



Barney John Award

The 2011 Barney John Award for outstanding service by a general staff member to the school was awarded to Trent Orchard, for his Herculean effort in facilitating the occupation of the Linnaeus Building.

VC's Award for Outreach

The Vision Centre Outreach Team (Rizsa Albarracin, Shaun New, Visa Vlahos, Yu Shan Hung, Angeliza Querubin, Faran Sabeti, Corrine Carle and Bryony Webster, all from RSB) have won the prestigious Vice Chancellor's Award for Community Outreach for the 'Vision Day' program they run in schools.



Young Visionaries from the ARC Centre of Excellence in Vision Science

Student Conference

The annual RSB Postgraduate Student Conference held in December was a great success with 97 talks presented across the three Divisions. The student organising team put in a huge amount of work: Isabel Saur and Laura Gunn (PS), Will Feeney and Dan Hoops (EEG), Michael Wong and Divya George (BSB).

The winners of the Hiroto Naora Award for Academic Achievement were Sandra Binning (EEG), Lauren Du Fall (PS) and Kylie Easton (BSB). Runners up were Hanna Jones (EEG), Isabel Saur (PS), Nadia Radzman (PS), and Rizsa Albarracin (BSB). EEG and BSB also had a number of honourable mentions. EEG: Dan Hoops, Veronica Briceno, Piyankarie Jayatilaka, Camila Moray, Claudia Delgado, Trevor Murray. BSB: Divya George, Laurence Wilson, Natalie Spillman, Tiffany Russell, Esther Rajendran.

Promotions

Congratulations to the following staff on their recent promotion.

From level C-to-D: Peter Solomon (PS); David Tscharke (BSB); Georg Weiller (PS); John Rathjen (PS).

From level B-to-C: Naomi Langmore (EEG).

From level A-to-B: Gonzalo Estavillo (PS); Ajay Narendra (EEG).

Steve O'Connor returns

Steve O'Connor has just returned to his full-time role as school manager. Lisa Cousins, who has been in the role of Deputy School Manager in Steve's absence has will be returned to CECS.

Congratulations

Benjamin Rae (Price lab, PS) has just submitted his PhD thesis on the evolution of the the carbon-dioxide concentrating mechanism of cyanobacteria.

Sandra Binning (Backwell & Keogh Labs, EEG) and Dominique Roche (Jennions Lab, EEG) have each been awarded Grants-in-Aid from the Society for Integrative and Comparative Biology. Dominique also won the 2012 Ian Potter Doctoral Fellowship at Lizard Island to fund his PhD research.

The Djordjevic lab (PS) is part of a team with colleagues from CECS, Curtin University and the King Saud bin Abdulaziz University that has obtained \$500K from the Australian Solar Institute for research on solar fuels.

The Djordjevic lab (PS) has also received \$100K from the ANU Discovery Translation Fund to investigate 'new modulators of plant root architecture and environmental sensing'.

Nadiatul Radzman (Djordjevic Lab, PS) has been awarded a Research Grant Award from the Golden Key International Honour Society to study a new plant regulatory peptide, MtRAR1 in the model legume *Medicago truncatula*. Nadia has been a Golden Key member of the ANU since the first year of her undergraduate degree.

Carolyn Behm (BSB) has been awarded two new grants, one from the Discovery Translation Fund of ANU Connect Ventures (\$99,625) and the other from Commercialisation Australia (\$50,000), for development of an assay to discover novel anti-nematode compounds.

Welcome

Christina Delay will be joining the Djordjevic lab (PS) to begin a PhD on new regulatory molecules that control plant root architecture.

Viridiana Silva Peres is joining the Evans lab (PS) as a PhD student. She comes from Mexico and will be working on developing screening approaches for improving photosynthesis in wheat.

Jennie Mallela will be joining the Jennions

New Lab Leaders

The ranks of RSB have swollen this month with the commencement of six new lab leaders.



Giel van Dooren
(BSB)



Sylvain Foret
(EEG)



Justin Borevitz (PS)



Ben Corry (BSB)



Alex Maier (BSB)



Richard Callaghan
(BSB/Med School)

Lab (EEG) as a postdoc to study the environmental histories of reef building organisms on the Great Barrier Reef.

