

## NEWSLETTER

## NEWS

## CONGRATULATIONS

Staff of the Research School of Biology have once again achieved outstanding results in the annual Vice-Chancellor's Teaching Awards, with an individual Vice-Chancellor's Award for Teaching Excellence to **Chris Fulton**, EEG, and a team citation for outstanding contribution to student learning to the team which presents Biol2121 - **Plants: Genes to Environment**.



Chris Fulton joined the ANU as a lecturer in 2006, moving here from a postdoc position at James Cook University.

He is a Chief Investigator in the ARC Centre of Excellence for Coral Reef Studies, and teaches in third-year Marine Ecology (BIOL3116), Carbonate Reef Field Studies (EMSC3019), Australian Vertebrates (BIOL2111) and The Blue Planet (EMSC1006), as well as offering undergraduate research projects.

The Biol2121 teaching team, **Adrienne Nicotra** (convenor), EEG, **Ulrike Mathesius**, PS, **Michael Djordjevic**, PS, **Gonzalo Estavillo**, PS, **Beth Beckman**, CEDAM, and **Amy Davidson**, EEG, come from a range of backgrounds and career stages. This course is the keystone in the ANU's plant science curriculum. Its research-



Adrienne Nicotra

led approach gives students a theoretical and practical understanding of integral links between genes, cells, whole plants and the environment. In the first part of the course the lecturers - Adrienne, Ulrike, **Marilyn Ball**, PS, and **Michael** - present the theoretical and conceptual material, delivered through a 'structured discussion' approach designed by the team in collaboration with **Beth Beckman**. In the second part of the course the students form teams of *Plant Detectives* and engage in laboratory-based research. Their objective

is to investigate the effects of a gene mutation in an

unidentified *Arabidopsis* variety on physiology, form and response to environment. The students are guided in their detective work by a manual written by **Gonzalo**, **Adrienne** and **Ulrike**. **Gonzalo** runs the lab, with support from other members of the teaching team and demonstrator **Amy Davidson**, PhD student in EEG. The detective work culminates in the students using their data, together with public online resources, to identify the mutation.

The course offers a researched experience that involves both students and teachers in a collaborative intellectual challenge. The model has application well beyond this particular course, and shows how it is possible to engage groups of students in research projects at a second year level.

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## NEW ROLE

**Trent Orchard** is to take on the role of Building Coordinator across the School. Trent has 12 years experience in the RSBS workshop and has been second-in-charge in the workshop for seven years. In his new role Trent will have responsibility for all building management and maintenance issues across RSB and will liaise with Facilities & Services on behalf of the School, as well as with the Colleges of Science project managers in relation to the new building. He will play a major role in coordinating the move to the new building, as well as in planning the refurbishment of other areas in RSB.

## CONGRATULATIONS

Congratulations to the mid-year honours cohorts who handed in their theses the week before last.

## FAREWELL

**Thomas Payne**, PS, will be winding up his work on the apomixis project with **Enrico Perotti** to take up a position with the Central West Catchment Management Authority in Gilgandra.

## GRANTS AWARDED

**Adrienne Hardham**, PS, has been awarded a grant from the Hermon Slade Foundation to support research on the motility of zoospores of the plant pathogen *Phytophthora nicotianae*.

**Ajay Narendra** and **Jochen Zeil**, EEG, have been awarded a research grant of \$84K over three years from the Hermon Slade Foundation for their project on jack jumper ants.

## NOTICES

## JCSMR DEPT. OF IMMUNOLOGY SEMINAR SERIES

2 June, 2pm  
Finkel Lecture Theatre, JCSMR  
'Extra-medullary hematopoiesis for production of antigen presenting cells'  
Professor Helen O'Neill, BSB.

## PLANT BIOLOGY SEMINAR SERIES

26 May, 1pm,  
Plant Industry Lecture Theatre,  
Plant Industry, CSIRO.

'The epigenetics of *Arabidopsis* hybrids'  
Dr Michael Groszmann,  
Plant Industry, CSIRO.

These and other seminars can be found on our Events page at: <http://biology.anu.edu.au/News/Events.php>

## RSB MORNING TEA

The Plant Sciences Division will host a morning tea on Thursday, 27 May at 10.30-11.30 am in the Robertson Building Foyer.

## HAPPY HOUR

Friday 28 May, 5pm  
RN Robertson building.  
Cheap beer and snacks.  
All Welcome.

This newsletter is distributed fortnightly by email and hard-copy, and is archived at <http://biology.anu.edu.au/Newsletter>.

Contact [Diane Whitehead](#) to be added to the mailing list, and to submit material for future issues.

## AIDS ORPHANS

It is easy to think that in the new South Africa problems have been sorted out and black people are doing alright. But that is not true. There is widespread, crippling poverty. Hard as it is to believe, there are people starving to death. My brother (a retired businessman) heard of a very poor community in Zululand so he went and had a look. He found seven children living in an unused cow pen. Their parents had died of AIDS and their hut had burnt down. Around the corner there was a pair of very old people whose children had died of AIDS, leaving them with no form of support; they were literally eating weeds. These people need food, medical supplies, warm clothing, blankets and some form of shelter. My brother is doing what he can, but he needs as much help as he can get.

