



THE  
AUSTRALIAN  
NATIONAL  
UNIVERSITY

# Annual Report 2001

Published by the [Marketing and Public Affairs Division](#)  
[The Australian National University](#)

*Published by*  
Marketing and Public Affairs Division  
The Australian National University

*Produced by*  
Publications Office  
Marketing and Public Affairs Division  
The Australian National University

*Printed by*  
University Printing Service  
The Australian National University

ISSN 1327-7227

April 2002

# THE AUSTRALIAN NATIONAL UNIVERSITY

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VICE-CHANCELLOR  
PROFESSOR IAN CHUBB AO

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11 April 2002

The Hon Dr Brendan Nelson MP  
Minister for Education, Science and Training  
Parliament House  
CANBERRA ACT 2600

Dear Minister

**Report of the Council for the period 1 January 2001 to 31 December 2001**

We have the honour to transmit the report of the Council of The Australian National University for the period 1 January 2001 to 31 December 2001 furnished in compliance with Section 9 of the *Commonwealth Authorities and Companies Act 1977*.

Emeritus Professor P E Baume  
**Chancellor**

Professor I W Chubb  
**Vice-Chancellor**



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## Further information about ANU

Detailed information about the achievements of ANU in 2001, especially research and teaching outcomes, is contained in the annual reports of the University's research schools, faculties, centres and administrative divisions.

### For course and other academic information, contact

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# The Council and University Officers

## The Council

As at 31 December 2001

### *Chancellor*

The Hon Emeritus Professor P.E. Baume, AO MD BS Syd., FRACP, FAFPHM, FRACGP (Hon), HonDLitt USQ (to 30/11/2003)

### *Pro-Chancellor*

Dr A.C. Bennett, SC BSc (Hons) PhD Syd., LLB NSW (to 13/11/2004)

### *Vice-Chancellor*

Professor Ian Chubb, DPhil Oxon (1/1/2001 to 31/12/2007)

*Director, Institute of Advanced Studies and Chair, Board of the Institute of Advanced Studies*

Professor Frank Cameron Jackson, BA (Hons) BSc Melb, PhD LaTrobe, FASSA, FAHA, FBA (1/1/2001 to 1/7/2001)

### *Deputy Vice-Chancellor (Research)*

Professor Frank Cameron Jackson, BA (Hons) BSc Melb., PhD LaTrobe, FASSA, FAHA, FBA (from 1/7/2001 to 1/10/2001)

Professor John Hearn BSc MSc Dub. PhD ANU (from 2/10/2001)

### *Chair, Board of The Faculties*

Professor Richard Mark Pashley, BSc (Hons) DIS Lough., PhD DIC Lond. (1/1/2001 to 30/6/2001)

### *Deputy Vice-Chancellor (Education)*

Professor Richard Mark Pashley, BSc (Hons) DIS Lough., PhD DIC Lond. (1/7/2001 to 31/12/2001)

### *Pro Vice-Chancellor (Academic)*

Professor Robin Barrington Stanton, BE PhD NSW (1/7/01 to 30/6/01)

### *Pro Vice Chancellor (Academic Development and Informational Services)*

Professor Robin Barrington Stanton, BE PhD NSW (1/7/01 to 30/12/01)

### *Pro Vice-Chancellor (Administration)*

Mr Christopher William Burgess, BA (Hons) Tax

### *President, ANU Students' Association*

Mr M. Wasilewicz (01/12/2000 to 30/11/2001)

Ms J. Yin (from 1/12/2001 to 30/11/2002)

### *President, Postgraduate and Research Students' Association*

Ms R. Ennor, BAsianStudies ANU MA Macq. (03/05/2000 to 16/05/2001)

Ms S. Grey, MA (Hons) Auck. (17/05/2001 to 16/05/2002)

*Four persons appointed by the Governor-General (Term — up to four years)*

(2 positions vacant)

Ms Georgina Carnegie BEc Monash, MPA Harv., MAIIA, FAICD (From 6/02/2001 to 5/02/2005)

Ms Elizabeth Nosworthy BA LLB LLM (from 6/02/2001 to 5/02/2005)

Mr I.F. Grigg, AM BA ANU (29/08/1989 to 14/08/2000 and 13/12/2000 to 12/12/2004)

Dr M.S. Keating, AC AO BCom (Hons) Melb., PhD ANU, FRAIPA, FASSA (14/08/1996 to 14/08/2000 and 13/12/2000 to 12/12/2004)

*One Member of Parliament appointed by the Governor-General on the nomination of the Prime Minister (Term — up to four years)*

Senator B. Mason (25/10/2000 to 24/10/2004)

*One Member of Parliament appointed by the Governor-General on the nomination of the Leader of the Opposition (Term — up to four years)*

Senator K. Carr, BA (Hons) DipEd MA Melb. (13/10/1999 to 12/10/2003)

*Two persons appointed by the Chief Minister of the ACT (Term — up to four years)*

Justice M.M. Finn, BA LLB Qld. (20/05/1994 to 31/05/2002)

Mr M. Delaney, BA LaTrobe (14/09/2001 to 13/09/2005)

*One person who is either a Dean or the Head of a Research School and is elected, in either case, by the Deans and the Heads of the Research Schools voting together*

Professor A. Milner, BA (Hons) Monash, MA PhD Cornell, FASSA (30/09/2000 to 29/09/2002)

*One member of the academic staff of the Institute of Advanced Studies elected by the members of that staff*

Professor J. White, BSc Syd., DPhil Oxon, CMG, FAA, FRS (30/09/2000 to 29/09/2002)

*One member of the academic staff of The Faculties elected by the members of that staff*

Dr M. Green, BSc NSW, PhD ANU (30/09/1998 to 29/09/2002)

### *Two persons elected by Convocation*

Ms B.M. Arndt, BSc ANU, MPsych NSW

Dr D.H. Solomon, BA LLB (Hons) LittD ANU

*One member of the general staff of the University elected by members of that staff*

Mr K.J. Lonsdale, AssocDipMechEng DDIAE, BTech USQ, PGCertCnflctMgt Macq. (to 25/05/2002)

*A co-opted member (Term — up to four years)*

Mr J.F. Muir, AO (to 31/09/2004)

## University Officers

As at 31 December 2001

### *Chancellor*

The Hon Emeritus Professor Peter E Baume, AO, MD BS Syd., FRACP, FAFPHM, FRACGP (Hon), HonDLitt USQ

### *Pro-Chancellor*

Dr Annabelle Claire Bennett, SC BSc (Hons), PhD Syd., LLB NSW

### *Vice-Chancellor*

Professor Ian Chubb, DPhil Oxon.

