

# THESES, AWARDS & TEACHING

## Central Nervous System Stability and Degeneration

### Teaching

Valter K. Supervised an honours student, visiting high school students and teachers, and convened and lectured in the undergraduate course, BIOL301 Neuroscience.

Provis J and Stone J. Lectured in BIOL301 Neuroscience.

Provis J and Wellard J. Supervised summer scholars.

Provis J and Stone J. Supervised a PhD student.

### Honours

Chrysostomou V. Oxygen-induced changes in the mammalian retina: insights into the underlying cellular mechanisms.

## Comparative Genomics

### Student Theses Awarded

#### Doctor of Philosophy

Waters P. Evolution of the Mammalian Y Chromosome.

Sankovic N. Molecular Characterisation of a Marsupial Y Chromosome.

Premzl M. Prion Protein Gene and Its Shadow.

#### Honours

Haines H. How do male Kangaroos cope with only half as many ribosomal RNA genes as female Kangaroos?

Patel V. Isolation and characterization of beta ( $\beta$ )-globin genes in marsupials.

#### Awards

Graves JAM. Distinguished Fellow,

UCLA Centre for Society and Genetics.

Graves JAM. Macfarlane Burnet Medal for Biology (Aust. Academy of Science).

Gruetzner F. The Eppendorf Award for a Young Australian Researcher (Lorne Genome Conference)

### Teaching

Graves JAM. Five Lecture units on sex chromosomes and sex determination, BoZo, Human Genetics.

Gruetzner F. Lectured on comparative vertebrae genomics for fish, birds and mammals, BaMBi, Biotechnology.

Wakefield M. Two lectures on bioinformatics, BOZO, Human Genetics.

Koina E. Three practical demonstrations on nucleic acid expression analysis, ANU College of Science, Functional Genomics Workshop – New Tools for Bioscientists

## Environmental Biology

### Awards

Roderick ML and Farquhar GD. *Discover* magazine (2005) 26(1): 29 named the article "Changes in Australian Pan Evaporation from 1970 to 2002. *International Journal of Climatology* 24(9): 1077-1090" as one of the top 100 stories (number 43) for science for 2004.

### Teaching

Evans JR. Supervised and co-supervised PhD students and a Summer Scholar.

Evans JR. Supervised a student research project: A Stewart – a BHP Billiton finalist.

Evans JR. Prepared material for the section 'Plants and Greenhouse' in the unit 'Greenhouse Science' in an

on line Masters in Contemporary Science course. This unit was prepared by members of the Co-operative Research Centre for Greenhouse Accounting and was offered for the first time in 2005.

Evans JR. The greenhouse effect – rising carbon dioxide. Presented to Year 5 students at Lyneham Primary School, Canberra.

Farquhar GD. Supervised and co-supervised PhD students.

Kriedemann P. University of New England Residential School (week long). Invited lecture series and laboratory practicals on viticulture and wine science to graduate students and distance-education students. A compulsory unit in their Viticulture Graduate Diploma coursework. University of New England, Armidale, November 2005.

Masle J. Supervised PhD students.

Stuart-Williams H. Co-supervised PhD student.

## Ecosystem Dynamics

### Awards

Martin K. Smithsonian Marine Science Research Fellowship, USA.

### Teaching

Ball MC. Co-supervised two PhD students and one Honours student (BoZo).

Loveys BR. Co-supervised Honours student.

Roderick ML. Gave an invited lecture titled: Sinks, an overview, to University of Sydney final year Environmental Chemistry students.

Roderick ML. Supervised PhD students and Co-supervised PhD student (UWA).

Roxburgh SH. Gave an invited lecture to GEOG 2016 Introduction

to Greenhouse.

Roxburgh SH. Prepared online lectures and labs for a Master of Contemporary Science course in Greenhouse Science.

Roxburgh SH. Co-supervised PhD students (ANU and Melb Uni).

Schortemeyer M. Gave a 1-day practical class on gas exchange measurements for postgraduate students at the Institute of Botany, São Paulo, Brazil.

Schortemeyer M. Co-supervised a PhD student.

## Genomic Interactions

### Student Theses Awarded

#### Honours

Holmes P. Proteomic analysis of lateral root and nodule meristems.

#### Teaching

Chen H-C, Djordjevic MA, Hocart CH, Imin I, Mathesius U, Rolfe BG, Weiller GF and Weinman JJ. Supervised PhD students.

Rolfe BG. Organised and ran the Proteomics workshop at the Plant and Animal Genome XII conference, San Diego, January.

