

NEWSLETTER



NEWS

2009 STAFF EXCELLENCE AWARDS

The following RSB staff were honoured with an award (and in some cases a kiss, and in one case two kisses) from the Vice-Chancellor at a ceremony held in University House on 12 November.

25 years Service Medallion

Marilyn Ball (PS)
Carolyn Behm (BSB)
Michael Djordjevic (PS)
Ursula Hurley (PS)
Ted Maddess (BSB)
Richard Williamson (PS)

Career Achievement Individual Award

Angelika Bröer (BSB)

Innovation and Excellence in Service Quality

Kelly Debono
(Animal Services)
Jan Hemmi (EEG)

Angelika's and Kelly's awards were featured in the last newsletter.

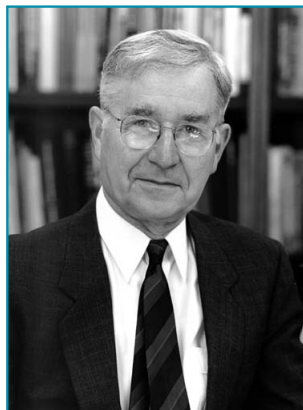
Jan Hemmi (EEG) received the Vice-Chancellor's Award for Innovation



and Excellence in Service Quality for his innovative approaches in promoting a stimulating team environment and group cohesion. As part of this effort, a number of online tools such as a literature/manual database and a wiki have been implemented to facilitate efficient sharing of information within the group. This ranges from detailed scientific methods and protocols to day to day experimental notes and comments.

A MILESTONE

Emeritus Professor Brian Gunning's book on disc, *Plant Cell Biology on DVD – Information for Students and a Resource for Teachers* has just been published by Springer-Verlag, Heidelberg. The book was 12 years in the making and is a collection of 2000+ micrographs and 250+ movies of processes in live cells. For details, [click here](#).



CONGRATULATIONS

Wiebke Ebeling, PhD student in EEG, received the 'Young Visionary Achievement Award 2009' in recognition of her outstanding contribution to the Young Visionaries program of the ARC Centre of Excellence in Vision Science.



WELCOME

Ms Jiancun Kou has arrived on study leave to work with Professor Fred Chow (PS) on photosynthetic responses to high-light and water stress in leaves. Ms Kou comes from the Northwest Agricultural and Forestry University, Yangling, Shaanxi, China, and her visit is funded by the China Scholarship Council for one year.

Dr. Delphine Vincent has arrived from INRA de Pierroton-Bordeaux in France to join Dr. Peter Solomon's lab (PS) for a two year postdoctoral position. Delphine's project will be focussed on understanding the wheat response at the proteome level to fungal effector protein exposure with the goal of determining the mode-of-action of these important pathogenicity proteins

Welcome to two Summer Research Scholars, Kimberley Louwrens, Melbourne University, and Helen Luan, ANU, who will be working on brood parasite recognition by hosts with Naomi Langmore in EEG.

GRANTS AWARDED

Jochen Zeil (EEG) has been awarded \$24,000 funding under the 2010 Group of Eight Australia-Germany Joint Research Cooperation Scheme for his project, 3D modelling of natural scenes to reconstruct vision in flying insects.

NOTICES

PLANT BIOLOGY SEMINAR SERIES

BaMBi Seminar Room,
Peter Baume Building 42

25 November, 1pm
Delphine Vincent
The Fungal secretome, not so secret any more.

2 December, 1pm
Anton Wasson
The role of flavonoids in root organ development in Medicago truncatula.

HAPPY HOUR/ CHRISTMAS PARTY

To celebrate the end of year and the coming Christmas season, there will be a special happy hour on Friday 27 November from 3.30pm in the R N Robertson Building.

The School will provide the food (barbecued sausages from the Lyneham butcher, a vegetarian option, bread rolls and salads) and drinks will be

available on a cost-recovery basis. Following on from its popularity at Oktoberfest, the German-style beer from the [Zierholz Brewery](#) in Fyshwick will again be available on tap. All are very 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.