### *Deputy Vice-Chancellor*

Professor John Alan Richards, Be PhD NSW, FIREE, FIEAust, FIEEE, FTSE, CPEng

*Director, Institute of Advanced Studies and Chair, Board of the Institute of Advanced Studies*

Professor Frank Cameron Jackson, BA (Hons) BSc Melb, PhD LaTrobe, FASSA, FAHA, FBA (1/1/01 to 1/7/2001)

*Chair, Board of the Institute of Advanced Studies*

Professor Brian L N Kennett, PhD ScD Camb. (from 13 Sept 2001)

### *Deputy Vice-Chancellor (Research)*

Professor Frank Cameron Jackson, BA (Hons) BSc Melb., PhD LaTrobe, FASSA, FAHA, FBA (from 1/7/2001 to 1/10/2001)

Professor John Hearn BSc MSc Dub., PhD ANU (from 2/10/2001)

### *Chair, Board of The Faculties*

Professor Richard Mark Pashley, BSc (Hons) DIS Lough., PhD DIC Lond.

### *Deputy Vice-Chancellor (Education)*

Professor Richard Mark Pashley, BSc (Hons) DIS Lough., PhD DIC Lond. (1/7/01 to 31/12/01)

### *Pro Vice-Chancellor (Academic)*

Professor Robin Barrington Stanton, BE PhD NSW (1/1/01 to 30/6/01)

*Pro Vice-Chancellor (Academic Development and Information Services)*

Professor Robin Barrington Stanton, BE PhD NSW (from 1/7/01)

### *Pro Vice-Chancellor (Administration)*

Mr Christopher William Burgess, BA (Hons) Tas

### *Dean, Faculty of Arts*

Associate Professor Adam Shoemaker, BA (Hons) Queen's, PhD ANU

### *Dean, Faculty of Asian Studies*

Professor Anthony Milner, BA Monash, MA PhD Cornell, FASSA

### *Dean, Faculty of Economics and Commerce*

Professor Timothy Brailsford, MEd PhD Monash, FCPA, AAIBF (Snr), FAIM

### *Dean, Faculty of Engineering and Information Technology*

Professor John Baird, BSc PhD ANU

### *Dean, Faculty of Law*

Professor Michael Coper, BA LLB Syd., PhD NSW, Barrister NSW, Barrister & Solicitor ACT

### *Dean, Faculty of Science (interim)*

Professor Don Byrne, BA PhD Adel., FASSA, FAPS

### *Director, School of Art*

Professor David Williams, TACTF Melb., TC DipArt RMIT, Fellow RMIT, MEd LaTrobe

### *Director, School of Music*

Professor Nicolette Fraillon, BMus Melb.

### *Director, The John Curtin School of Medical Research*

Professor Judith Whitworth, AC, DSc MD PhD BS Melb., FRACP

### *Director, Research School of Astronomy and Astrophysics*

Professor John Norris, BSc PhD

### *Director, Research School of Biological Sciences (Interim)*

Professor John Hearn BSc MSc Dub., PhD ANU (to 1/10/2001)

Professor John Gibson, BSc Hons PhD Sheff., MA ScD Camb. (interim, from 1/10/01)

### *Dean, Research School of Chemistry*

Professor Denis Evans, BSc Syd., PhD ANU, FRACI, FAA

### *Director, Research School of Earth Sciences*

Professor Mark Harrison, BA LLB GradDipInternational Law ANU

### *Director, Research School of Information Sciences and Engineering*

Professor Brian Anderson, AO, FRS, FAA, FTSE

### *Director, Research School of Pacific and Asian Studies*

Professor James Fox, AB Harv., BLitt DPhil Oxf., KNAW, FASSA



*Director, Research School of Physical Sciences and Engineering*

Professor Erich Weigold, FAA, FTSE, FAPS, FAIP

*Director, Research School of Social Sciences*

Professor Ian McAllister, BA *CNA*, MSc PhD *Strath.*, FASSA

*Director, Centre for Resource and Environmental Studies*

Professor Robert Wasson, BA Hons *Syd.*, PhD *Macq.*

*Dean, School of Mathematical Sciences*

Professor Alan Carey, BSc *Syd.*, MSc *Adel.*, DPhil *Oxf.*

*Director, Asia Pacific School of Economics and Management*

Professor Ron Duncan, BAgEc MAgEc *UNE*, PhD *ANU*

*Director, Centre for Aboriginal Economic Policy Research*

Professor Jon Altman, BA MA (Hons) *Auck.*, PhD *ANU*

*Director, Centre for Cross Cultural Research*

Professor Howard Morph, BSc MPhil *Lond.*, PhD *ANU*

*Director, Humanities Research Centre*

Professor Iain McCalman BA MA *ANU*, PhD *Monash*, FRHS, FASSA, FAHA

*Director, National Centre for Epidemiology and Population Health*

Dr Anthony McMichael, MB BS PhD, FAFPHM, FRCP, FMedSci

*Director, Centre for Mental Health Research*

Professor Anthony Jorm, BA *Qld.*, GDipComp *Deakin*, MPsychol PhD *NSW*, DSc *ANU*, FASSA

*Director, Centre for Educational Development and Academic Methods*

Dr Linda Hort, BA (Hons) PhD *ANU*, DipEd *Universite de Geneve*, MA *Griffith*

*Dean, The Graduate School*

Dr John Hooper, BA (Hons) *Syd.*, PhD *Oxf.*

*Dean of Students*

Mr Selwyn Harcourt Cornish, BEc *WAust.*

*Director, Scholarly Information Services*

Mr Colin Robert Steele, MA *Liv.*, GradDipLib *Lond.*, ALA, AALIA, KtCrossSpain

*Director, Information Infrastructure Services*

Dr Robin Erskine, BSc PhD *Glas*

*Director, Corporate Information Services*

Mrs Fay Gibbons, BSc *Syd.*, GradDipCompStud *CCAE*

*Director, Scholarly Technology Services*

Dr Brian Molinari, BE *WAust.*, PhD *Camb.*

*Director, Human Resources*

Ms Margaret Nona Ford, BSc *Monash*, GradDipAdmin *CanberraCAE*

*Director, Student Recruitment and International Education*

Mr Timothy Beckett, MA *Dub.*

*Director, Student Administration and Support Services*

Dr Patricia Miller, BSc (Hons), PhD *Manc.*

*Director, Information Technology Services*

Dr Robin Erskine, BSc PhD *Glas*

*Director, Facilities and Services*

Mr Warwick Raymond Williams, BSc *NSW*

*Director, Finance and Business Services*

Mr Alan Raymond Bunsell, BAppSc *CanberraCAE*, FCPA

*Director, Public Affairs Division*

Mr James Scott Mahoney, BA *ANU*, MPRIA

*Director, Planning and Policy Coordination*

Mr Robert Hugh Arthur, BA *ANU*

*Endowment*

Mr Bruno Yvanovich, BSc *Flind.*, MPubAdmin *Canb.*

*Legal Officer*

Mr Stephen Keith Herrick, Barrister & Solicitor (to 1 April 2001)

