research

A review is required if your research impacts or is of particular significance to Aboriginal and Torres Strait Islander peoples, including the planning, collection, analysis, and dissemination of information or knowledge, in any format or medium, which is about or may affect Indigenous peoples, either collectively or individually. **This requirement extends** to the use of collections, such as archives, datasets, information collections, or biospecimens. More information here.

Animal Ethics Committee (AEC)

Anyone wanting to use animals for scientific purposes at Charles Sturt University must seek approval from the AEC before starting. “Scientific purposes” include teaching, field trials, environmental studies, research, diagnosis, product testing, and the production of biological products. Animals include any non-human vertebrate and cephalopods. More AEC information here.

Institutional Biosafety Committee (IBC)

If your research or teaching involves the purchase/acquisition of micro-organisms of Risk Group 2 or higher or work with genetically modified organisms (GMOs) or potentially infectious and/or hazardous biological agents, you may be required to apply for IBC approval. IBC ensures safe and responsible innovation by reviewing activities involving the procurement, use, and physical containment of these organisms. More IBC information here.

National Security Compliance Committee (NSCC)

The NSCC reviews activities listed in the Defence and Strategic Goods List or the higher education sector countering foreign interference guidelines, to ensure mechanisms are in place to detect and report potential non-compliance with the University’s national security obligations. More NSCC information here.

Radiation Safety Committee (RSC)

If you’re teaching or conducting research involving radiation, you will need approval from the RSC. Working with radiation includes the acquisition, disposal, and/or use of radioactive substances, irradiating apparatus, high-powered laser devices, or non-ionising radiation. More RSC information here.

Research with other organisations

Where your research has already been approved by another accredited Ethics Committee (i.e., external to Charles Sturt), you must submit an HREC Externally Approved Proposal Form or Collaborative Research Agreement between Accredited Animal Research Establishments. If you are unsure which form or procedure applies, please contact the Research Integrity Unit for assistance.

Contact the relevant committee, see our contact us page or contact a Research Integrity Officer via email: researchintegrity@csu.edu.au

Submitting human research ethics applications

All applications must be emailed to ethics@csu.edu.au and include the following:

- Project Description
- Recruitment material including social media posts, flyers, and emails
- Participant Information Sheet
- Consent Form for interviews and focus groups
- Research Data Management Plan
- Evidence of research merit – there is a new peer review template: see note below
- HREA output form
  - Each member of the research team must sign the output form
  - Answering ‘no’ to HREA Q1.9.11 for each researcher will generate space at the end of the form for everyone to sign
- Certificates for Human Research Ethics and Research Integrity training modules

A note on Indigenous Research

Indigenous research includes all research that impacts or is of particular significance to Aboriginal and Torres Strait Islander peoples, including the planning, collection, analysis and dissemination of information or knowledge, in any format or medium, which is about or may affect Indigenous peoples, either collectively or individually (see AIATSIS, 2020, p. 6; National Statement Section 4.7, pp. 93–96).

In the HREA output form, Section 2, Q1.19 - 'The research will involve the following participants', you must tick ‘Aboriginal and Torres Strait Islander peoples’.

A new peer review form

In response to feedback from the HREC committee and researcher community, the peer review form has been redesigned to require more transparency around the review process. Old versions of the form will not be accepted from May 2026. Please find a copy of the new form on our website here.

Only complete applications are reviewed by the HREC. Any submissions missing documentation will be returned to the applicant for updating.

Build your research capability in 2026

As you plan your PPDR goals, consider participating in Charles Sturt’s researcher development programs in 2026.

These programs are designed to strengthen your research skills and capability across key areas, including grant writing, publication development, statistical data analysis, and strategic career planning.

You can also take part in the Conscia Research Staff Mentoring Program as a mentee or mentor – a valuable opportunity to support your research career and achieve your professional goals.

Explore program options and schedules and register here: Researcher development programs.

Let's Talk Research! Masterclass Series returns in 2026

Interested in what our researchers are working on? The Let's Talk Research! Masterclass Series is back for 2026.

