



NEWS

Loeske Kruuk awarded the Genetics Society Mary Lyon Medal



Loeske Kruuk (EEG) has been awarded the 2014 Mary Lyon Medal of the Genetics Society (UK). The Mary Lyon Medal, named after the distinguished geneticist Mary Lyon FRS,

has been established to reward outstanding research in genetics to scientists who are in the middle of their research career. Loeske has also just been elected to membership EMBO (the European Molecular Biology Organization, an academy of life sciences), and she is an editor of a book published last month: 'Quantitative Genetics in the Wild' (eds. Charmantier, Garant and Kruuk, Oxford University Press), an edited volume showing how quantitative genetics has improved our understanding of evolutionary processes.

Sue Cossetto received a Vice Chancellor's Teaching Award

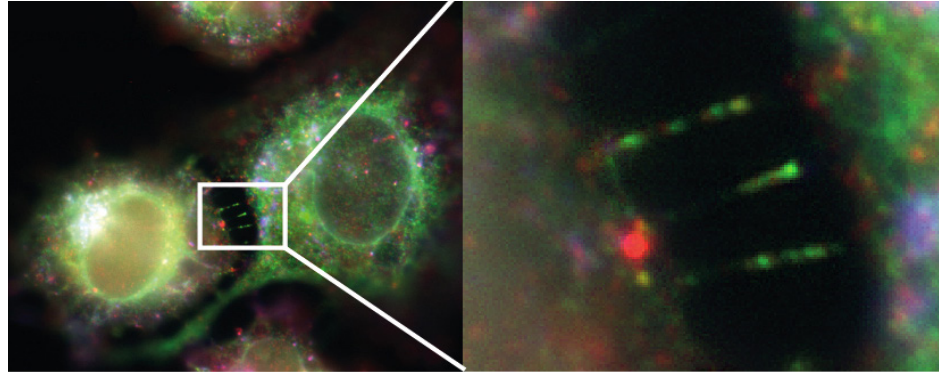


Sue Cossetto (Sub Dean, CMBE & CPMS) was awarded a Vice Chancellor's Award for Excellence in Education, for Outstanding Contribution to Student Learning. The award was for her work at

the Research School of Biology on the development and implementation of curricula that links graduate attributes and skills development within a research-led context.

Morning tea for Kieran Kirk

A school morning tea was held on May 8 in the Linnaeus drop in centre to thank Kieran for his efforts and achievements during his time as Director, and to celebrate his promotion to Dean of the College. Acting Director Stefan Bröer delivered an entertaining speech and presented a gift. In addition to his role as Dean of the College, Kieran will retain his lab in the Division of Biomedical Science and Biochemistry.



Localisation of vaccinia virus protein F5 in finger-like projections between two infected cells. This image was recently published in a paper entitled 'Vaccinia virus F5 is required for normal plaque morphology in multiple cell lines but not replication in culture or virulence in mice' in *Virology*. Image credit: Bianca Dobson, Dean Procter, Tim Newsome and David Tschärke.

Paper recognised

A paper by **Ben Corry** (BSB) entitled 'Na⁺/Ca²⁺ selectivity in the bacterial voltage-gated sodium channel NavAb is one of the top five cited articles in the journal *PeerJ*, selected in the *PeerJ* Picks 2014 Collection and has been featured on the *PeerJ* blog.

Grant

Peter Solomon (PS) was recently awarded \$320K from the Grains Research and Development Corporation to undertake viral-induced gene silencing in wheat in collaboration with Rothamsted Research in the UK.

International summer program selection

Hong Kiat (Don) Lim (O'Neill Lab, BSB) has been selected in a competitive round for a funded place in the RIKEN Center for Integrative Medical Sciences (IMS) Summer Program in Yokohama, Japan. Up to 40 participants have been invited to spend a week (from June 20 - 27) at the RIKEN facilities, during which all members will also attend the IMS-JSI International Symposium on Immunology 2014.

PHDs SUBMITTED

Jennifer Anne Cochran (Nicotra Lab, EEG) 'Population variation in seed and seedling traits along a climate gradient: plant persistence in South West Western Australia under a changing climate'.

Vincent Pujol (Jones Lab, PS) 'Characterising a suppressor of stem-rust resistance genes effective against race Ug99 on wheat chromosome 7L'.

Amrit Nanda (Masle Lab, PS) 'The role of the ERECTA gene family in *Arabidopsis thaliana* seed development, and salt signalling during germination'.

Eliza Middleton (Zeil Lab, EEG) 'Navigation, recruitment, foraging ecology and visual systems of the Banded Sugar Ant, *Camponotus consobrinus*'.

Laura Gunn (Whitney Lab, PS) 'Exploring novel *in planta* and *in vitro* approaches for bioengineering Rubisco'.

PHDs AWARDED

Xie-Wah (Audrey) Chan (Saliba Lab, BSB) 'Thiamine transport and metabolism by the human malaria parasite *Plasmodium falciparum*'.

Amy Michelle Davidson (Nicotra Lab, EEG) 'Responding to change: Phenotypic plasticity and local adaptation, case studies using native and invasive *Erodium* species'.

MEDIA

Research undertaken by **Kathy Schneebeli** (Mathesius Lab, PS, and CSIRO PI) during her PhD on the use of the model grass *Brachypodium* for finding new resistance genes against fungal pathogens in wheat was featured on the ABC Science show, entitled 'Wild grass could supply genes to combat wheat root disease'.

