

AGRIPARK

**WORLD
CLASS
FACILITIES**
IN THE HEART
OF THE
RIVERINA



Charles Sturt
University



KNOWLEDGE, INNOVATION
AND ENDURING PARTNERSHIPS
ARE VITAL TO THE FUTURE OF
FOOD AND FIBRE PRODUCTION
IN AUSTRALIA.

01



Whether you are considering a move to the AgriPark or have already taken your place, we invite you to take a closer look at the range of facilities and participating organisations within the precinct and talk to us about the opportunities for collaboration.

AN ECOSYSTEM OF INNOVATION AND COLLABORATION

The Agrisciences Research and Business Park (AgriPark) on Charles Sturt University's Wagga Wagga Campus is a key step in supporting the agricultural sector to meet the challenges of the 21st century head-on.

Located in the heart of the Riverina, the AgriPark is an innovation precinct dedicated to research, curated collaboration, and sustainable production. It's providing the infrastructure, services and support for innovative industry to co-locate, integrate and work with each other and the multidisciplinary research strengths at Charles Sturt University.

An ecosystem of innovative organisations, the AgriPark will measure its success on the creation of new businesses, new products and new ways of thinking.



FROM OUR COMMERCIAL FARM
TO WORLD CLASS LABORATORIES,
CHARLES STURT UNIVERSITY'S
ENVIRONMENTAL TEST SUITE INCLUDES
A RANGE OF RESEARCH FACILITIES
WITHIN A SINGLE PRECINCT ON THE
WAGGA WAGGA CAMPUS.

02

01. LABORATORIES

Charles Sturt University in Wagga Wagga has 25 operational laboratories ranging from standard through to physical containment level 3 (PC3). Two labs are also certified for work with Genetically Modified Organisms (GMO) and our Environmental and Analytical Laboratories provide an analytical commercial and research testing service.

Our facilities include large bench space laboratories, preparation and wash up areas, liquid nitrogen storage and dispensing area, and specialist rooms for microbiology, microscopy, molecular biology, parasitology, tissue culture and virology.

02. ANALYTICAL EQUIPMENT

Charles Sturt University's analytical capability encompasses a range of specialist equipment including:

- Australia's only Supercritical Fluid Extractor
- High Performance Liquid Chromatography (HPLC)
- Gas Chromatography – Mass Spectrometry (GCMS, GCMQTOF)
- Liquid Chromatography – Mass Spectrometry (LCMS, LCMWQTOF, LCMSQQQ).

Microscopy capability includes scanning electron, fluorescent, light, confocal and slide scanner.

03. RHIZOLYSIMETER

Charles Sturt University's Rhizolysimeter is the largest root growth and soil water research facility in Australia.

The facility contains 24 soil monoliths encased in steel tubes arranged in rows in an underground laboratory, allowing access for viewing and detailed measurements up to 2.5m beneath the soil surface.

04. PHYTOTRON AND GROWTH CHAMBERS

Charles Sturt University's Phytotron is a large, open plan space for working with plants and soils. The facility includes dehydrators, plant and soil grinding rooms, cold rooms, dry storage area, vacuum digging equipment, soil sterilisation, and root washing facilities.

The Phytotron houses 13 large growth chambers, including two specialist chambers for frost conditions and CO2 manipulation. All growth chambers are temperature, light and humidity controlled to provide the perfect environment for plant and soil testing.

05. GLASSHOUSES

Charles Sturt University has several operational glasshouses, ranging from standard to physical containment level 2 (PC2) with various size bays suitable for large and small projects.

Our state-of-the-art 400m2, three bay, PC2 GMO (Risk Level 2) glasshouse has been designed and constructed for sustainability and optimal environmental control.

06. FIELD TRIAL SITES

Our research and demonstration sites allow for replicated field trials under controlled conditions. These sites can be irrigated and monitored with in-field and remote sensing technology.

The field sites have showcased new research findings, technologies and demonstrations with practical applications on crop production, crop protection and plant health. They also host outreach extension and teaching of both undergraduate and postgraduate students.