This popular series showcases the expertise and innovation of Charles Sturt's researchers, providing a platform for both experienced and emerging academics to share new publications, research insights, and significant findings.

This year's topics span a range of areas, including internships, research innovation, translation readiness, policy impact, co-design, and partnerships.

Masterclasses are held on the first Wednesday of each month, 12–1 pm (NSW time), and are facilitated by Professor Jason White, Director of Research Services.

Join these lunchtime sessions to connect with colleagues and learn more about the impactful research happening across the university.

More information: Masterclass series

Conscia Mentoring

Conscia pairs research staff with a more experienced research leader to develop their research career, meet research goals, and strategise for future academic success. Mentees can connect with mentors for one-time meetups to address a short query (Research Connect) or for ongoing, structured support with guided mentoring (Research Horizons).

How does it work?

Mentees are encouraged to identify research goals when applying to join Conscia and they are matched with mentors who have skills in becoming a researcher, doing research, communicating research, and applying for funding.

Join Conscia as a mentee

If you are looking for advice or guidance on developing research capability in becoming a researcher, conducting research, communicating research, or applying for funding, considering joining Conscia as a mentee (open to early career research staff).

Join Conscia as a mentor

If you have research knowledge, skills, and experience in becoming a researcher, conducting research, communicating research, and applying for funding, considering joining Conscia as a mentor (open to academic staff, professional staff members, research leaders, adjunct staff members).

More information: Conscia mentoring

Learning R

R is a popular and widely used programming language that works well with research data for statistical analysis.

Develop your skills by joining the *Learning R* Masterclasses in 2026 to learn the fundamentals of R for statistical and descriptive analysis and basic computation, to more advanced topics.

Familiarity with basic summary statistics (mean, median, standard deviation, quartiles, etc.) is assumed, although no experience of using R is required.

Masterclasses run on the 3rd Wednesday of each month, 10am-12:15pm (AEST).

Join our introductory workshop *The Big Picture on Data Analysis and Choice of Statistical Software* workshop before participating in the Learning R Masterclasses.

More information: Learning R

Quantitative Consulting Unit

The Quantitative Consulting Unit (QCU) is a research support unit within the Office of Research Services.

QCU is a consultation service that provides high-level, quantitative statistical advice and support, including recommendations on the design and analysis of research projects. It also undertakes complex statistical analyses to meet the research needs of staff, Higher Degree Research (HDR) candidates, and students.

You can access QCU staff's knowledge, skills, and experience to develop submissions to internal and external funding bodies for support of statistical analyses of research data.

Benefits for researchers

- Develop submissions to internal and external funding bodies for the support of statistical analyses of research data.
- Access training, support and learning resources to improve researcher capability in the use, interpretation, and application of statistical analysis and technologies.
- Create, use, and enhance data sets for research data aggregation, analysis and visualisation.

More information.

For enquiries, contact: qcu@csu.edu.au

Spatial Data Analysis Network

The Spatial Data Analysis Network (SPAN) is a research support unit within the Office of Research Services.

SPAN staff can source, prepare, and customise spatial datasets, including mapping, image production and processing to optimise their scope, reliability and synthesis, spatial apps, field surveys, and dashboards.

Delivering high-quality services

Access SPAN staff's knowledge, skills, and experience to support research projects, grant funded projects, and the dissemination of research.

Researchers can liaise with SPAN staff for technical consultation support and advice, including the preparation and customisation of spatial datasets, programming, and the development of location-based surveys, research application tools and unique scripts in relation to diverse research problems for:

- Geographic Information Systems (GIS)
- Remote Sensing and Image Analysis
- Spatial Statistics and Spatial Analysis
- Simulation and Modelling
- Spatial and analytical software
- Scientific instrumentation and other hardware
- Location-based survey planning and questionnaire design

Researchers can also access spatial technologies, including field and computing equipment, hardware, software and systems for the creation, use, interpretation, and application of spatial statistics to improve research productivity.

More information.

For enquiries, contact: span@csu.edu.au

Research Data and Tools

Research data is information collected, observed, or generated to validate research findings and answer questions or test theories. Turning this often-disparate 'raw' information into useful and usable data usually requires a series of transformations, processes, and analyses.

