

THESES, AWARDS & TEACHING

Central Nervous System Stability and Degeneration

Student Thesis Awarded

Honours

Shelley, E. Thesis: A Histopathological and Immunohistochemical Survey of Aged Human Retinas.

Teaching

Valter K. Supervised a summer scholar, visiting high school students and teachers, and convened and lectured in the undergraduate course, BIOL 3101, Neuroscience.

Provis J and Stone J. Lectured in BIOL 3101, Neuroscience.

Provis J and Stone J. Valter K. Supervised four PhD students.

Comparative Genomics

Student Theses Awarded

Honours

Smith C. Thesis: Tasmanian Devil Chromosomes: Providing a Framework for Devil Facial Tumour Disease.

Awards

Graves JAM. UNESCO-L'Oreal Women in Science 'Asia-Pacific Laureate' 2006

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

Teaching

Graves JAM. Gave two lecture units on sex chromosomes and sex determination, BoZo, Human Genetics.

Waters P. Gave two lecture units on sex chromosomes and sex determination, BoZo, Human Genetics.

Ezaz T. Gave two lecture units on sex chromosomes and sex determination, BoZo, Human Genetics.

Wakefield M. Gave two lecture units on bioinformatics, BoZo, Human Genetics.

Environmental Biology

Student Theses Awarded

Doctor of Philosophy

Scott Gilmore. Thesis: Genetic Mapping of Plant Transpiration Efficiency.

Youping Zhou. Thesis: Carbon, Oxygen and Hydrogen Isotope Compositions of Plant Material: Insights from Controlled Growth Experiments and Modelling.

Honours

Matthew Harrison. Thesis: Does the proportion of leaf nitrogen allocated to cell walls influence photosynthesis?

Awards

Farquhar GD. Doctor Honoris Causa in recognition of 'expertise in Environmental Biology' Universiteit Antwerpen, Brussels.

Royal Society of Tasmania R.M. Johnston Memorial Medal. Awarded to "a scholar of great distinction in any field within the Society's purview".

Teaching

Evans JR. Co-supervised Honours student.

Edwards, E. Co-supervised Honours student.

Farquhar GD. Co-supervised PhD and Honours students.

Hobbins M. Co-supervised Summer Scholar and work experience student.

Masle J. Supervised PhD students and Summer Scholars.

Roderick, M. Co-Supervised Summer Scholar. ANU Convenor of Bachelor of Global and Ocean Sciences Program and Convenor of Global Change Science Major.

Ecosystem Dynamics

Student Theses Awarded

Doctor of Philosophy

Hume I. Thesis: Using High Frequency Satellite Imagery to Estimate Forage Vegetation in a Semi-Arid Environment.

Honours

Steinwendler AM. Thesis: Functional characterisation and physiological properties of heteroblastic juvenile and adult *Eucalyptus pauciflora* ssp. *pauciflora* leaves.

Teaching

Ball MC. Presented a module of lectures and a laboratory practical on temperature tolerance in BIOL 3125, Functional Ecology, and co-supervised one Honours student and three PhD students.

Egerton JGG. Contributed to the teaching of a laboratory practical in BIOL 3125, Functional Ecology.

Loveys BR. Co-supervised an Honours student.

Roderick ML. Gave an invited lecture: *Climate Change: Wetter or Drier?*, to 2nd year ANU Geography students and 3rd year University of Sydney final year Environmental Chemistry students.

Roderick ML. Supervised two PhD students and co-supervised one PhD student (UWA).

Schortemeyer M. Co-supervised one PhD student.

Steinwendler AM. Contributed to the teaching of a laboratory practical in BIOL 3125, Functional Ecology.

Genomic Interactions

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.

Hocart CH and McKinlay C. Organised a three day "Functional Genomics Workshop: - New Tools for Bioscientists" (June 5 -7), ANU. Technical lectures provided by Hocart CH, McKinlay C, Christie J, Mathesius U and Weiller G.

Hocart CH and McKinlay C. Organised a one day "Mass Spectrometry Workshop" (Nov 16), RSBS, ANU. Technical lectures provided by Hocart CH, McKinlay C, Stuart-Williams H, and Mathesius U.

Hocart CH and McKinlay C. Organised a one day "Mass Spectrometry Symposium", RSBS, ANU (Nov 17), ANU.

Imin N. Supervised Summer Scholars, an Internship Student and an Honours Student.

Weiller G. Supervised a Summer Scholar.

Molecular Genetics and Evolution

Student Theses Awarded

Doctor of Philosophy

Smibert P. Thesis: Reverse genetic analysis of the RGK family of small GTPases of *Drosophila melanogaster*.