Mr Kenneth Grime, Barrister & Solicitor (from 2 April 2001)

*Master, University House*

Dr Richard Rafe Champion de Crespigny, BA *Melb & ANU*, MA Oriental Studies PhD *ANU*, FAHA (to 30/09/2001)

Professor John Alan Richards, BE PhD *NSW*, FIREE, FIEAust, FIEEE, FTSE, CPEng (from 1/10/2001)

*Director, Research Services Office*

Dr Ian McMahon, BSc PhD *ANU*

**Officers for Ceremonial Occasions**

*Marshal*

Mr Selwyn Harcourt Cornish, BEc *WAust.*

*Esquire Bedell*

Dr Eliza Ahmed, PhD *ANU*



# Overview of The Australian National University

## Goals and objectives

The Australian National University was established by the Federal Parliament in 1946 specifically to lead the development of the intellectual capacity of the nation through research and research training in line with the best international standards. It is the only Australian university established by a Commonwealth Act of Parliament. In 1960 The Australian National University accepted responsibility for undergraduate education along with an expectation that the highest standards of education would be achieved.

As the specially chartered national University, The Australian National University continues to conduct research at the highest levels of international ranking in all its Research Schools, Faculties and Centres, and offers a unique research-led education to undergraduate and postgraduate students as well as postdoctoral fellows.

The Australian National University therefore advances the national intellectual and creative capacity in three key ways:

- through broad-based research and research-led education in the disciplines fundamental to all knowledge: the humanities, the sciences and the social sciences;
- by supporting research and research-led education in a spectrum of professional disciplines; and
- by studying Australia in its various contexts.

It is the aim of the University to create an inspirational working environment for all staff, students and visitors, thereby achieving its objectives.

In each of its endeavours The Australian National University strives to achieve at the levels of the world's great universities.

## The year in summary

In January 2001, Professor Ian Chubb AO took up the position of Vice-Chancellor of the University following the retirement of Professor Deane Terrell at the end of 2000. Professor Chubb is the 10th Vice-Chancellor of The Australian National University. He was formerly Vice-Chancellor of Flinders University and, in 2001, simultaneously held the position of Chair of the Australian Vice-Chancellors' Committee.

The first task of the Vice-Chancellor was to clarify the primary functions, objectives and strategic goal of The Australian National University. The process of doing so involved extensive consultation with internal and external stakeholders — the University's Council; staff and students; State, Territory and Federal Government; academic peers both nationally and internationally; business and industry; and intending or future students.

The University has two primary functions: research and education. Its primary research objective is to maintain its national leadership in research and sustain its capacity to tackle complex, large-scale fundamental research problems

that require research strength and depth within and between disciplines. Its primary education objective is to become the university of choice for the most able students nationally and internationally, while being attentive to its local role.

As a strategic goal, The Australian National University will consolidate its place within the top rank of the world's research-led universities.

## Governance

A 22-member Council governs the University. It is chaired by the Chancellor, and includes the Pro-Chancellor, the Vice-Chancellor, the chairs of the Research Committee and Education Committee, and the presidents of the undergraduate and postgraduate students' associations. In addition to these ex-officio members, Council also includes four members appointed by the Governor-General, one member of Parliament nominated by the Prime Minister and appointed by the Governor-General, one member of Parliament nominated by the Leader of the Opposition and appointed by the Governor-General, two people appointed by the Chief Minister of the ACT, the head of an academic unit elected by the Deans of The Faculties and Directors of the Research Schools, one member elected by the academic staff of the Institute of Advanced Studies and one member elected by the academic staff of The Faculties, two people elected by Convocation, a member of the general staff of the University elected by the general staff, and one co-opted member.

In June, the Council announced a restructure of University governance. Two new positions were created — Deputy Vice-Chancellor (Research) and Deputy Vice-Chancellor (Education) — with primary responsibility for achieving the research and education objectives articulated above. The positions of Director of the Institute of Advanced Studies and Chair of the Board of The Faculties were discontinued. Professor John Hearn, formerly Director of the Research School of Biological Sciences, took up the position of DVC (Research) in October 2001. Professor Hearn is also Chair of the Australian BioScience Consortium, the Society for Reproductive Biology and the ARC Expert Advisory Committee in Biological Sciences and Biotechnology. The appointment of Professor Malcolm Gillies as DVC (Education) is to start in 2002. Professor Gillies was formerly Pro Vice-Chancellor at Adelaide University and responsible for the faculties of the humanities and social sciences, and the professions. He is also immediate past president of the Australian Academy of the Humanities and the National Academies Forum, the coordinating body of the learned academies.

The University also formed a peak academic body, the Academic Board, which advises the Council on all matters relating to the strategic academic directions of the University. Working directly with the Academic Board are three new committees:

- the Research Committee, whose role is to advise on and implement the research policies of the University;
- the Education Committee, whose role is to advise on and implement the education policies of the University relating to all award and non-award programs of study; and
- the Information Strategy Committee, whose responsibility is to advise on and implement the policies of the University relating to information resources and to the development of the information infrastructure and services that support academic enterprises.

This new governance structure brings together the two traditional halves of the University, the Institute of Advanced Studies and The Faculties, into cohesive academic entities with University-wide strategic responsibilities.

## National Institutes

The Australian National University's complex structure of Research Schools (whose orientation is research and postgraduate research training) and Faculties (whose role includes not only research but undergraduate and postgraduate education) is a legacy of the merging of the University and the Canberra University College in 1960 and, later, with the then Canberra Institute of the Arts (now National Institute of the Arts) in 1992. The Vice-Chancellor's creation of the National Institutes in October brought researchers, lecturers, students and academic visitors into 21 new cross-University structures. Cross-University collaboration and interaction has long been established practice, and the National Institutes will enhance the richness of the University's research and education resources. The new Institutes, listed below, have vigorous programs of collaboration, seminar and lecture series and publishing.

They are:

- National Institute for Asia and the Pacific
- National Institute for Environment
- National Institute for Indigenous Australia
- National Institute of Bioscience
- National Institute of Business and Economics
- National Institute of Government and Law
- National Institute of Health and Human Sciences
- National Institute of Information Sciences and Engineering
- National Institute of Science
- National Institute of Social Sciences
- National Institute of the Arts
- National Institute of the Humanities

## Entry of the IAS into the national competitive grants scheme

The 2000 White Paper, *New Knowledge, New Opportunities*, announced a Government decision to allow the Institute of Advanced Studies, to trade part of its block funding in order to be eligible to compete for national competitive grants. In 2001, the first year in which Institute staff were eligible for national competitive grants funding, caps on the number of applicants and entry price were imposed.

These are scheduled to gradually decrease until 2005, beyond which there will be no further limitations. This is a fundamental change to the environment of Australia's only block-grant funded university research facility and has major implications for the way in which the Institute of Advanced Studies will operate in the future.