Hocart CH, McKinlay C, Stowe S, Christie J, Mathesius U and Weiller G. Organized and ran a three day "Functional Genomics Workshop: - New Tools for Bioscientists" (Dec 5 - 7), ANU.

Imin N and Hocart CH. Supervised Summer Scholars.

## Molecular Genetics and Evolution

### Student Theses Awarded

#### Doctor of Philosophy

Archer S. Comparative studies on *Flightless I*.

#### Honours

Fraval H. Analysis of a Rho family GTP exchange factor (GEF)- FTPase activating protein (GAP) interaction.

Jianbin W. Characterisation of Drosophila Diablo, an actin regulatory protein implicated in RhoGTPase signalling.

#### Teaching

Ball E. Gave a practical class in BIOL3181 Current Topics in Developmental and Molecular Biology 2005 in the School of Biochemistry and Molecular Biology.

Ball E. Gave a slide show and talk and helped to lead a field trip at the Kioloa Open Days.

Jones L. Gave four lectures in BIOL3181 Current Topics in Developmental and Molecular Biology 2005 in the School of Biochemistry and Molecular Biology.

Jones L. Gave three lectures and a practical session to biology undergraduates at James Cook University, Townsville.

Murray M. Gave four lectures in BIOL3181 Current Topics in Developmental and Molecular Biology 2005 in the School of Biochemistry and Molecular Biology.

Saint R. Gave seven lectures in BIOL3181 Current Topics in Developmental and Molecular Biology 2005 in the School of Biochemistry and Molecular Biology.

## Molecular Plant Physiology

### Student Theses Awarded

#### Doctor of Philosophy

Koerniati, S. Development of a transactivator system for rice and its application for studies of floral development.

#### Honours

Dwyer S. Acclimation of C<sub>4</sub> photosynthesis to high temperature.

#### Awards

Emmlyn-Jones D. Received the 2005 Principal's Award for contribution to college and student development, Burgmann College, The Australian National University.

Mueller-Cajar O. Received a travel award from the GRC to attend the conference 'CO<sub>2</sub> Assimilation in Plants: Genome to Biome' held in Aussios, France.

Cousins AB. Received a NSF international postdoctoral fellowship.

Woodger FJ. Received an ARC postdoctoral fellowship.

#### Teaching

Badger M. and Price D. Supervised a summer scholar.

Von Caemmerer S. Co-supervised PhD and honours students, and a summer scholar.

Woodger FJ. Delivered guest lecture in Division of Biochemistry and Molecular Biology BIOL3061 Genomics course on signal transduction.

Woodger FJ, Rosche E and McNevin D. Supervised Year 12 students as part of CSIRO Student Research Scheme.

## Photobioenergetics

### Student Theses Awarded

#### Doctor of Philosophy

Wallace B. Electron transfer in an artificial photosynthetic reaction center: Simulation using quantum Monte Carlo wavepackets.

#### Honours

Harms A. A physiological study into the effects of different regimes of light/dark and aerobic/anaerobic pretreatments on photosynthetic hydrogen production by *Chlamydomonas reinhardtii*.

#### Awards

Chow WS was made an ISI Highly

Cited Researcher.

## Teaching

Anderson JM and Chow WS. Supervised PhD students and Year 12 students in CSIRO Student Scheme.

Fernández-Velasco J. Supervised Honours student and work-experience student from France.

Hillier W and Wydrzynski T. Supervised PhD students and summer scholars.

## Plant Cell Biology

### Student Theses Awarded

#### Doctor of Philosophy

Rashbrooke MC. Molecular and genetic analysis of MOR1, a microtubule-associated protein in the model plant *Arabidopsis thaliana*.

#### Teaching

Blackman L. Co-supervised PhD scholar.

Collings DA. Lectured, BIOL3161 – Genomics and its Applications, Department of Biochemistry and Molecular Biology, Faculties ANU. Adjunct lecturer – Charles Sturt University. Supervised PhD and Masters scholars.

Gunning BES. Lectured, SCNC1101 PhB course – Imaging, Science and beauty in plant cells: 340 years of botanical microscopy.

Hardham AR. Co-convener and lectured, BIOL3177 – Advances in Molecular Plant Science, Division of Biochemistry and Molecular Biology. Lectured, BIOL 3102 – Plant-Microbe Interactions, School of Botany and Zoology. Supervised PhD scholars.

Hocart CH. Co-supervised PhD, Honours and Summer scholars.

Hocart CH, McKinlay C, Stowe S, Christie J, Mathesius U and Weiller G. Organized and ran a three day workshop. Functional Genomics Workshop – New Tools for

Bioscientists. (Dec 5-7) ANU.