Honours

McFarlane LA. Thesis: Preliminary Transcriptome Analysis of the Egg from the coral *Acropora millepora* (Hons 1).

Awards

Murray MJ. Received the ANZSCDB Toshi Yamada Prize for the best talk given by a post-doctoral fellow at Combo.

Teaching

Ball EE. Taught a practical class on *Drosophila* development in Biol 3181, Current Topics in Developmental and Molecular Biology, BoZo.

Ball EE and Hayward DC. Served as examiners in the Honours program, BoZo.

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

Ball EE. Gave a keynote/public lecture to the ANU School of Mathematics BioInfoSummer Program on Animal Phylogeny, Coral Research and Bioinformatics.

Jones L. Presented four lectures in BIOL 3181, Current Topics in Developmental and Molecular Biology, BaMBi.

Murray M. Taught in BIOL 3181, Current Topics in Developmental and Molecular Biology.

Saint R. Presented six lectures in BIOL 3181, Current Topics in Developmental and Molecular Biology, BaMBi.

Saint R. Presented guest lectures in Biology I: Human Perspectives, The University of Adelaide.

Saint R. Organized and lectured in the 5th Australian Developmental Biology Workshop.

Molecular Plant Physiology

Student Theses Awarded

Doctor of Philosophy

Sharwood RE. Thesis: Analysis of transgenic tobacco transplanted with Rubisco subunits from sunflower.

Mueller-Cajar O. Thesis: Directed evolution of Rubisco in *Escherichia coli*.

Awards

Von Caemmerer S. Election to the Australian Academy of Science and the Deutsche Akademie der Naturwissenschaftler (Leopoldiana).

Teaching

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

Badger MR. Co-supervised PhD and honours students, and a summer scholar.

Whitney S. Supervised PhD students and a summer scholar.

Kaines SS and Whitney S. Supervised Year 12 students as part of the CSIRO Student Research Scheme.

Photobioenergetics

Student Theses Awarded

Doctor of Philosophy

Kim E-H. Thesis: The structure/function relationship in *Arabidopsis* chloroplasts with particular reference to macromolecular crowding.

Hay S. Thesis: Protein engineering of novel porphyrin/quinone-binding proteins for light-induced electron transfer.

Honours

Singh S. Thesis: Substrate water exchange in Photosystem II D1-D61N and D1-D170H mutants of

Synechocystis PCC6803 in the S₃ State.

Talent M. Thesis: A sustainable photosynthetically derived liquid fuel for developing countries: a simple method of extracting oil from microalgae.

Awards

McConnell I. Best poster award, Australian Society of Plant Scientists annual conference.

Teaching

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

Fernández-Velasco J. Supervised an Honours student.

Hillier W. Taught a course in 2nd year biochemistry, BIOL 2171, Biochemistry of the Cell, BaMBi.

Hillier W and Wydrzynski T. Supervised PhD students and an Honours student.

Plant Cell Biology

Student Theses Awarded

Doctor of Philosophy

Catanzariti A-M. Thesis: Avirulence elicitors expressed and secreted from the haustoria of flax rust.

Chakrabarti A. Thesis: Structure-function analysis of Cf-9 and Cf-9B resistance proteins from tomato (*Lycopersicon esculentum* Mill.).

Paeper CS. Thesis: Aquaporins and the vacuolar H⁺-pyrophosphatase in *Phytophthora nicotianae*.

Honours

Gan PHP. Thesis: Characterization of cyclophilins in *Phytophthora nicotianae*.

Landgren E. Thesis: Characterisation of polygalacturonase in *Phytophthora nicotianae*.

Awards

Gan PHP. University Medal.

Teaching

Blackman L. Co-supervised Honours and PhD scholars.

Collings DA. BaMBi and BoZo. Gave four lectures in BIOL 1007, Living Cells; twelve lectures, and associated practical classes and tutorials in BIOL 2121, Plant Structure and Function; one lecture in BIOL 3161, Genomics and its Applications. Supervised Bachelor of Medical Science student in BIOL 3190, Medical Sciences Elective. Adjunct lecturer – Charles Sturt University. Supervised a Masters scholar.

Gunning BES. External examiner for PhD Theses in the University of Newcastle and the University of Sydney.

Hardham AR. Co-convener and lecturer, BIOL 3177, Advances in Molecular Plant Science, BaMBi. Supervised Summer Research scholars, Honours and PhD scholars.

Hocart CH. Co-supervised PhD scholars.