## Resources and budget

The Australian National University ended the year in a healthy financial position. There were significant improvements in the financial performance of all budget units, academic and administrative, recurrently and externally funded. An early initiative of the Vice-Chancellor was the freezing of operational debt incurred through restructures by faculties and schools. A new budget formula was devised in 2001, which deemed a percentage of each area's budget to be contestable, and awarded on the previous year's performance outcomes. Academic budget units prepared for the new contestable funding environment through careful planning and attention to creating surpluses for future contingencies.

Up to and including 2001, the University's budget was prepared on a rolling triennial basis. A number of major changes to the budget process were flagged late in 2001 for implementation in 2002. Given the new contestable funding environment, it was critical for the Vice-Chancellor to exercise more direct control of the budget and its allocation.

In 2001, total revenues from ordinary activities were \$479,818 million excluding ANUTECH and \$513,425 million including ANUTECH. Total operating expenses from ordinary activities were \$421,911 million excluding ANUTECH and \$443,625 including ANUTECH. The \$64 million difference between revenues and operating costs reflects non-cash components such as depreciation and accruals, the increase from initial land valuations and funding for capital acquisitions, plant and equipment.

Total University assets have been calculated at about \$1.5 billion with liabilities held against them of \$0.5 billion. The balance is reflected in equity. Cash reserves fell by \$42 million to \$115 million. This fall partially reflected a major capital building program.

## Review of University administration

In August 2001, the Vice-Chancellor commissioned a review of University administration to be conducted by consultants, Professor Ken McKinnon and Ms Sue Walker. The reviewers held extensive consultations with staff and students of the University over a number of months, the brief of the Review being to advise on the adequacy and the balance of distribution of administrative resources, the administrative culture of the University and on whether the administration adequately served the academic enterprise. The Review was also asked to examine the University's system of delegation and advise on whether accountabilities and responsibilities were appropriately structured and exercised, and further to advise on key performance benchmarks for the University's administration.

The McKinnon-Walker Review reported in November. It acknowledged the University's status as an internationally respected University, and commended recent changes to governance (such as the formation of a single Academic Board), which were designed to enhance the University's ability to operate as a single focused entity. The Review's key recommendations relate to the engendering of an enabling administrative culture closely aligned to academic priorities, with a student focus in particular. Implementation of the Review will become the University's chief administrative priority in the year to come.

## Authority and accountability

Arising partly out of the new governance and senior executive structure, but also related to the McKinnon-Walker Review of Administration, the University has begun the process of reviewing the formal academic and administrative authorities of its senior staff. Starting in 2001, a program of review and revision of academic Statutes and Rules was begun. As the heads of the University's academic units, Deans and Directors now have the authority to make academic decisions — such as admission of students — on behalf of their Research School, Faculty or Centre. They are also held more directly accountable for such decisions, in the same way as they are held accountable for all administrative decisions taken in their area of responsibility. The program of revision of delegated legislation and review of administrative delegations is expected to be completed in 2002.

## The University's reputation

The reputation of ANU is determined by its performance and the judgements made by others on its research, teaching and managerial capacity. Another measurement is the willingness of groups and individuals to enter collaborative agreements or partnerships with the University. This year has again seen a very large number of these joint agreements.

The Commonwealth Minister for Health and the ACT Chief Minister announced plans for the establishment of a new Medical School at the ANU. The School's graduate medical program will have a rural and community focus and a problem-based learning approach. Students will be based on the ANU campus, at the Canberra Hospital and other health facilities within Canberra, as well as rural hospitals and GP settings over the four-year course. The first intake of 60 students is expected to be in 2004.

The University is one of the core partners in the National Bid for the Information and Communication Technology (ICT) Centre of Excellence. The consortium's bid was one of four shortlisted for the \$124.8 million centre to be funded by the Federal government under the Backing Australia's Ability innovation statement. The winning bid will be announced in 2002.

The University was awarded 14 Australian Research Council (ARC) Linkage Project Scheme grants for collaborative research projects with industry. The grants were valued at \$2.88 million over three years and include seven

postgraduate PhD scholarships. The ANU is the lead institution in five successful Linkage Infrastructure, Equipment and Facilities Scheme grants valued at \$1.79 million. It is a partner in a further seven successful applications submitted by other Australian universities.

ANU researchers were involved in ARC Strategic Partnerships with Industry — Research and Training partnerships worth \$441,600 in 2001. Partners included State Forests of New South Wales, the NSW Department of Land and Water Conservation, the Chicago Zoological Society and the Water Research Foundation of Australia.

Dr Heather Strang from the Research School of Social Sciences and Professor Lawrence Sherman, from the University of Pennsylvania, won a £2.3 million (\$6.3m) grant from the British Home Office to work with the British police and justice system on evaluating and developing restorative justice techniques.

Professor Richard Arculus from the Department of Geology in the Faculty of Science, together with CSIRO Exploration & Mining on board the National Facility *RV Franklin*, discovered a previously unknown area of ocean-floor volcanic activity to the east of the Vanuatu volcanic chain.

A new Phenomics Facility headed by Professor Chris Goodnow at the John Curtin School of Medical Research won a grant of \$11.5 million from the Federal government to establish a new laboratory. It will build upon and provide wide access to new technology pioneered at ANU for analysing mammalian genes.

The ANU is one of four major University partners in the Smart Internet Technology Cooperative Research Centre. The Department of Computer Science, Faculty of Engineering and Information Technology, is half of the ANU component. Staff have developed a number of advanced algorithms.

The University became the national gateway for video-conferencing broadcasts of learning material from all Australian tertiary and other institutions through a new worldwide network, The Global Development Learning Network, established by the World Bank. The Asia Pacific School of Economics and Management is managing access to the ANU's facility.

The ANU's Centre for Mental Health Research (CMHR) was awarded a \$7.75 million grant from the National Health and Medical Research Council to continue research into common mental health disorders and improve the public's awareness of mental health problems through web sites, books, training courses and the CMHR's mental health first-aid course. During the year the Centre trained more than 1,000 people in the course and published a consumer guide about depression.

The Research School of Social Sciences successfully tendered for the establishment of a \$5 million Social Protection Facility for SouthEast Asia funded by AusAID. The Facility, managed jointly by the ANU and the Institute for Population and Social Research at Mahidol University in Bangkok, will assist developing economies in East Asia to

improve social programs and safety nets through technical assistance and general capacity building measures.

An Australian Centre for Population Research was established and successfully bid for ARC funding of \$105,000 over two years in collaboration with the Department of Immigration and Multicultural Affairs.

The Strategic and Defence Studies Centre in the Research School of Pacific and Asian Studies developed a new Graduate Studies in Strategic and Defence program, a feature of which will be cooperative links with Curtin University of Technology.

Several high profile academic appointments were made during the year. They include new Deans of the Faculties of Arts (Professor Adam Shoemaker), Engineering and Information Technology (Professor John Baird), Science (Professor Tim Brown), the Medical School (Professor Paul Gatenby) and the School of Mathematical Sciences (Professor Alan Carey).

