Mission

The National Wine and Grape Industry Centre is an alliance between Charles Sturt University, NSW Department of Primary Industries and the NSW Wine Industry Association. The mission of the Centre is to provide research, education and engagement with the Australian Wine Industry.

Areas of Research

Research is conducted across the value chain, from the vineyard to the wine and includes sensory and consumer preference studies. This integrated research approach focuses on viticulture, plant disease management, fruit growth and composition, wine sensory and process engineering. The NWGIC has an impressive network of wine companies and vineyards that support our research.

| Vineyard and environmental factors that impact on yield, including soil-water-nutrient interactions and carbohydrate partitioning | Development of automated systems for yield prediction |
| Assessing new disease resistant varieties in a warm climate | Understanding biochemical and physiological changes within the grape berry that impact on its growth and composition |
| Determining the impact of beneficial and disease-causing fungi and bacteria on grapevine health and developing management strategies to control disease organisms | Chemical and sensory evaluation of wines to understand regionality and the critical factors that determine wine style and uniqueness |
| Methods to mitigate wine oxidation | Early harvest and process engineering including membrane filtration for the production of wines with lower alcohol levels |
| Identifying consumer preferences to better target domestic and international markets | Assessing the most effective ways of communicating and engaging with the wine industry for the adoption of new practices and technology |

The Australian Grape and Wine Authority (AGWA) and the Australian Research Council (ARC) are important funding providers for our research.
Links to other research organisations

At the national level, NWGIC collaborates withCSIRO, Australian Wine Research Institute, South Australian Research and Development Institute, University of Adelaide, Australian National University, Melbourne University, University of NSW and University of Western Sydney.

The Centre is an international partner of the Oenoviti and Vinifera EuroMaster consortia for training Masters, PhD students and engaging research collaboration.

Facilities

PC2 laboratories equipped with state-of-the-art chemical analyses, metabolomics, proteomics, microbiology, molecular biology and biomarker analysis equipment and accredited with the ISO9001 Quality Management System

Experimental winery

Wine sensory analysis suite

Experimental vineyard

PC2 glasshouses

Controlled environment plant growth chambers

Bird proof enclosures

Controlled root environment lysimeters

Also located on the CSU campus is the National Life Sciences Hub (NaLSH), an integrated science hub in food security, plant and animal health for inland Australia.

Education and Training

NSW DPI’s Tocal College is registered to deliver Qualifications to the wine Industry from Certificate II or entry right through to Advanced Diplomas in viticulture, oenology, marketing and Agr business

CSU offers undergraduate and graduate level training in viticulture, oenology and wine business

Contact us

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