Hocart CH and McKinlay C. Organised a three day "*Functional Genomics Workshop: - New Tools for Bioscientists*" (June 5 -7), ANU. Technical lectures provided by Hocart CH, McKinlay C, Christie J, Mathesius U and Weiller G.

Hocart CH and McKinlay C. Organised a one day "*Mass Spectrometry Workshop*" (Nov 16), RSBS, ANU. Technical lectures provided by Hocart CH, McKinlay C, Stuart-Williams H, and Mathesius U.

Hocart CH and McKinlay C. Organised a one day "*Mass Spectrometry Symposium*", RSBS, ANU (Nov 17), ANU.

Jones DA. Supervised PhD scholars.

John PCL. Lectured, BIOL 3177, Advances in Molecular Plant Science, BaMBi.

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

Rouse DT. Co-convener of the joint RSBS/CSIRO Plant Biology seminar series.

Williamson RE. Supervised PhD scholar.

Visual Science

Student Theses Awarded

Doctor of Philosophy

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

Berry R. Thesis: A Multi-Level Analysis of the Dragonfly Ocelli.

Petratchkov S. Thesis: The impact of the visual environment on the pattern of glycosaminoglycan synthesis in the sclera of the chick.

Honours

Hahn K. Thesis: Optic-flow-based-scene reconstruction for UAV navigation.

Wilson S. Thesis: The resolution of time in cat cortical neurons.

Awards and Honours

Srinivasan MV. Distinguished Visitor, Royal Society of New Zealand.

Srinivasan MV. Prime Minister's Prize for Science.

Srinivasan MV. Election to the Academy of Sciences for the Developing World.

Teaching

Barron AB. Gave two lectures to Botany and Zoology 3rd year Animal Behaviour.

Barron AB. Gave one lecture to the RSBS Animal Navigation Summer School.

Barron AB. Gave six lectures to the University of Otago 3rd year Neuroethology.

Claudianos C. Supervised two PhD theses.

Hemmi JM. Contributed six lectures in PSYCH 2010, on information processing.

Hemmi JM and Zeil J. Co-supervised two PhD theses.

Ibbotson M. Lectured PSYCH 2010, Visual and cognitive neuroscience (a new course designed to look at higher functions of the brain).

Ibbotson M. Course convenor. Lectured BIOL 3112 (part of the Neuroscience Major), Advanced Neuroscience: Sensory and motor systems and related diseases.

James AC. Supervised PhD students, and co-supervised with Dr H Gardner, Dept Computer Science, FEIT, PhD student and Masters student.

Maddess T. Lectured for the ANU Electron Microscopy Unit.

Maddess T and James AC. Supervised PhD students .

Maddess T. Gave Lab courses for PSYCH C3016, and BIOL 3101.

Maleszka R. Supervised and co-supervised PhD students.

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

Reinhard J. Advised two PhD theses.

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

Srinivasan MV. Presented nine lectures, BIOL 3103, Regulatory and Integrative Physiology, BoZo.

Zeil J and Hemmi JM. Co-supervised three PhD theses.

Zeil J and Stowe S. Maleszka R supervised one PhD thesis .

Zeil J. Co-supervised two PhD theses.

Zeil J. Gave ten lectures on Sensory Systems & Sensory Ecology and ran a practical project in BIOL 3103, Current Research in Animal Physiology, BoZo.

Zeil J. Gave four Lectures on Marine Physiology , BoZo.

Zeil J. Gave two lectures at the 5th ACEVS-CVS Summer School on Animal Navigation, November 27 - December 1.

Zhang SW. Co-supervised four PhD students and two Honours students and examiner for a German Diploma.

Electron Microscopy Unit

Teaching

Brink FB. Presented one-day course on Energy Dispersive X-ray Microanalysis as part of the EMU Microscopy, Imaging and Microanalysis Workshops, MIA 2006, and contributed to other sessions.

Huang CX contributed to Root/Soil Biology Workshop 2006, convened by Prof. Margaret McCully, CSIRO Plant Industry, and to Microscopy Imaging and Analysis 2006.

Stowe S. Convened and lectured in the eight-day ANUEMU MIA 2006 workshop series (April-May), lectured to Physics 1201, co-convened two-day satellite workshop of ACMM-19 on Laser cell Capture Microscopy, co-convened five-day Advanced SEM Workshop, co-supervised two PhD students.

Webb D. Ran Light Microscopy and Advanced Fluorescence Light Microscopy sections of MIA 2006, and a one-day light microscopy course for BaMBi.

All ANUEMU staff contributed to practical sessions for MIA 2006, and for Physics 1201 and 3032.