Professor Raghendra Jha, formerly Senior Professor at the Indira Gandhi Institute of Development Research in Bombay, joined the ANU in February 2001 as the Rajiv Gandhi Professor of South Asian Economics in the Australia South Asia Research Centre (ASARC). He also began a five-year term as Executive Director of the centre.

An e-commerce professorship was been created at the ANU. Professor Shirley Gregor has been appointed and brings more than 25 years of industry and academic experience to the new role of Professor of Information Systems in the Faculty of Economics and Commerce. Prof. Gregor will be involved in establishing an e-commerce research centre at the ANU.

Dr Annabelle Bennett, University Pro Chancellor since November 1998, was appointed to her second term.

Dr Linda Hort became the new Director of the Centre for Educational Development and Academic Methods (CEDAM) in October 2001, leaving her position as Head of the School of Marketing and Management at Griffith University.

## 2001 Statistical Highlights

### Students

In 2001, the ANU had 8,425 enrolled undergraduate and postgraduate students, an increase from the previous year.

Postgraduate load represented 28 per cent of the total annual load.

Of the student total, 52 per cent were female — 48 per cent of postgraduates and 53 per cent of undergraduates.

The majority of students studied full-time.

Students from the ACT/Queanbeyan region made up 60 per cent of the total, while 14 per cent were from overseas. At the postgraduate level, the proportion of students from overseas was much higher at 33 per cent.

81 per cent of undergraduate students were under the age of 25, while almost 55 per cent of postgraduates were over 30 years old.

Almost 70 per cent of ANU students paid Higher Education Contribution Scheme (HECS) fees, while a further 22 per cent paid Domestic Tuition Fees or International Student Fees.

ANU offers a variety of combined degrees; in 2001, combined degrees represented 44 per cent of the total bachelor degree enrolment.

The proportion of students in the commencing undergraduate intake who achieved a UAI of 95 or more was 23 per cent (95 per cent achieved 75 or more).

### Staff

The total number of Full-time Equivalent (FTE) staff at the ANU was 3,071, comprising 1,066 academic staff, 1,725 general staff, and 280 casual and part-time teaching staff.

48 per cent of FTEs were located in the Institute of Advanced Studies and Centres with 27 per cent in the National Institute of the Arts and The Faculties. The Central Units, Administration and Trading areas made up the balance.

55 per cent of all staff (including casual and part-time) were on continuing appointments.

The majority of both academic and general staff worked full time.

Females represented 55 per cent of general staff and 29 per cent of academic staff.

Research-only staff made up 53 per cent of the total academic FTEs.

The Student–Staff ratio in The Faculties and the National Institute of the Arts (including part-time teachers) was 13.7.

## Academic and student initiatives

- ANU academic staff and students led the way with new ideas, understandings and innovative teaching practices. Many were recognised by national and international awards:
- John Curtin School of Medical Research Visiting Fellow, Professor Gordon Ada, was selected as a 2001 John's Hopkins University Society of Scholars inductee.
- Three students won prestigious Baudin Scholarships funded by the French Government to live and study in France for a year.
- Joe Coventry, PhD student at the Centre for Sustainable Energy Systems, was awarded the 2001 Sir David Zeidler Travelling Scholarship. The award was presented by the Chief Scientist, Dr Robin Batterham, and was for his work on a solar energy system that produces both electricity and hot water.

- Professor Brian Anderson, Director of the Research School of Information Sciences and Engineering, received the prestigious Education Medal in the Institute of Electrical and Electronics Engineers 2001 International Honours Awards. The medal is presented to the year's most inspiring educator for "outstanding graduate texts of lasting value and far-reaching international influence, and for outstanding leadership in the development of electrical engineering education in Australia".
- PhD student Luke Hendrickson of the Research School of Biological Sciences surveyed ACT region viticulturists. His survey, commissioned by the ACT Government, has major implications for the local wine industry's growing and processing practices.
- In the Faculty of Science's School of Psychology, Kate Hall became the first student to submit a doctoral thesis in the Clinical Psychology program. This is the first professional doctorate to be submitted at The Australian National University.
- Denis Labutin, from the School of Mathematical Sciences was awarded the 2001 J.G. Crawford prize for his PhD thesis, the first time since 1993 that an SMS student won the award.
- The Department of Engineering in the Faculty of Engineering and Information Technology introduced a web-based system to help potential students identify any academic staff in the Faculties and the Institute of Advanced Studies with research expertise and interests relevant to the students' interests.
- Professor Kurt Lambeck, of the Research School of Earth Sciences, won the 2001 Prix International Lemâitre for his work on the Earth's rotation. Professor Lambeck's research has had an impact in several areas including astronomical observations, satellite positioning and theories of evolution of the solar system and the structure of the Earth.
- Humanities Research Centre staff, in collaboration with the Emeritus Faculty and the ACT History Teachers' Association, developed the History Teachers' Summer School (to be held in 2002). The Summer School, utilising the scholarship of HRC visiting fellows and academic staff, was designed to address the crisis in history teaching and reinvigorate the history curriculum, increasing secondary students' participation in the subject.
- Professor Chris Goodnow in the John Curtin School of Medical Research was awarded \$3.3 million for research into molecular analysis of pathways in diabetes from a joint Juvenile Diabetes Research Foundation and National Health and Medical Research Council initiative, as well as a large grant from the Wellcome Trust.
- A book by Dr Tim Bonyhady from the Centre for Cross-Cultural Research won the NSW Premier's Book Award for Australian History, while a second book by another academic from the Centre was short-listed for the Regional and Community History Prize. Dr Bonyhady's winning book challenges the common assumption that white Australians only became interested in protecting

the natural environment in the 1960s and 1970s by arguing that colonists wished to preserve it from as early as 1788.

- Professor Peter Bartlett of the Research School of Physical Sciences and Engineering was the 2001 winner of the Malcolm McIntosh Prize for Achievement in Physical Sciences. The national award was for his work in helping computers learn tasks fundamental to the development of more intelligent computing systems.
- Professor Hilary Charlesworth was winner of the American Society of International Law's annual Certificate of Merit for "outstanding contribution to international law" for her book (co-authored with C. M. Chinkin) *The Boundaries of International Law* (Manchester University Press, 2000).
- The Faculty of Economics and Commerce established the Memorial Neil Vousden Scholarship to commemorate the contribution of Dr Neil Vousden following his premature death in 2000. The scholarship provides financial support for a student in the Master of Economics program.
- The Australian Chemistry Olympiad team, organised by the Department of Chemistry in the Faculty of Science, returned from the 33rd International Chemistry Olympiad at Mumbai, India in July, with four medals: two gold, one silver and one bronze — Australia's best result to date. One student was ranked fifth overall out of 210 students.
- Sydney music student and composer, Nicholas Vines, was awarded the Harvard Club of Australia's 2001 Menzies Scholarship. The Robert Gordon Menzies Scholarship is administered by the ANU. Mr Vines began classes at the Harvard Graduate School of Arts and Sciences in September 2001 and plans to complete a Music PhD specialising in composition.

