



Australian Government

Australian Grape and
Wine Authority



Opportunities for investment in the priority area of quality and provenance

The Australian Grape and Wine Authority Strategic Plan 2015–20 identifies quality and provenance as a priority research and development (R&D) topic for the Australian wine sector.

Background

One of our key priorities is to increase the demand and premium paid for all Australian wine. A promotional focus on wines of exceptional quality and finesse that reflect their provenance and terroir will most quickly elevate the image and reputation of all the wines we produce. To assist this, we will provide tangible evidence to support our fine wine claims through research into Australia's unique terroirs and how these terroirs influence wine style and quality. Another strategy we will continue to use to drive demand and price increase is to provide tools and approaches to grape growers and wine producers that enable them to ceaselessly improve quality, such as objective measures of quality.

Current situation

It is well accepted that provenance, the place and environment in which grapes are grown, strongly influences wine quality. Provenance, plus the many and different interactions and factors involved in grape and wine production, result in a wine's unique traits. This is embodied in the concept of terroir:

*'The complete natural environment in which a particular wine is produced, including factors such as the soil, topography, and climate.'*¹

The study of terroir has developed over the last 20 years and has generally focussed on how terroir influences fruit composition and quality, how terroir influences vine growth through climate/soil/water interactions, how regions can be chemically fingerprinted, how to find the 'best' terroirs (zoning) and using precision viticulture to manage and improve production.

Our current R&D investment is primarily related to grape and wine quality, rather than specifically on this concept of terroir, and includes:

- [UA 1205](#): Objective measures of Australian sparkling wine style and quality
- [CSP 1201](#): Grape quality parameters that influence wine flavour and aroma
- [AWR 1202](#): Assessment of relationships between grape chemical composition and grape allocation grade
- [AWR1 2.2.2](#): Feasibility study for origin verification of Australian wine
- [AWRI 3.1.1](#): Identification and origin of volatile compounds responsible for important wine sensory attributes
- [AWRI 3.1.3](#): Flavour precursors: contribution to wine aroma, in-mouth sensory properties and flavour release
- [AWRI 3.5.3](#): Formation and fate of positive and negative sulfur compounds
- [AWRI 3.1.4](#): Factors affecting wine texture, taste, clarity, stability and production efficiency
- [NWG 1401](#): Metal ion speciation: Understanding its role in wine development and generating a tool to minimise wine spoilage

¹ Oxford Dictionary, <http://www.oxforddictionaries.com/>, accessed 1 October 2015

- [CSU 1301](#): Determination of thresholds for bunch rot contamination of grapes and techniques to ameliorate associated fungal taints
- [UA 1202](#): Objective measures for powdery mildew

Brief summaries of these current projects are available on our website and can be accessed by clicking on the hyperlinked project codes.

Opportunities for new R&D investment

For this funding round, we are seeking projects that:

- focus on better understanding how and why fine Australian wines reflect their provenance and terroir and what changes in management practices can be adopted to more optimally express unique Australian terroirs
- contribute to the development of objective measures of wine quality.

Some of the questions for which we are seeking answers are:

- What are the impact compounds for the flavours, mouthfeel attributes and textural properties that describe and characterise fine Australian still and sparkling wines of provenance?
- What is the relative contribution of soil, geology, climate and aspect to the presence and levels of these compounds and the unique expression of terroir?
- How important is microbial diversity in the expression of unique Australian regional terroir?
- What new tools and technologies could be developed to validate the provenance and varietal origins of wine?
- What new tools and technologies could be developed to better describe and recognise those aspects of terroir that contribute the most to fine wine outcomes?
- How does glutathione in particular, and nitrogen management in general, contribute to enhancing white wine quality and allow the unique terroir of the vineyard to be optimally expressed?
- What tools and technologies can be developed to help predict wine grades and styles that reflect the provenance of the fruit and which support decision making regarding the best way to produce wine that enhances its unique characteristics?

These projects should build on international research and our previous and current projects.

Next steps

We are seeking preliminary project proposals for projects to start from July 2016 that address these questions. The criteria we use to assess proposals can be downloaded by [clicking here](#).

We ask you to complete and lodge your application online through our Clarity Investment Management System (CIMS). [Click here](#) to go to CIMS. If you have not used CIMS before, please contact us at applications@wineaustralia.com for a username, password and 'how to' guide.

Key dates

Preliminary Project Applications (PPAs) due	Friday 6 November 2015
Final Project Applications (FPAs) invited	Friday 18 December 2015
FPAs due	Monday 22 February 2016
Applicants advised	late April 2016
Contracting	May 2016
Projects start	July 2016