



## NEWS

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### NEW PAPER IN SCIENCE

**Hanna Kokko** (EEG) and **Jussi Lehtonen** (Kokko lab, EEG) together with their international collaborators from Finland and France, have published a paper in *Science*, showing how genetic variation persists through generations, rather than being bred out in an evolution towards a 'perfect type' in the European Bank Vole.



Sexual conflict in bank voles. Credit: M. Møkkönen

### FELLOWSHIP SUCCESS

In the recently announced ARC Future Fellowship and DECRA (Discovery Early Career Researcher Award) Fellowship round RSB had an 86% success rate for Future Fellowships and a 45% success rate for DECRA Fellowships.

Future Fellowships have been awarded to:

**Loeske Kruuk** (EEG; presently at the University of Edinburgh)

**Patrick Meir** (PS; presently at the University of Edinburgh)

**Sarah Pryke** (EEG; presently at Macquarie University and joining us in the New Year, having been appointed to a continuing position earlier this year)

**Amanda Ridley** (EEG; presently at Macquarie University)

**Peter Solomon** (PS)

**David Tschärke** (BSB) DECRA Fellowships have been awarded to:

**Karen Ford** (EEG)

**Tamsyn Hilder** (BSB)

**Jennie Mallela** (EEG)

**Ajay Narendra** (EEG)

**Lisa Schwanz** (EEG)

In addition, **Jan Hemmi** (EEG) has been awarded a Future Fellowship through the University of Western Australia.

### ARC DISCOVERY AND LINKAGE GRANTS

RSB also did very well in the recent ARC Discovery and Linkage Grant round. The following staff were awarded grants:

#### BSB

1 other + **Giel van Dooren** (through U.Melb)

#### EEG

**Pat Backwell**

**Michael Jennions**, **Hanna Kokko** including a DORA Fellowship for Michael

**Scott Keogh** + 3 others

**Ryszard Maleszka**

**Adrienne Nicotra** + 3 others

**Sarah Pryke**

**David Gordon** (Linkage Grant)

#### PS

**Lucas Cernusak**

3 others + **Lucas Cernusak** (through Macquarie)

**Michael Djordjevic**, **Nijat Imin** + 3 others

**Warwick Hillier** + 2 others

**David Jones** + 1 other

**Ulrike Mathesius**, **Adrienne Nicotra**

### Dean Price

**Peter Solomon**

**Shunichi Takahashi**, **Fred Chow**, **Warwick Hillier** + 2 others

**Spencer Whitney** + 1 other

5 others + **Owen Atkin**, **Murray Badger** (LIEF Grant; through UWA)

### AUSTRALIAN JOURNAL OF ZOOLOGY EDITOR

**Paul Cooper** (EEG) has been appointed as the Editor-in-Chief of *Australian Journal of Zoology*.

### NEW HEAD OF EEG

**Bill Foley** is to step down as Head of the Division of Evolution, Ecology and Genetics from the end of January 2012, having been in the role for two and a half years, and having been Head of the former Department of Botany and Zoology for some years prior to that. Following consultation with members of the Division, **Scott Keogh** is to be appointed Head of EEG, commencing January 30, 2012.

## CONGRATULATIONS

**Graham Farquhar** (PS) is to be awarded the Peter Baume Award, the ANU's highest award, "for exceptional staff members and Alumni of the University whose contributions to the economic, cultural, scientific or social development of Australia or the international community have demonstrated distinguished service of the highest degree." The award will be presented by the Chancellor at next month's graduation ceremony.

**John Evans** (PS) has been promoted to Professor. John is one of the ANU's nineteen Thomson 'Highly Cited' researchers and his promotion is a fitting recognition of his many outstanding contributions over an extended period. See the 'Lab Leader Spotlight' on John over the page.

**Ryan Phillips** (Peakall lab, EEG) has won the Harper Prize Young Investigator award for his paper "Do mycorrhizal symbioses cause rarity in orchids?" published in *Journal of Ecology* earlier this year.

## WELCOME

**Daniel Stanton** (PS) has arrived from Princeton University to begin a postdoctoral appointment on the ecophysiology of Antarctic mosses with **Marilyn Ball** (PS) and collaborators, **Graham Farquhar** (PS) Gary Bryant (RMIT), Sharon Robinson (Wollongong) and Dana Bergstrom (AAD).

**Dayong Fan** has joined the Chow lab (PS) to work on an ARC-funded project on probing

the four photosynthetic membrane complexes at work *in situ* in leaves. Dayong comes from the Institute of Botany, The Chinese Academy of Sciences, Beijing.

**Andrew Chew** has just joined the RSB IT team as the IT Client Services Team Leader, replacing James Molinari in this role. Andrew brings a wealth of experience from his previous role at CASS, as well as experience at DOI and in the private sector.

## LAB LEADER SPOTLIGHT - JOHN EVANS, PS

**Lab members:** Hugo Alonso, postdoc; Paul Gauthier, postdoc; Donya Tohidi-Esfahani, postdoc; Peter Matthews; research officer; Soumi Bala, technical officer.