## Enrolments

The University maintained its first-year undergraduate entrance standards again in 2001, while recording an increase in the number of offers it made to prospective Australian students. ANU made 2,403 offers through the University Admissions Centre, and 200 through the Victorian Tertiary Admissions Centre. At mid-year a further 121 offers of admission were made.

Total student load (including international student load) increased in 2001.

### Summary Total Annual Student Load, 1996–2001

Year	1996	1997	1998	1999	2000	2001
Total-Load	8586.6	8714.7	8318.8	8372.5	8205.0	8425.5

About 1,000 new students attended Pre-Enrolment Advice Day in January, the initiative was introduced in 2000 and is designed to help students make the transition from university offer to enrolment.

New undergraduate courses to be introduced in 2002 include the Bachelor of Photonics, Bachelor of Arts (Social

Work)/ Bachelor of Social Work, Bachelor of Arts (International Relations), Bachelor of e-Commerce and Bachelor of Finance.

## Research performance

The research impact of papers written by ANU academics in 17 major fields ranked in the top 1 per cent of the world, a study by the British newspaper, *The Guardian* revealed. The ANU led the world in research impact of papers in the environmental sciences and was in the top three in mathematics. It joined Harvard, Yale, Stanford, Columbia, MIT, Caltech, Cambridge, Oxford and other major US and British universities in the top rank. Four ANU academics were named as Federation Fellows, each receiving \$1.125 million over five years. They were Professor John Braithwaite, Research School of Social Sciences, for his research on restorative justice and responsive regulation; Professor Mike Dopita, Research School of Astronomy and Astrophysics, for his work on the epoch of galaxy formation; Professor Mandayam Srinivasan, Research School of Biological Sciences, who works on honeybee vision and navigation, and applications to robotics; and Professor Gottfried Otting, who will join the Research School of Chemistry to conduct research on new methods for structural biology in solution.

ANU was also one of the most successful universities in the Australian Research Council (ARC) grants for 2001, with \$24.13 million awarded in new research grants to be paid over the next five years. The number and total value of new grants awarded increased significantly from last year, due in part to one quarter of the staff of the Institute of Advanced Studies' staff being eligible for the full range of ARC project grants for the first time.

A total of 66 Discovery Project Scheme grants, valued at \$19.51 million over five years, were also won by the University. The grants included 25 fellowships comprising three Professorial Research Fellowships, six Australian Research Fellowships/QEII Fellowships, 16 Australian Post-doctoral Research Fellowships and one Discovery Indigenous Researchers' Development Scheme grant worth \$20,000.

There were many research advances during 2001. A small selection includes:

- Publication of the *Oxford Companion to the High Court of Australia* in December 2001. The volume, edited by staff in the Faculty of Law, is a major contribution to public law scholarship in Australia. The project was supported by significant grants (approximately \$275,000) from the ARC and the Centenary of Federation Council.
- The Research School of Chemistry research on the enzymes that prevent mutations in cell division, leading to disease. The School has determined the structure of the 'proofreader' enzyme, contributing to an intense worldwide effort to understand how DNA polymerases work.
- Researchers in the Faculty of Arts' School of Archaeology & Anthropology received ARC large project funding for a five-year period for research into the

anthropology of the contribution of South Asia to the peopling of Australasia.

- A Linkage (formerly known as SPIRT) grant was won by the Faculty of Arts' School of Social Sciences for a three-year Political Science project examining new environmental policy instruments and government-industry strategies in Queensland. The School of Economics in the Faculty of Economics and Commerce is researching whether secret reserve prices in auctions influence auction outcomes. The research is funded in part by an Australian Research Council Large Grant.

- Scientists' work at the Research School of Biological Sciences was reported in *Nature* during 2001. It was discovered that honey bees navigated by measuring distances in terms of optic flow rather than energy expended or any other method. Applied research for the design of robotic vision and navigation systems is developing from this work. Researchers at the John Curtin School of Medical Research (JCSMR) have discovered a mechanism by which the immune system attacks lung growths, providing a basis for a new approach to cancer vaccinations. New technology, patented in 2001 by JCSMR researchers, will allow the development of more effective and safe vaccines using a totally synthetic approach.

- The Research School of Information Sciences and Engineering has been developing visually guided robots operating in a real-time, real-space environment. An autonomous car and an autonomous submersible were employed as demonstrators and rigorous experimental platforms. By 2001, both platforms reached a state of preliminary experiments. The visually guided submarine (KAMBARA) presented at the international conference on intelligent robots and systems resulted in an invitation to present the same paper at a major underwater engineering conference.

- The Department of Physics, Faculty of Science, gave the first demonstration of "spatial squeezing", a technique to beat quantum limits in image resolution; the initial demonstration produced the first Bose Einstein Condensate (a macroscopic quantum state) in Australia, featuring the coldest temperatures in the universe.

## The information environment

The University established a new Division of Information on 1 February 2001, following the report of the Information Policy Working Party that recommended the creation of a unified management and coordination structure for the University's information services. The Division commenced operation with four organisational units headed by Professor Robin Stanton, Pro-Vice-Chancellor (Academic Development and Information Strategy). The four units are:

- Corporate Information Services
- Information Infrastructure Services
- Scholarly Information Services, and
- Scholarly Technology Services.



The Division is responsible for ensuring that the University benefits from an advanced information infrastructure, and for supporting research and education through responsive information and educational technology services.

In 2001, the Division initiated or continued a number of activities.

The Information Literacy Program, offers a broad range of opportunities for staff and students to develop the skills to exploit the many information resources available to them.

Staff and student access to scholarly information resources is enhanced through the Electronic Access Program, the Electronic Pre- and Post-Print Repository, the Australian Digital Theses Program, and the Electronic Reserve Program.

Highly responsive educational technology services are provided through the University's involvement in a Distance Learning Centre associated with the World Bank Global Distance Learning Network and the expansion of the WebCT program of online course development and delivery.

An Information Commons was established, an initiative providing 1,000 open access machines for students lacking a dedicated workspace.

During the year, the Australian Partnership for Advanced Computing was set up with the ANU as leading partner and host institution, providing facilities management services to the APAC National Facility.

The Australian Key Journals project was completed after three years of development and is now available from the ANU databases webpage.

The Division has moved to integrate services and develop, wherever possible, seamless delivery across the four organisational units. Considerable emphasis has been placed on streamlining the provision of information services across the University, focused on the needs of staff and students.