Access Charles Sturt survey programs (REDCap, Qualtrics, ArcGIS location based surveys), systems, tools and support to enhance your data analysis: Here.

For enquiries, contact: researchsupport@csu.edu.au

Editing Service

It takes a lot of time and effort to write a journal paper...wouldn't it be great if you could have your paper professionally edited before it is submitted for publication? Well, you can!

Charles Sturt offers a free editing service for academic staff to improve the quality of research publications, including papers, books, and book chapters.

Checks carried out include spelling, grammar, punctuation, citations and references, consistency in word use, tenses, heading levels, and table and figure formatting. These won't guarantee that your research will be published, but they can smooth the publishing process and, in some cases, make the difference between a submission being accepted or rejected.

To access the research editing service, please complete the online form (it takes less than 2 minutes).

For more information, click the link below or contact Research Editor Mark Filmer, directly.

Find out more or apply.

Reimagining university pathways for rural first-in-family students

A new international study led by the Higher Education Equity Research Unit (HEERU) is exploring how universities can better support rural and regional students who are the first in their families to attend university.

The project, **Towards socially and regionally equitable futures: Exploring first-in-family rural learners in higher education**, brings together Charles Sturt University and the University of Innsbruck to examine how rurality and first-generation status intersect to shape student experiences.

Rural and first-in-family students face lower participation and higher attrition rates, and these challenges are often amplified when both factors overlap. Rather than focusing on "fixing" students, the study takes a strengths-based approach, recognising the place-based knowledge, community connections and aspirations these students bring to higher education. The research asks a critical question: *how can universities redesign degree structures, support systems and engagement approaches to better meet students where they are?*

Through student surveys and interviews across Australia and Austria, the research will help inform more inclusive degree structures, support systems and engagement approaches.

Why this matters

Improving access, participation and success for rural first-in-family students is central to building a fairer higher education system. This project will generate practical insights, good practice principles and international collaboration to help universities better engage and retain students from regional and remote communities.

Impact

The project will deliver the following outputs:

- A series of high-profile pieces targeted at both scholarly journals and practitioner publications and networks.
- Good practice principles for retaining students from regional and remote backgrounds: these will be distributed across key stakeholders in both countries
- Establishing a strong network between the regions (e.g. through on-site and online meetings with key stakeholders) and within both universities.
- Bring together two strands of scholarship: one relating to sociology of rural education, particularly informed by the cultural wealths of first-generation university learners, the other related to human geography, focusing on the ideas of spatiality, liminality, and the politics of 'mobility', e.g. (O'Shea et al, 2019).

This transdisciplinary cross-country collaboration is designed to limit the impact that a person's postcode and family biography has on their educational opportunities, particularly university attendance. This is not simply a matter of access—it's about rethinking participation in ways that reflect the realities of justice, and designing futures that are truly inclusive.

PhD Internships in the Spotlight

PhD internships have taken centre stage in 2025, with renewed attention on the wide ranging benefits they deliver for higher degree by research (HDR) candidates, supervisors, universities and industry partners. As demand grows for work ready researchers who can operate across academic and applied settings, internships are proving to be a critical bridge between research training and real world impact.

Over the past year, the Office of Graduate Research has focused on strengthening the foundations that support PhD internships. Throughout 2025, new resources, targeted training and streamlined administrative processes were developed to make internship participation easier and more accessible for candidates and supervisors alike. With this groundwork now in place, the emphasis has shifted to promoting awareness of internship opportunities and celebrating the achievements of candidates who have already undertaken them.

In February and March, Deputy Vice Chancellor (Research), Professor Neena Mitter, hosted a series of three workshops for HDR supervisors. These sessions highlighted the strategic importance of PhD internships within the university's broader research agenda and reinforced the vital role supervisors play in encouraging candidates to pursue industry embedded experiences. Supervisors were also encouraged to draw on their own research networks and partnerships to help create new and meaningful internship opportunities.

The spotlight then turned to HDR candidates on 1 April as part of the Let's Talk Research Masterclass Series. Hosted by Professor Jason White (Director of Research Services) and facilitated by Dr Jennifer Podesta (Office of Graduate Research) three PhD candidates shared their internship experiences and reflected on the professional and research skills they gained.

