

Wine

Adelaide is Australia's pre-eminent wine industry educator and has produced many of the country's greatest winemakers. Today it is also producing expert graduates in the research and marketing sides of the wine industry.

Research conducted at the University's Waite Campus and the National Wine Centre is focused on improving the productivity and end-use quality of horticultural crops, in particular, the grapevine.

The Hickenbotham Roseworthy Wine Science Laboratory and vineyards, located on the Waite Campus, provide for education and research in viticultural practices, pigments and tannins in grapes and wines and distillation technologies. These and other research areas are supported by extensive small-lot winemaking and sensory evaluation facilities.

Professor Dennis Taylor is Chair of Oenology and heads a Grape and Wine Chemistry group. The research conducted within this group is principally funded through the Grape and Wine RDC (GWRDC) and the Australian Research Council (ARC) with strong support from the University.



Great wine making requires a deep understanding of the human dimension and the impact on the human senses. The University has a range of sensory research projects directed at understanding the basics of sensory perception and the drivers of wine quality including astringency; consequences of viticulture and winemaking practices on wine sensory properties; wine grape berry sensory assessment; wine consumer preference, behaviour and health; plus wine and food interactions.

The research of the Wine Microbiology and Microbial Biotechnology Group is aimed at understanding the metabolism and genetics of industrial microorganisms and improving their performance in the winemaking brewing and food industries.

The University has close links with CSIRO, Australian Wine Research Institute, PROVISO and SARDI through the Wine Innovation Cluster, a new collaborative initiative of these five leading grape and wine research agencies.

Along with its partners (CSIRO, SARDI and AWRI) the University was behind the establishment of Provisor: a leading, Australian-based technical and engineering consultancy supporting the local and international wine, food and beverage industries. Provisor is developing new research capabilities for managing wine quality from "grape to glass". It is now the Major National Research Facility focusing on wine quality. Their expertise includes small-scale wine making, bio-fermentation and consumer and sensory evaluation.

Areas of Expertise

- Wine science, chemistry and microbiology
- Yeast nutrition and optimisation
- Wine making technology
- Wine consumer behaviour and preferences
- Wine and food interactions
- Distillation & production of potable spirits
- Sensory science & wine quality
- Vine nutrition
- Grapevine pathology
- Grapevine biochemistry and physiology
- Viticulture
- Modelling and mechatronics in horticulture

New Strategic Focus

Wine Innovation Cluster

The Cluster sees five leading grape and wine research agencies coming together with a single goal in mind: in collaboration, to achieve results that would not be possible working as standalone agencies. Between them, the partners possess the major share of Australian research, development, extension and education capabilities over the whole of the grape and wine value chain from "climate, soil and water" to the "consumer's lips". Combined with the world-class education reputation of the University of Adelaide and the cluster's location in a purpose-built \$28 million facility at the Waite Campus, the Wine Innovation Cluster is set to achieve its target – recognition as the world's premier research, development,

extension and education facility servicing the wine industry.

Wine 2030 Research Network

The Australian Wine 2030 Initiative is a coalition of research groups pursuing a linked series of research projects on wine, alongside a series of education innovations. The Australian Wine 2030 research program has been built to better inform our vision for the Australian wine industry and help the industry achieve its potential. The program will tackle the key challenges facing the industry over the period to 2030 including climate change and water constraints as well as supply- and demand-side shifts in the markets for wine.