## The physical environment

The \$7.5 million Peter Karmel Building, an extension to the Canberra School of Music, was officially opened by Dr Terry Cutler, Chair of the Australia Council, in October during the National Institute of the Arts jubilee celebrations. The building houses the jazz and percussion departments of the School and the Australian Centre for Art and Technology, and is named after NITA Board Chair and former ANU Vice-Chancellor, Emeritus Professor Peter Karmel.

Construction of a \$6 million Plant Culture Facility in the Research School of Biological Sciences was completed late in the year. The building meets requirements set by the Gene Technology Regulator and Australian Quarantine Service for plant research.

The opening of the \$6.3 million Baldessin Parking Station added 350 car parking spaces to the Acton campus. The multi-storey carpark was aimed at reducing the amount of traffic flowing through campus.

The Chancellor, Professor Peter Baume, opened the W.E.H. Stanner Building in November. The building provides new offices for graduate students and staff of the Centre for Cross-Cultural Research and the Humanities Research Centre. The \$2.5 million project included refurbishment of the adjoining Old Canberra House, which also houses the two centres.

The Vice-Chancellor, Professor Ian Chubb, re-opened the John Curtin School of Medical Research's F Wing after a \$2.6 million refurbishment of the Animal Breeding Establishment.

Projects under construction include the refurbishments of Fenner Hall (\$3.2 million) and University House (\$3 million) and the \$3.5 million construction of Judith Wright Court accommodation facilities.

Several environmental management activities were undertaken during the year, including an environmental risk audit of the Acton and Mt Stromlo campuses, a Green Office audit program including reviews of 18 departments within the University, establishment of recycling stations and liaison with various community groups including Sullivan's Creek Catchment Group, general staff, academic and student groups.

Waste recycling initiatives including adding organic waste to compost production and internal mulching resulted in a 20 per cent improvement on waste totals in 2000.

The University completed a benchmarking survey of environmental management programs in various Australian and New Zealand universities. The results rated the ANU program as the most advanced and potentially most effective (along with University of Newcastle) in the tertiary sector. The results of the survey have been reported in a paper published in the peer-reviewed *International Journal of Sustainability in Higher Education*.

## Outreach to the community

The ANU continued its local, national and international outreach activities during 2001 through a range of events and programs.

At the community level the ANU Public Lecture Series attracted almost 7,000 people to 43 lectures. High-profile speakers included Jose Ramos Horta, The Hon Sir Gerard Brennan, and the Indonesian Foreign Minister, HE Dr Hassan Wirajuda. The *Talking About Books Series* held nine events attracting just over 1,500 people. Authors included Booker Prize winner Margaret Atwood; Scottish crime writer, Ian Rankin; journalist George Negus (event held in conjunction with the Embassy of Italy); and Australian novelists Tim Winton and Bryce Courtenay.

Three *Outlook 2020* events were held in association with the Canberra Business Council. These events, which averaged about 60 participants from business, the public sector and the University, featured academics from ANU commenting on issues facing regional business in the next 20 years.

Artworks and musical performances by students from the ANU's School of Music and School of Art were showcased in Melbourne in August. The "31@20" exhibition by the ANU's School of Art exhibited outstanding work produced over the 20-year history of the School's Gold and Silversmithing Workshop, following its return from a successful tour of Germany, Taiwan, Canberra and Perth.

A new initiative, *Books for Kids*, in collaboration with the ACT Education Department, was launched in September. The project aims to donate books to primary school children in the ACT to promote literacy.

More than 250 primary and secondary school children in the ACT participated in the ANU Chess Festival. The ANU Open, now the second largest chess tournament in Australia, attracted three International Grand Masters in a field of 105 players.

The ANU International Sculpture Park was opened in October 2001. A variety of works will be on display at the park, situated at Acton Peninsula (adjacent to the National Museum of Australia). Two major sculptural works by Australian artist Christine O'Loughlin were in place for the opening. An installation, by Fiona Foley, is located between Old Canberra House and the Cross-Cultural Research Centre's new building.

The University's Drill Hall Gallery hosted 12 exhibitions in 2001 (including an international exhibition from Vanuatu), attended by a total of 12,077 people. A further 18,554 people viewed the Drill Hall Gallery's touring exhibition *Peter Purves Smith* in Western Australia and Victoria.

The University's Graduate Affairs office hosted several interstate and international events throughout the year including receptions in all state capitals and functions in Japan, Singapore and Malaysia.

The Canberra School of Art hosted the first major group exhibition by The Seniwati Gallery of Art by Women Artists of Bali in Australia in September 2001. The show was held in conjunction with the sixth Women in Asia Conference at the ANU and was opened by the Indonesian Ambassador HE Sudjdnan Parnohadiningrat.

A performance in Russia of a composition by Canberra School of Music PhD candidate, Katia Tiutiunnik, was so well received that she was invited to return for a further performance. Ms Tiutiunnik's large-scale string quartet *Night Journey* was performed in December by the Rimsky-Korsakov Quartet in St Petersburg. The event was sponsored by the Australian Embassy in Moscow.

## Conclusion

The University made significant achievements in 2001, building on its national role in research and education and its involvement in the international, national and local community. Its staff are in great demand not just in their professional academic disciplines but as expert advisers and commentators.

The Australian National University is Australia's only nationally chartered university. Like other institutions established by commonwealth statute, it is a national resource, historically and now. It has made fundamental and wide-ranging contributions to the nation since its beginnings in 1946: it has produced government ministers, leaders of national institutions and high-level advisers to national and international government. It has raised Australia's intellectual reputation by producing Nobel Prize winners and leaders in academic disciplines in universities around the world. Its profile in Canberra, the national capital, and in Australia and internationally is significant. The University continues to fulfil its mission as one of the great research universities of the world, and will continue to look to the Federal Government as a source of support to ensure its future success and viability.

The Council, Vice-Chancellor and senior officers of the University look forward to building on and realising the University's potential over the coming years.

# Council and Council Committees

Number of meetings and Members' attendance for the period 1/1/01 to 31/12/01

Dr C Turner 2  
Mr A Jorrey 1

## Council

Number of Meetings: 8

<i>Name of Member</i>	<i>Number of Attendances</i>
The Hon Emeritus Professor P Baume (Chair)	8
Dr A Bennett	7
Professor I Chubb	8
Professor F Jackson (to 1/10/01)	6
Professor J Hearn (from 2/10/01)	2
Professor R Pashley	8
Ms R Ennor	7
Mr M Wasilewicz	8
Ms G Carnegie	4
Ms E Nosworthy	5
Mr I Grigg	6
Dr M Keating	7
Senator B Mason	4
Senator K Carr	3
Justice M Finn	6
Mr M Delaney	7
Ms B Arndt	8
Dr D Solomon	8
Professor A Milner	7
Professor J White	6
Dr M Green	6
Mr K Lonsdale	8
Mr J F Muir	8