Kathy just finished her PhD at CSIRO Plant Industry supervised by Michelle Watt and Ulrike Mathesius. The invitation to be interviewed for the Science Show was a

Lab Leader profile: Marcel Cardillo (EEG)



Lab research

Spatial and phylogenetic patterns of biodiversity, and the macro-evolutionary and ecological

processes that generate these patterns. A major current focus is the amazing plant diversity of Australia's southwest corner. We also do more conservation-oriented work on patterns of extinction risk among species.

Greatest achievement

Keeping an academic career afloat while also keeping four small children fed, clothed and happy. Scientifically, helping produce the first species-level phylogeny of the mammals. Not because it represents the last word in mammal evolution, but because – with over 1000 citations – it seems to have facilitated a huge amount of research on mammals around the world.

Next big thing

My personal next big thing (whether others agree remains to be seen) is to explore links between community-level ecological processes and large-scale macroevolutionary patterns.

Your science hero

I don't really have heroes, but one ecologist who earns my greatest respect is Daniel Simberloff – he did more than anyone to ensure community ecology was placed on a solid statistical foundation.

result of Kathy competing in the '3 Minute Thesis' competition last year. A good incentive for students to get their message out!

Peter Solomon (PS) was interviewed for an article in the newsletter of the Australian National Data Service, 'Share', entitled 'Harvesting Australia's wheat datasets'.

WELCOME

Weidong Jing has joined the Bröer Lab (BSB) as a PhD student. Weidong studied at Tsinghua University in Peking and will work on the role of aminophospholipid flippases in liver cancer.

Jasmine Nikolic (BTLC) has joined the Student Administration team. Jasmine started on 14 April and has taken the student administration office role. She will assist with BTLC Front Office counter enquiries, and administers Biology postgraduate programs. Jasmine has replaced Peter Francis who is a temporary transfer to the College of Engineering and Computer Sciences for two years. Jasmine has previously worked at Admissions and at the ANU College of Business and Economics, and is highly experienced in student administration.

PAPERS ACCEPTED

Balkrishna, S, Bröer, A, Welford, SM, Bröer, S, *et al*, Expression of glutamine transporter Slc38a3 (SNAT3) during acidosis is mediated by a different mechanism than tissue-specific expression, *Cellular Physiology and Biochemistry*

Blyton, MDJ, Banks, SC, Peakall, R, Lindenmayer, DB, & Gordon, DM, Not all types of host contacts are equal when it comes to *E. coli* transmission, *Ecology Letters*

Quantitative Genetics in the Wild. Edited by Charmantier, A, Garant, D, & Kruuk LEB

Day, E & Kokko, H, Relaxed selection when you least expect it: why declining bird populations might fail to respond to phenological mismatches. *Oikos*

Dobson, BM, Procter, DJ, Hollett, NA, Flesch, IEA, Newsome, TP, & Tschärke, DC, Vaccinia virus F5 is required for normal plaque morphology in multiple cell lines but not replication in culture or virulence in mice, *Virology*

Feeney, WE, Welbergen, JA, & Langmore, NE, Advances in the study of coevolution between avian brood parasites and their hosts. *Annual Review of Ecology, Evolution and Systematics*

Friesen, PC, Peixoto, MM, Busch, *et al*,

Chilling and frost tolerance in *Miscanthus* and *Saccharum* genotypes bred for cool temperate climates, *Journal of Experimental Botany*

George, DT, Mathesius, U, Behm, CA, & Verma, NK, The periplasmic enzyme, AnsB, of *Shigella flexneri* modulates bacterial adherence to host epithelial cells, *PLoS One*

Griffiths, K, Tan, JHK, & O'Neill, HC, Characterisation of the effect of LPS on DC subset discrimination in spleen, *Journal of cellular and molecular medicine*

Mortier, V, Wasson, A, Jaworek, P, D, Mathesius U, *et al*, Role of LONELY GUY genes in indeterminate nodulation on *Medicago truncatula*. *New Phytologist*.

Lewis, MJ, Chao, R & Corry, B, Molecular dynamics simulation of the partitioning of benzocaine and phenytoin into a lipid bilayer, *Biophysical Chemistry*

O'Neill, HC, Griffiths, KL, Periasamy, P, Petvises, S, Hey, Y-Y, Tan, JKH, *et al*, Spleen stroma maintains progenitors and supports long-term hematopoiesis, *Current Stem Cell Research and Therapy*

Pavitt, AT, Walling, CA, McNeilly, AS, Kruuk, LEB, *et al*, Causes and consequences of variation in early-life testosterone within a wild population of red deer. *Functional Ecology*

Schneebeil, K, Mathesius, U, Watt, M, *Brachypodium distachyon* is a pathosystem model for the study of the wheat root disease *Rhizoctonia solani* AG 8. *Plant Pathology*

Shaw, AK & Kokko, H, Mate finding, Allee effects, and selection for sex-biased dispersal, *Journal of Animal Ecology*

Stopher, KV, Bento, AIR, Clutton-Brock, T, Kruuk, LEB, *et al*, Multiple pathways mediate the effects of climate change on maternal reproductive traits in a wild mammal. *Ecology*

Whitehead, LF, Long, BM, Price, GD & Badger, MR, Comparing the in vivo function of α and β -carboxysomes in two model cyanobacteria, *Plant Physiology*.

This monthly newsletter is archived at biology.anu.edu.au/newsletter
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