TOPOLOGY MAP FIRST

The image (below right) has been selected for the cover of *Molecular Membrane Biology*. It comes from the recently accepted paper: *Membrane topology of the cyanobacterial bicarbonate transporter, BicA, a member of the SulP (SLC26A) family*, by Megan Shelden (PS), Susan Howitt (BSB), and Dean Price (PS).

This paper represents the first comprehensive of topology map for a member of the large SulP/SLC26 super-family. The map is for the BicA bicarbonate transporter (first described by the Price lab) which is an important transporter in the cyanobacterial CO₂ concentrating mechanism and likely to contribute to the greater than 25% of global primary net

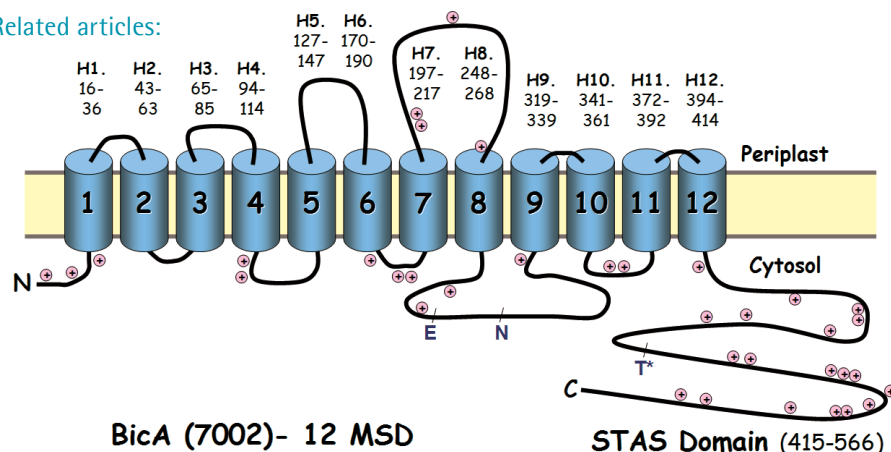
productivity attributed to cyanobacteria. Mutations in SLC26 transporters are associated with a number of debilitating human diseases (e.g. diastrophic dysplasia and Pendred syndrome) and the structural map helps in the interpretation of the nature of these mutations.

[Identification of a SulP-type bicarbonate transporter in marine cyanobacteria.](#)

Right: [Dean Price.](#)



Related articles:



PAPERS ACCEPTED

Boeddeker N., Hemmi J.M. Visual gaze control during peering flight manoeuvres in honeybees. *Proceedings of the Royal Society B*.

Buer C., Imin N., Djordjevic M. Flavonoids-New roles for old molecules. *Journal of Integrative Plant Biology*.

Bunce, M., Worthy, T. H., Phillips, M. J., Holdaway, R. N., Willerslev, E., Haile, J., Shapiro, B., Scofield, P., Drummond, A., Kamp, P., and Cooper, A. The evolutionary history of the extinct ratite moa and New Zealand Neogene paleogeography. *Proceedings of the National Academy of Sciences USA*.

Cardillo, M., and Meijaard, E. Phylogeny and the co-occurrence of mammals on southeast Asian islands. *Global Ecology & Biogeography*.

Dewar, R.C. Maximum entropy production and plant optimisation theories. *Philosophical Transactions of The Royal Society B: Biological Sciences*.

Fallow, P. M. and Magrath, R. D. Eavesdropping on other species: mutual interspecific understanding of urgency information in avian alarm calls. *Animal Behaviour*.

Gunning B. *Plant Cell Biology on DVD – Information for Students and a Resource for Teachers*. DVD publication, Springer-Verlag, Heidelberg, ISBN 978-3-642-03690-3.

Jiang, C.-D., Mao, S.-Y., Zhang, W.-H., Shi, L., Zhang, J.-Z., Chow, W.S., Yang, J.-C. Effects of water stress regulation on photosynthetic performance in clonal plant of strawberry during soil drying. *Physiologia Plantarum*.

Shelden M.C, Howitt S.M, Price G.D Membrane topology of the cyanobacterial bicarbonate transporter, BicA, a member of the SulP (SLC26A) family. *Molecular Membrane Biology*.