ENVIRONMENTAL TEST SUITE



AT THE AGRIPARK, WE ARE FIRM BELIEVERS THAT THE KNOWLEDGE ECONOMY BENEFITS WHEN PARTNERS COLLABORATE AS EQUALS WITH A COMMON VISION. WE ARE HERE TO HELP FACILITATE THAT VISION.

COLLAB- ORATION THE KEY

“Relocating to the Wagga Wagga Campus was a smart move for RDA Riverina. Not only do we have spacious offices and an idyllic view, but we are situated among some of the biggest players in local and national industry. We have recently partnered with Charles Sturt University on some vital research for our region – just part and parcel of being an AgriPark tenant.”

Rachel Whiting
CEO and Director of
Regional Development

Regional Development Australia
(RDA) Riverina



More than providing the facilities organisations need to run their businesses day-to-day, we are also committed to providing opportunities for collaboration between participants and a portal into research at the University.

Whether you're a startup looking to test a new idea, a larger corporation looking for access to innovation, a business seeking to deliver solutions to industry challenges, or an industry body looking to improve productivity across the entire value chain, we're here to help.

CHARLES STURT UNIVERSITY IS RENOWNED FOR ITS ANIMAL AND VETERINARY SCIENCE DEGREES AND HAS WORLD-CLASS RESEARCH AND TEACHING CAPABILITIES CATERING FOR BOTH LARGE AND SMALL ANIMALS.

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01. PRE-CLINICAL CENTRE

The Pre-clinical Centre is a specialised anatomy laboratory with associated tutorial rooms and an impressive museum showcasing many animal skeletons.

The anatomy laboratory features high definition cameras and four large plasma screens allowing closeup images to be used for teaching and research purposes. The laboratory also boasts a large gantry capable of holding whole animal specimens.

02. VETERINARY CLINICAL CENTRE

Providing specialist services in equine medicine, surgery, anaesthesia and reproduction, this world-class large animal hospital includes operating theatres, sophisticated imaging equipment (including CT and fluoroscopy), neonatal intensive care unit, equine isolation unit, reproduction unit and high-speed treadmill and sports medicine services.

These facilities are run by highly trained and dedicated staff who deliver comprehensive patient care and research capacity.

03. VETERINARY DIAGNOSTICS LABORATORY

Our Veterinary Diagnostic Laboratory (VDL) provides a comprehensive array of animal health analyses to meet the needs of private practices, primary producers and government agencies.

The VDL is a highly secure (PC2 and PC3 capable) facility with capacity to provide diagnostic services in gross pathology (post-mortem examination), histopathology, biochemistry, haematology, cytology, microbiology, molecular biology and parasitology.

04. SMALL ANIMAL REFERRAL HOSPITAL

Charles Sturt University's Small Animal Referral Hospital housed within the Kay Hull Veterinary Teaching Hospital is a centre of excellence for small animal veterinary services.

The hospital is fully equipped for all procedures including canine specialist production/theriogenology, cardiology, ECG and Holter Monitor Assessment, cerebral spinal fluid collection and analysis, CT scanning, digital computed radiography and myelography, endoscopy, fluoroscopy and rhinoscopy, musculoskeletal and echocardiography ultrasound.

05. EQUINE CENTRE

Boasting an impressive 35m x 80m indoor arena with lights and irrigation, Charles Sturt University's Equine Centre is an outstanding facility used for teaching courses in Equine Science.

The precinct also includes an all-weather rubber-ingrained sand arena, enclosed warm up arena, international standard cross country course, outdoor sand arena, a range of stables and day yards, and amenities block.

06. SHEEP AND CATTLE FACILITIES

Charles Sturt University runs 2000 maternal composite ewes for meat, a merino flock for wool, and 400 Angus breeding female cattle as part of the Angus Australia Sire Benchmarking Program.

Our sheep management area includes a shearing shed, penning yards, auto drafter and field studies room.

The sheep and cattle feedlots are used for intensive research with single or group lots. Both feedlots are adjacent to the animal holding yards, which features automatic scales.