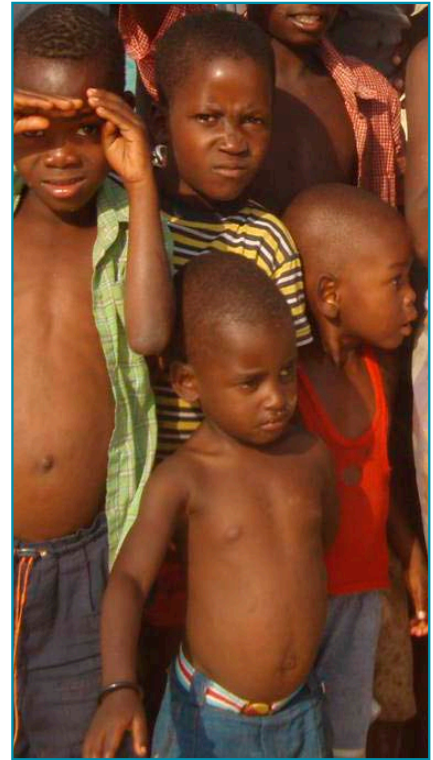
### YOUR JUNK CAN MAKE MONEY FOR A VERY HUNGRY CHILD

Late last year we voted on a charity for RSB to support. The outcome of the vote was that we will support the AIDS orphans.

We are going to have our first charity event for this excellent cause on **Wednesday, 2 June, in the Robertson Foyer**. It will be a TRASH 'n TREASURE. If everyone brings a few things from home (an item of clothing; an old vase; a home-made bottle of jam) we will put it all together and have a lunch-time sale.

PLEASE can I ask everyone to start bringing in their old stuff. There will be a collection box for each building:  
Robertson Building (Diane's office)  
Gould & Banks buildings (Audra's office)  
Building 41 (Cathie's office).

Please take the time and effort to get involved- Pat Backwell.



## PAPERS ACCEPTED

Barry, K.L. and Kokko, H. Male mate choice: why sequential choice can make its evolution difficult. *Animal Behaviour*.

Bookmythe, I., Jennions, M.D., Backwell, P.R.Y. Interspecific assistance: fiddler crabs help heterospecific neighbours in territory defence. *Biology Letters*.

Catanzariti, A-M., Jones, D. Effector proteins of extracellular fungal plant pathogens that trigger host resistance. *Functional Plant Biology*.

Edmunds, R.C., van Herwerden, L., Fulton, C.J. Population-specific locomotor phenotypes are displayed by barramundi, *Lates calcarifer*, in response to thermal stress. *Canadian Journal of Fisheries and Aquatic Sciences*.

Indrasumunar, A., Kereszt, A., Searle, I., Miyagi, M., Li, D., Nguyen, C.D., Men, A., Carroll, B.J., Gresshoff, P.M. Inactivation of duplicated nod factor receptor 5 (NFR5) genes in recessive loss-of-function non-nodulation mutants of allotetraploid soybean (*Glycine max* L. Merr.). *Plant Cell Physiol*.

IpCho, S.V.S, Tan, K-C, Koh, G, Gummer, J, Oliver, R.P., Trengove, R.D. and Peter S. Solomon. The transcription factor *SnStuA* regulates central carbon metabolism, mycotoxin production and effector gene expression in the wheat pathogen *Stagonospora nodorum*. *Eukaryotic Cell*.

Klug, H., Lindström, K. and Kokko, H. Who to include in measures of sexual selection is no trivial matter. *Ecology Letters*.

Lenné, T., Bryant, G., Hocart, C.H., Huang, C.X., Ball, M.C. Freeze avoidance: a dehydrating moss gathers no ice. *Plant, Cell and Environment*.

Milner, R.N.C., Jennions, M.D., Backwell, P.R.Y. Eavesdropping in crabs: an agency for lady detection. *Biology Letters*.

Peakall, R., Ebert, D., Poldy, J., Barrow, R.A., Francke, W., Bower, C.C., and Schiestl, F.P. Pollinator specificity, floral odour chemistry and the phylogeny of Australian sexually deceptive *Chiloglottis* orchids: Implications for pollinator-driven speciation. *New Phytologist*.

Rafiqi, M., Gan, P.H.P., Ravensdale, M., Lawrence, G.J., Ellis, J.G., Jones, D.A., Hardham, A.R., Dodds, P.N. Internalization of flax rust avirulence proteins into plant cells can occur in the absence of the pathogen. *Plant Cell*.

Roche, S.A., Carter, R., Peakall, R., Smith, L.M., Whitehead, M.R. and Linde, C. A narrow group of monophyletic *Tulasnella* (*Tulasnellaceae*) symbiont lineages is associated with multiple species of *Chiloglottis* (*Orchidaceae*) orchids – implications for orchid diversity. *American Journal of Botany*.

Sun, F., Roderick, M.L., Farquhar, G.D., Lim, W.H., Zhang, Y., Bennett, N., Roxburgh, S.H. Partitioning the variance between space and time. *Geophysical Research Letters*.

Wallenius, T.C., Peakall, R., Oberprieler, R. Volatile, thermogenesis and dehiscence patterns of *Macrozamia communis* (*Zamiaceae*): implications for cycad pollination research. *The Botanical Review*.