Sarah Condran

Sarah Condran (School of Computing, Mathematics & Engineering) spoke about her five month internship with global defence corporation Lockheed Martin, describing how it provided new perspectives on her research and a deeper understanding of how industry operates compared to academia. Sarah's industry mentor Anthony Silvestre also shared insights into what industry partners look for in PhD interns and the importance of strong university–industry relationships.

Miltone Kimori

Fellow PhD candidate Miltone Kimori (Faculty of Business, Justice & Behavioural Sciences) discussed his internship with the Western Murray Land Improvement Group, supported by One Basin CRC, highlighting the importance of research translation, community engagement and applied learning.

Mohummad Mohsan Sheeraz

Completing the panel, Mohummad Mohsan Sheeraz shared his four month blockchain internship with Evernode Labs, noting the benefits of gaining Australian industry experience as an international student.

Collectively, these internships demonstrate the powerful role industry embedded experiences play in developing transferable 'soft' skills such as time management, collaboration and professional communication. By integrating candidates into industry research units, internships accelerate the transfer and adoption of knowledge, strengthen professional networks and enhance employability - equipping PhD graduates with the skills and confidence to thrive across academic, industry and community based careers.

To find out more about PhD Internships contact graduateresearch@csu.edu.au.

DocFest Graduate Research Conference 2026: Pathways to Growth - your HDR journey

From 18–22 May 2026, higher degree by research (HDR) candidates, supervisors, Honours students and anyone interested in research, are all invited to come together online each day from 12 noon for DocFest Graduate Research Conference 2026—a week dedicated to growth, connection, and the evolving research journey. With the theme *Pathways to Growth: your HDR journey*, DocFest 2026 recognises that research is not only about building knowledge, but also about building people who do the research.

This year's virtual conference celebrates the personal and professional pathways that shape each researcher's unique story. Through inspiring keynote presentations, interactive workshops, and meaningful panel discussions, DocFest creates a supportive space to reflect on challenges, celebrate milestones, and develop the skills and resilience needed to thrive in research and beyond.

DocFest 2026 offers inspiration from a diverse range of speakers including experts from across the research landscape, supervisors and university staff who bring valuable perspectives. Together, these voices highlight the breadth and depth of research being undertaken at Charles Sturt University, while fostering a strong sense of research community.

This year we are especially delighted to welcome Kylie Walker AM CompIEAust, Chief Executive Officer of Australian Academy of Technological Sciences & Engineering as our keynote speaker on Tuesday 19 May 12:00-1:00pm.

More than a conference, DocFest is an opportunity for researchers to connect, learn, and feel empowered at every stage of the journey. Whether you are just beginning your HDR, approaching completion, or an experienced researcher, DocFest provides tools, insights, and encouragement to support your journey.

Find out more about DocFest and program details

Learn more.

Solve a business challenge or fast-track your organisation’s research and development. A Charles Sturt University PhD Internship is an opportunity worth exploring.

We’ll connect your business with emerging researchers, who’ll bring sharp analytical skills, fresh ideas and sound research expertise. Together, we’ll design and deliver solutions that are flexible and responsive.

What is a PhD Internship?

A PhD Internship is a short-term project (usually three to six months) where candidates focus on a specific challenge in your organisation. Internships are co-designed in partnership with our expert researchers to ensure alignment with your goals. Depending on the project, interns may work full-time or part-time in your organisation, on-site or remotely.

Need more time? If your challenge requires a longer-term project, we can set up an industry-embedded PhD over three to four years. After something smaller? We can also facilitate a shorter placement.

Learn more

→ info.csu.edu.au/host-an-internship

What are the benefits?

- Specialised expertise and advanced research capabilities focused on rapid results.
- Cost-effective tailored solutions.
- Structured programs requiring minimal administration.
- Enhanced research capacity in your workforce through collaboration and knowledge exchange.
- Access to intellectual property (IP) generated during the internship.
- You’ll be supporting the researchers of the future.
- Tax incentives may apply.

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