John PCL. Lectured, BIOL3177 – Advances in Molecular Plant Science, Division of Biochemistry and Molecular Biology.

John PCL and Letham DS. Co-supervised students (Wollongong).

Jones DA. Co-convener and lectured, BIOL3177 – Advances in Molecular Plant Science, Division of Biochemistry and Molecular Biology. Lectured, BIOL3102 – Plant-Microbe Interactions, School of Botany and Zoology, ANU. Supervised PhD students and Summer scholars.

Perotti E. Lectured in the Plant Developmental Biology course at the Institute of Plant Biology, University of Zürich, Switzerland.

Williamson RE. Supervised PhD and Summer scholars.

## Visual Science

### Student Theses Awarded

#### Doctor of Philosophy

Bell A. The underwater piano: A resonance theory of cochlear mechanics.

Price N. Processing of visual acceleration and motion during saccades: physiology and modelling of cat and monkey cortex.

#### Honours

Ambadeniya M. Control of eye growth through imposed peripheral myopic defocus.

McCarthy S. Received the Young Investigator Award at the 2<sup>nd</sup> Singapore Eye Research Institute and The Association for Research in Vision and Ophthalmology (SERI-ARVO) Meeting Singapore.

McCarthy S. ANU College of Science and National Institute of Bioscience. 3<sup>rd</sup> Annual Postgraduate and Postdoctoral Symposium. Bringing Bioscience Together in 2005. ASMR Prize for Best Poster Presentation.

Taylor R. Higher-order spatial correlations in the human striate cortex: an isotrigon texture based approach.

## Teaching

Barron A. Gave an invited lecture Animal Navigation Summer School.

James AC. Supervised PhD students, X Goh and B Doolan, co-supervised PhD student J Sheridan.

Ibbotson MR. Lectured in Psychology for the course, PSYC007 Biological Bases of Behaviour.

Maddess T. Lectured, BIOL3162 Intellectual Property. Lectured for the ANU Electron Microscopy Unit, and the National Graduate School of Management.

Maddess T and James AC. Supervised PhD students and Honours student. Gave Lab courses for PSYC3016 and BIOL 3101.

Maleszka R. Supervised and co-supervised two PhD students.

Maleszka R. Member of the ANU Neuroscience Honours Management Committee.

Morgan IG. Supervised two ANU PhD students, co-supervised one PhD student at the University of Sydney, one student at La Trobe, and one ANU Honours student. Hosted two 3<sup>rd</sup> year Project students from Psychology, PSY007.

Srinivasan MV. Supervised and co-supervised seven PhD students.

Srinivasan MV. Conducted eight lectures in Division of Botany and Zoology course, Regulatory and Integrative Physiology, BIOL 3103.

Srinivasan MV. Presented two lectures to ANU PhD students.

Zeil J and Hemmi JM. Co-supervised four PhD students.

Zeil J, Stowe S and Maleszka R. Co-supervised one PhD student.

Zeil J. Co-supervised two PhD students

Zeil J gave 9 lectures on Sensory Systems and ran a practical project in BIOL3103 (BOZO): Current Research in Animal Physiology.

Zeil J. Contributed four lectures on Marine Physiology in BIOL2112 (Botany and Zoology). Marine Biology.

Zeil J and Srinivasan MV. Organised the 4<sup>th</sup> CVS Summer School on Animal Navigation, November 28 - December 2.

Zhang SW. Supervised PhD students Emily Baird, Allen Cheung, Pinar Cinar and Diploma students Sebastian Schwarz (Würzburg University) and Mario Pahl (Würzburg University).

Webb D. Ran Light Microscopy and Advanced Fluorescence Light Microscopy sections of MIA 2005.

## Electron Microscopy Unit

### Student Theses Awarded

#### Doctor of Philosophy

Brink FJ. Oxygen/Fluorine Ordering, Modulated Structures and Solid Solutions in Metal Oxyfluoride Systems.

#### Teaching

Brink FB. Presented one day courses on Energy Dispersive X-ray Microanalysis and TEM Electron Diffraction as part of the EMU Microscopy, Imaging and Microanalysis Workshops (MIA 2005), and contributed to other sessions.

Brink FJ, Huang CX and Stowe SJ ran one-day "tailored" workshops in imaging and analytical SEM for archaeologists from RSPAS, and for staff of the National Gallery of Australia Conservation Department.

Huang CX contributed to MIA 2005.

Stowe S. Organised and lectured in the 12-day ANUEMU MIA 2005 (Jul-Oct) and contributed to the RSBS "Functional Genomics" Biotechniques Workshop in December. Co-supervised two PhD students (RSBS).