

# Australia & New Zealand

<http://www.arabidopsis.org/portals/masc/countries/Australia.jsp>  
Contact: Barry Pogson  
The Australian National University, Canberra  
<http://www.anu.edu.au/bambi/people/academic/pogson.php>  
Email: [barry.pogson@anu.edu.au](mailto:barry.pogson@anu.edu.au)

Australia has a strong tradition in plant scientific research with most institutions across all states of Australia having some research involved *Arabidopsis* as a model system. Major areas of *Arabidopsis* research and functional genomics are Canberra, Melbourne and Perth. Major sites of plant science with foci on crops such as grains, grapes and legumes include Queensland, Tasmania, South Australia and NSW. Centres with a strong focus on *Arabidopsis* included Australian Research Council (ARC) Centre of Excellence in Plant Energy Biology ([www.plantenergy.uwa.edu.au/](http://www.plantenergy.uwa.edu.au/)) and CSIRO Plant Industry ([www.pi.csiro.au](http://www.pi.csiro.au)), plus numerous researchers across all the Universities in New Zealand and Australia.

Increasing numbers of New Zealand plant scientists are incorporating *Arabidopsis thaliana* into their research, and several are using functional genomics approaches. Funding is principally available through the Royal Society of New Zealand's Marsden Fund and the New Zealand Foundation for Research, Science and Technology. In addition to the projects being conducted at the universities, research programs are carried out at the Government-owned Crown Research Institutes.

## Key new developments during 2008 were:

**Plant Phenomics** ([www.plantphenomics.org.au](http://www.plantphenomics.org.au)) Construction of high throughput phenotyping facilities in Canberra and Adelaide is underway with full commissioning during 2009. The NCRIS funded National Facility will be available to researchers at the marginal cost of running the facility and several international collaborations are being established and encouraged. For more information contact Bob Furbank ([Robert.Furbank@csiro.au](mailto:Robert.Furbank@csiro.au)) or Mark Tester ([mark.testers@acpfg.com.au](mailto:mark.testers@acpfg.com.au)).

**SUBA** (a SUBcellular location database for *Arabidopsis* proteins) brings together data from chimeric fluorescent fusion protein studies and mass spectrometry surveys of subcellular compartments with protein localisation information obtained from other literature references and bioinformatic prediction tools. The SUBA database provides a powerful means to assess protein subcellular localisation in *Arabidopsis* (<http://www.suba.bcs.uwa.edu.au>).

**Anno-J:** Interactive web-based genome browsing in *Arabidopsis* for large datasets in functional genomics. Julian Tonti-Filippini and A. Harvey Millar ([hmillar@cyllene.uwa.edu.au](mailto:hmillar@cyllene.uwa.edu.au)), ARC Centre of Excellence in Plant Energy Biology, The University of Western Australia, Perth. The rapid growth of new types of genome-aligned data at the DNA, RNA and protein levels requires a renaissance in web-based genome annotation browsers to provide useful data-mining tools for quickly exploring increasing complex data sets. Anno-J is a modern web-application for visualizing genome annotation data using Web 2.0 technologies for greatly enhanced style control, data syndication, data maintenance, user-interface and flexibility. Recent publications using Anno-J include: Lister et al. 2008, *Cell* 133:523-535, Ecker et al. 2008 *Developmental Biology* 319:462, Gregory et al. 2008, *Developmental Cell* 14:854-866.

## Symposium, Australia ICAR, and a New Appointment

- The 1st International Plant Phenomics Symposium was held in Canberra, April 22-24, 2009 (<http://www.plantphenomics.org.au/IPPS09/report>). This symposium, the first of its type, focused on the use of plant phenomics and functional genomics to boost crop productivity, and its proceedings will be published in a special issue of the journal *Functional Plant Biology*. Contact Bob Furbank ([Robert.Furbank@csiro.au](mailto:Robert.Furbank@csiro.au)) or Frank Gilmer ([jppc@fz-juelich.de](mailto:jppc@fz-juelich.de)) for further information on the Initiative. Also see the MASC Phenomics Subcommittee Report for more Symposium details.
- *Arabidopsis* 2013 - The 24th International Conference on *Arabidopsis* Research will be held in Australia in 2013. Tentative dates are July 8-12, and a possible venue is tropical Cairns, in far north Australia, the gateway to the Great Barrier Reef.
- Welcome to Mary Byrne, who has moved from John Innes to Sydney University during 2008/9.