

Research Directions

Office of Research Services

Finding Fuller Flavour

Dr Vince Higgins, School of Biomedical and Health Sciences, Nanoscale Organization and Dynamics Research Group and co-investigators at University of New South Wales, is collaborating with Carlton & United Breweries to enhance the flavour of fermented beverages. This ARC Linkage project will use functional genomics to identify yeast genes that create the flavour in fermented drinks. After studying the genes the researchers will manipulate the conditions during industrial fermentation that can effect flavour production and stability.

'By studying the relationship between gene regulation and cellular processes that are important in flavour production during fermentation, we will gain extensive insight into the way the metabolism changes during flavour development' explained Dr Higgins. 'Flavour is of course of major concern to the brewing and wine industries in the improvement and enhancement of their finished product.'

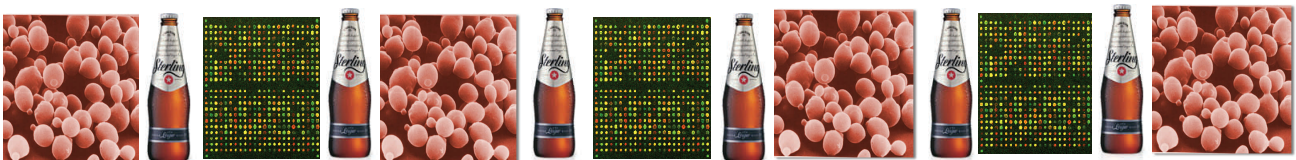
Dr Higgins says 'The research is a good example of how Australian companies in highly competitive international industries can collaborate with scientists in ways that add to public domain knowledge as well as potentially assist the company's future growth.'

Project Title: Application of functional genomics to study early fermentation parameters and flavour development in industrial fermentations.

ARC funding being received by UWS has been set at \$210,000

Industry partner, Carlton & United Beverages, contribution being received by UWS has been set at \$60,000

1. *Yeast cell microorganisms that convert barley and grapes into beer and wine*
2. *Modern beer*
3. *Microarray image of differential gene expression*



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Web Sites:

<http://www.uws.edu.au/about/acadorg/schools/biomedicalsciences>

History of Beer

http://www.fosters.com.au/enjoy/beer/history_of_beer.htm#References