**Currently researching:** Photosynthesis. "I class myself as a plant physiologist so I'm interested in how plants work. That really spans from the underlying biochemistry and anatomy of the leaf through to how it all works together to give the performance of the leaf. I'm also interested in global change and how plants react to rising atmospheric CO<sub>2</sub>."

**Greatest achievement:** "I have been interested in measuring mesophyll conductance which determines the CO<sub>2</sub> concentration gradient between the airspace inside the leaf to inside the chloroplast. That hadn't been done before because there wasn't the technology. We have developed methods that now allow us to measure mesophyll conductance, combining gas exchange with stable isotope measurements."

**Next big thing:** "Food security is a really exciting issue because it's a global issue. The growth in world population and improvements in standard of living place increasing demands on food production. Improving crop yields by improving the genetic potential has long lead times which means a big investment and collaboration across a broad range of people and skill sets. If we could find a characteristic that improved photosynthesis, improved growth, improved biomass - that characteristic could then be incorporated into elite cultivars and translated into improved yields."



## MEDIA

**Richard Milner's** (Backwell lab, EEG) work on fiddler crabs was featured in [Cosmos Magazine](#) online.

**Bill Foley** (EEG) has commented on the Eucalyptus genome being mapped in *Australasian Science*.

## 2012 RSB POSTGRAD CONFERENCE

The 2012 RSB Postgrad conference will be held on Thursday 1 and Friday 2 December 2011.

On Thursday there will be three concurrent sessions: PS in the Robertson Lecture Theatre, BSB in the SRES Lecture Theatre and EEG in the Gould Seminar Room. Talks will be ten minutes, including question time. The day will be well catered, with morning and afternoon tea, and lunch for all attendees in the new student drop-in centre in the Linnaeus Building.

Following the talks, a pizza dinner for the postgrads will be held in the Robertson Foyer with a DJ to play from 6 -11pm.

Friday morning will be a series of workshops, including a "how to do media" workshop held by Science Communications Officer, Casey Hamilton.

## CHRISTMAS PARTY

Where: Robertson Building in the foyer and adjoining courtyards – Catcheside Court if it rains

When: Friday 9 December, from 12.30pm

Food type: BBQ or vegetarian options, salads, desserts and 2 free drinks.

## THE LITTLE PICKLE

Next week will see the opening in the foyer of the Robertson Building of The Little Pickle, operated by The Purple Pickle team and selling coffee, cold drinks and a range of food.

## PUBLICATIONS

Bell, A. How do middle ear muscles protect the cochlea? Reconsideration of the intralabyrinthine pressure theory. *Journal of Hearing Science*.

Harmer, A.M.T., Kokko, H., Herberstein, M.E. & Madin, J.S. Optimal web design in sub-optimal foraging conditions. *Naturwissenschaften*.

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*.

Lehane, A.M., McDevitt, C.A., Kirk, K. & Fidock, D.A. Degrees of chloroquine resistance in *Plasmodium* - is the redox system involved? *International Journal for Parasitology: Drugs and Drug Resistance*.

Liu, Z., Zhang, Z., Faris, J.D., Oliver, R.P., Syme, R., McDonald, M.C., McDonald, B.A., Solomon, P.S., Lu, S., Shelver, W.L., Xu, S. & Friesen, T.L. The cysteine rich necrotrophic effector SnTox1 produced by *Stagonospora nodorum* triggers susceptibility of wheat lines harboring Snn1. *PLoS Pathogens*.

Mokkonen, M., Kokko, H., Koskela, E., Lehtonen, J., Mappes, T., Martiskainen, H. & Mills, S.C. Negative frequency dependent selection maintains sexually antagonistic alleles in a small mammal, *Myodes glareolus*. *Science*.

Takemoto, D., Rafiqi, M., Hurley, U., Lawrence, G.J., Bernoux, M., Hardham, A.R., Ellis, J.G., Dodds, P.N., & Jones D.A. N-terminal motifs in some plant disease resistance proteins function in membrane attachment and contribute to disease resistance. *Molecular Plant-Microbe Interactions*.

Tan, J.K.H., & O'Neill, H.C. Myelopoiesis in spleen producing distinct dendritic-like cells. *Journal of Cellular and Molecular Medicine*.

Tanz, S., Kilian, J., Johnsson, C., Apel, K., Small, I., Harter, K., Wanke, D., Pogson, B., & Albrecht, V. The SCO2 protein disulphide isomerase is required for thylakoid biogenesis and interacts with LCHB1 chlorophyll a/b binding proteins which affects chlorophyll biosynthesis in *Arabidopsis* seedlings. *The Plant Journal*.

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This newsletter is published monthly, and is archived at <http://biology.anu.edu.au/newsletter>. Please contact [Casey Hamilton](#) to submit material for future issues, or to be added to our newsletter mailing list.

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