Anna Harts will be commencing a PhD with the Kokko lab (EEG), working on sex ratio theory and mating systems.

Matti Jalasvuori will be joining the Kokko lab (EEG) as a Visiting Fellow to learn about modelling methods, while teaching the Kokkonuts about the world of virology.

Allison Shaw, a mathematical biologist from Princeton will also be joining the Kokko lab (EEG) for six weeks.

Yuan Yuan Hu recently arrived in Xinjiang, China, to work in the Chow lab (PS) on non-foliar green organs of cotton plants as part of her PhD project at Shihezi University.

Pravin Periasamy has returned to the O'Neill lab (BSB) as a postdoctoral fellow to work on the development and function of dendritic cells in the spleen microenvironment.

Farewell

The Behm lab farewells research assistant Harleen Basrai, who has moved to Melbourne to start a PhD in Neuroscience.

How to do media workshop

Slides for the 'How to do media' presentation at the Postgraduate Conference are now available [online](#).



Lab Leader Profile Justin Borevitz

Currently researching: The genetics of plant adaptation to environmental change. To do

this, we use phenomics in model organisms in seasonal climate chambers, and landscape genomics in foundation species in the agroecological field.

Greatest achievement: Genome wide association mapping in Arabidopsis.

Next big thing: Connecting genomic variation with phenomic variation.

Science hero: Norman Borlaug, father of the green revolution. Borlaug developed dwarf varieties of crops where the plant spends less energy growing tall and defending themselves and puts more energy into growing the parts of the plant we harvest.

Media

Ryszard Maleszka (EEG) was interviewed on 2NM radio on the decline in honey bee numbers.

Paul Waters' (EEG) [media release](#) about the shrinking Y chromosome in the tammar wallaby was picked up nationwide in [newspapers](#), on radio and [online](#).

Andrew Kahn's (Jennions lab, EEG) [media release](#) on female mosquitofish preferring males with a solid nutritional upbringing also received wide coverage, being picked up in [Cosmos](#) and [Australian Geographic](#), as well as in several newspapers and [online](#).

Gonzalo Estavillo's (PS) [media release](#) on drought signalling in plants was picked up on many ABC stations.

Kate Umbers' (Kokko lab, EEG) commented in [Cosmos](#) on research on the cost of sex to locusts.

Bryan Lessard (Trueman lab, EEG / CSIRO) was interviewed on ABC Radio about the "Beyonce fly".

Paul Cooper (EEG) worked with ABC Online for this [article](#) on metamorphosis.

Publications

Al Nadaf, S., Deakin, J.E., Gilbert, C., Robinson, T.J., Graves, J.A. & Waters, P.D. A cross-species comparison of escape from X inactivation in *Eutheria*: implications for evolution of X chromosome inactivation. *Chromosoma*.

Bhagavatula, P.S., Claudianos, C., Ibbotson, M.R. & Srinivasan, M.V. Optic Flow Cues Guide Flight in Birds. *Current Biology*.

Di Marco, M., Cardillo, M., Possingham, H.P., Wilson, K.A., Blomberg, S.P., Boitani,

L., & Rondinini, C. A novel approach for global mammal extinction risk reduction. *Conservation Letters*.

Harrison, M.T., Moore, A.D., Dove, H., Evans, J.R. Recovery dynamics of rainfed winter wheat after livestock grazing. 1. Growth rates, grain yields, soil water use and water-use efficiency. *Crop & Pasture Science*.

Harrison, M.T., Evans, J.R., Dove, H. & Moore, A.D. Recovery dynamics of rainfed winter wheat after livestock grazing. 2. Light interception, radiation-use efficiency and dry-matter partitioning. *Crop & Pasture Science*.

Harrison, M.T., Evans, J.R., Moore, A.D. & Dove, H. Dual-purpose cereals: can the relative influences of management and environment on crop recovery and grain yield be dissected? *Crop & Pasture Science*.