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ANIMAL AND VETERINARY FACILITIES



02



03



Charles Sturt University's
1600 hectare commercial farm

CHARLES STURT UNIVERSITY OFFERS A UNIQUE SET OF FACILITIES FROM ON-FARM PRODUCTION THROUGH TO CONSUMER AND MARKET ANALYSIS, PROVIDING OPPORTUNITIES FOR WHOLE OF LIFE CYCLE RESEARCH AND PRODUCT DEVELOPMENT.

01. UNIVERSITY FARM

Located adjacent to the campus, Charles Sturt University's 1600 hectare commercial farm has 400 hectares of zero-till continuous cropping. Sheep and cattle are run as model enterprises based on perennial pastures of lucerne and perennial grasses.

02. RESEARCH WINERY AND VINEYARD

Wine and grape research programs are underpinned by wine making and the research vineyard with replicated trials and more than 30 different grape varieties.

The University's Research Winery includes state-of-the-art wine making equipment and temperature controlled fermentation for replicated small batches of 1L to semi-commercial production of up to 1000L.

03. HORTICULTURE FACILITIES

The University's orchard zone has 24 commercial olive varieties and a small number of citrus trees, as well as shaded and unshaded hoop houses for research into larger plants or trees.

These facilities are ideal for precise intensive small crop planting, including manipulation of soil types, nutrition and watering regimes.

04. SENSORY LABORATORY

Charles Sturt University's Sensory Laboratory has a fully equipped kitchen and sample preparation area suitable for wine and food evaluation, pass-through compartments for distribution of samples to participants, and computer assisted data collection and sensory evaluation software.

05. MEAT LABORATORY

Certified as a food registered premises, Charles Sturt University's meat laboratory covers research in food science, meat and fibre science, veterinary quality assurance, food technology and product development and consumer sensory product evaluation testing.

The facility is equipped with mincers, hanging racks, vacuum packing equipment, large cool room for meat processing, kitchen preparation area, change room and lockers.

06. NUTRITION LABORATORY

Certified as a food registered premises, Charles Sturt University's Nutrition Laboratory is equipped with 12 cooking stations, stove tops, ovens, rangehoods, dishwashers and fridges.

The Nutrition Laboratory includes a small consultation room and a 30-place tutorial space ideal for consumer product evaluation.

FOOD
& WINE
FACILITIES



LOCATED IN THE HEART OF THE RIVERINA, THE AGRIPARK IS AN INNOVATION PRECINCT DEDICATED TO RESEARCH, CURATED COLLABORATION, AND SUSTAINABLE PRODUCTION.

05



A WORD ON WAGGA

Wagga Wagga is a vibrant regional city, nestled on the banks of the Murrumbidgee River. There is a delicious food and wine scene, wonderful galleries, tranquil riverbank walks and gorgeous gardens and parks. Right on the doorstep of Australia's food bowl, it's a fantastic place to work, live and study.

OTHER CAMPUS FACILITIES

In addition to the range of technical and industry standard facilities, the Wagga Wagga Campus offers plenty of opportunities to get out of the office, meet people and even get to know some of the resident wildlife.

Conference and meeting rooms with onsite catering are available to accommodate seminars and workshops.

Head to one of the cafes and bars for a coffee or a bite to eat; keep your fitness on-track at the gym, on the tennis, basketball, squash or netball courts; grab what you need at the mini-market / post office; or enjoy some downtime walking the picturesque 640 hectare campus (and keep an eye out for kangaroos).

Other facilities include:

- 01. 24-hour Learning Commons
- 02. Community Dental and Oral Health Clinic (open to the public)
- 03. Cellar door
- 04. Free car parking
- 05. Networked library
- 06. Sporting ovals
- 07. Swimming pool & gym
- 08. Videoconferencing facilities
- 09. Short term office space



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Wagga Wagga Campus
Boorooma Street
(Locked Bag 588)
Charles Sturt University,
NSW 2678

AGRIPARK.CSU.EDU.AU

GET IN TOUCH

If you are considering a move to the AgriPark, want to learn more about collaboration with other participants, or you are interested in a joint research project, get in touch:

Visit.

AGRIPARK.CSU.EDU.AU

Email.

AGRIPARK@CSU.EDU.AU

FOR FURTHER INFORMATION
PLEASE CONTACT:



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