Hassan, S. & Mathesius, U. The role of flavonoids in root-rhizosphere signalling - opportunities and challenges for improving plant-microbe interactions. *Journal of Experimental Botany*.

Jennions, M.D., Kokko, H., & Klug, H. The opportunity to be misled in studies of sexual selection. *Journal of Evolutionary Biology*.

Kahn, A.T., Livingston, J.D., & Jennions, M.D. Do females preferentially associate with males given a better start in life? *Biology Letters*.

Kokko, H. Dyadic contests: modelling fights between two individuals. In I.C.W. Hardy, & M. Briffa (Eds.), *Animal Contests*. Oxford University Press.

Kokko, H. Conflict and Restraint in Animal Species: Implications for War and Peace. In D. Fry (Ed.), *War, Peace, and Human Nature*. Oxford University Press.

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Livornois, A.M., Graves, J.A. & Waters, P.D. The origin and evolution of vertebrate sex chromosomes and dosage compensation. *Heredity*.

Murtagh, V., O'Meally, D., Sankovic, N., Delbridge, M.L., Kuroki, Y., Boore, J.L., Toyoda, A., Jordan, K.S., Pask, A.J., Renfree, M.B., Fujiyama, A., Graves, J.A. & Waters, P.D. Evolutionary history of novel genes on the tammar wallaby Y chromosome: Implications for sex chromosome evolution. *Genome Research*.

Nair, A., Korres, H., & Verma, N.K. Topological characterisation and identification of critical domains within glucosyltransferase IV (GtrIV) of *Shigella flexneri*. *BMC Biochemistry*.

Nichol, C.J., Pieruschka, R., Takayama, K., Förster, B., Kolber, Z., Rascher, U., Grace, J., Robinson, S.A., Pogson, B., & Osmond, B. Canopy conundrums: building on the Biosphere 2 experience to scale measurements of inner and outer canopy photoprotection from the leaf to the landscape. *Functional Plant Biology*.

Reef, R., Ball, M.C., & Lovelock, C.E. The impact of a locust plague on mangroves of the arid Western Australia coast. *Journal of Tropical Ecology*.

Sabeti, F., Maddess, T., Essex, R.W., & James, A.C. Multifocal pupillography identifies ranibizumab induced changes in retinal function for exudative age-related macular degeneration. *Investigative Ophthalmological & Visual Science*.

Starrfelt, J. & Kokko, H. Bet-hedging: A triple trade-off between means, variances and correlations. *Biological Reviews*.

Summers, R.L., Nash M.N., & Martin, R.E. Know your enemy: Understanding the role of PfCRT in drug resistance could lead to new antimalarial tactics. *Cellular and Molecular Life Sciences*.

Velten, J., Cakir, C., Youn, E., Chen, J., & Cazzonelli, C.I. Transgene Silencing and Transgene-derived siRNA Production in Tobacco Plants Homozygous for an Introduced AtMYB90 Construct. *PLoS ONE*.

Williams, M.E., & Matheius, U. Intimate Alliances: Plants and their Microsymbionts. *Teaching Tools in Plant Biology. The Plant Cell*.

Wydrzynski, T. & Hillier, W. (Eds). *Molecular Solar Fuels*. Royal Society of Chemistry.

Zawadzki, J.L., Kotze, A.C., Fritz, J.A., Johnson, N.M., Hemsworth, J.E., Hines, B.M. & Behm, C. A. Silencing of essential genes by RNA interference in *Haemonchus contortus*. *Parasitology*.

Zeil, J. Visual Homing – An Insect Perspective. *Current Opinion in Neurobiology*.

Zishiri, V.K., Joshi, M.C., Hunter, R., Chibale, K., Smith, P.J., Summers, R.L., Martin, R.E., & Egan, T.J. Quinoline Antimalarials Containing a Dibemethin Group are Active against Chloroquine Resistant *Plasmodium falciparum* and Inhibit Chloroquine Transport via the P. falciparum Chloroquine-Resistance Transporter (PfCRT). *Journal of Medicinal Chemistry*.

Christmas Party Photos