## Academic Board

Number of Meetings: 3

<i>Name of Member</i>	<i>Number of Attendances</i>
Professor I Chubb (Chair)	3
Professor J Richards	3
Professor R Pashley	3
Ms R Ennor	2
Mr M Wasilewicz	2
Professor E Weigold	3
Professor R Wasson	3
Professor A Shoemaker	3
Professor R Arculus	3
Professor N Fraillon	3
Professor T Brailsford	3
Ms B Payne	3
Mrs H Karmel	3
Professor G Farquhar	2
Dr A Hyslop	3
Professor P Weeks	3
Professor G Brennan	2
Professor B Kennett	1
Professor J Whitworth	1
Professor J Fox	2
Professor I McCalman	2
Professor D Evans	2
Ms A Cavanagh	3
Dr D Tryon	1
Professor C Easton	1

## Finance Committee

Number of Meetings: 5

<i>Name of Member</i>	<i>Number of Attendances</i>
Mr J F Muir (Chair)	5
Professor I Chubb	4
Professor J Richards	5
Professor R Pashley	5
Professor F Jackson	2
Professor J Hearn	1
Mr C Burgess	4
Ms R Ennor	3
Mr C Rau	2
Mr M Wasilewicz	5
Mr A Bunsell	5
Professor R Stanton	4
Mr K Lonsdale	4
Mr I Grigg	1
Dr M Keating	2
Senator B Mason	1
Senator K Carr	2
Dr A Bennett	3
Mr L Spencer	3
Ms A Terry	1
Ms M Ford	1

## Audit Committee

Number of Meetings: 6

<i>Name of Member</i>	<i>Number of Attendances</i>
Mr L Spencer (Chair)	5
Mr D Lawler (Deputy Chair)	6
Dr M Keating (to 9/3/01)	1
Ms E Nosworthy (from 9/3/01)	3
Dr L Brodribb	6
Mr J F Muir	3

## Honorary Degrees Committee

Number of Meetings: 1

<i>Name of Member</i>	<i>Number of Attendances</i>
The Hon Em Professor P E Baume (Chair)	1
Dr A Bennett	1
Professor I Chubb	1
Professor R Pashley	1
Ms R Ennor	1
Dr J Hooper	1
Dr D Solomon	1
Dr S Von Caemmerer	1
Dr N Peterson	1
Mr J F Muir (as an alternate for Dr Keating)	1
Professor B Kennett	0
Dr M S Keating	0

**Committee on Conditions of Appointment of  
the Vice-Chancellor and Deputy Vice-Chancellor**

Number of Meetings: Committee Members conferred as required throughout 2001 regarding conditions of appointment of the Vice-Chancellor.

*Name of Member*

Professor P Baume (Chair)

Dr A Bennett

Mr J F Muir

**Emergency Appointment (Vice-Chancellor)  
Committee**

Number of Meetings: 0

# University Statistics

<b>STUDENT ENROLMENTS 2001</b>									
LEVEL OF COURSE	FULL-TIME			PART-TIME			ALL		
	F	M	Total	F	M	Total	F	M	Total
<b>POSTGRADUATE</b>									
<b>IAS</b>									
PhD	211	280	490	13	14	27	224	294	517
Master by Research	3	9	12	0	3	3	3	12	15
Master by Coursework	22	20	42	8	7	15	30	27	57
Graduate Diploma	2	0	2	5	1	6	7	1	7
Graduate Certificate	1	0	1	0	0	0	1	0	1
Cross-Institutional	1	0	1	0	0	0	1	0	1
Non-award	6	5	11	0	1	1	6	6	12
<b>Total IAS</b>	<b>245</b>	<b>314</b>	<b>559</b>	<b>26</b>	<b>26</b>	<b>52</b>	<b>271</b>	<b>340</b>	<b>611</b>
<b>CENTRES</b>									
PhD	37	41	78	9	9	18	45	50	95
Master by Research	0	1	1	2	0	2	2	1	3
Master by Coursework	101	170	271	56	78	134	157	249	405
Graduate Diploma	34	33	67	19	38	57	53	71	124
Graduate Certificate	1	5	6	3	1	4	4	6	10
Non-award	16	17	33	3	0	3	19	17	36
<b>Total Centres</b>	<b>189</b>	<b>267</b>	<b>456</b>	<b>91</b>	<b>126</b>	<b>218</b>	<b>281</b>	<b>393</b>	<b>674</b>
<b>FACULTIES</b>									
PhD	210	230	440	51	52	103	261	282	542
Master by Research	22	20	42	12	15	27	34	35	69
Master by Coursework	82	62	143	83	74	157	165	136	301
Graduate Diploma	170	134	304	84	58	142	254	193	447
Graduate Certificate	2	1	3	3	4	7	5	5	10
Non-award	5	11	16	6	14	20	11	25	36
<b>Total Faculties</b>	<b>490</b>	<b>458</b>	<b>948</b>	<b>239</b>	<b>218</b>	<b>456</b>	<b>729</b>	<b>675</b>	<b>1405</b>
<b>ALL AREAS</b>									
PhD	458	550	1008	72	75	147	530	625	1155
Master by Research	25	30	55	14	18	32	39	48	87
Master by Coursework	204	252	456	147	160	307	351	412	763
Graduate Diploma	206	167	373	108	97	205	314	264	578
Graduate Certificate	4	6	10	6	5	11	10	11	21
Cross-Institutional	1	0	1	0	0	0	1	0	1
Non-award	27	33	60	9	15	24	36	48	84
<b>Total Postgraduate</b>	<b>925</b>	<b>1038</b>	<b>1963</b>	<b>356</b>	<b>370</b>	<b>726</b>	<b>1281</b>	<b>1408</b>	<b>2689</b>
<b>UNDERGRADUATE</b>									
<b>CENTRES</b>									
Bachelor	3	3	6	1	0	1	5	3	7
Cross-Institutional	8	6	13	2	1	3	10	7	16
<b>Centres Total</b>	<b>11</b>	<b>8</b>	<b>19</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>14</b>	<b>9</b>	<b>24</b>
<b>FACULTIES</b>									
Bachelor	3122	2797	5919	507	414	921	3628	3211	6840
Diploma	9	8	17	26	20	46	35	28	63
Assoc Diploma	0	0	0	0	1	1	0	1	1
Cross-Institutional	25	12	38	76	25	101	101	37	139
Non-award	0	0	0	22	17	39	22	17	39
<b>The Faculties Total</b>	<b>3156</b>	<b>2818</b>	<b>5974</b>	<b>631</b>	<b>477</b>	<b>1108</b>	<b>3787</b>	<b>3295</b>	<b>7081</b>
<b>ALL AREAS</b>									

Bachelor	3125	2800	5925	508	414	922	3633	3214	6847
Diploma	9	8	17	26	20	46	35	28	63
Assoc Diploma	0	0	0	0	1	1	0	1	1
Cross-Institutional	33	18	51	78	26	104	111	44	155
Non-award	0	0	0	22	17	39	22	17	39
<b>Undergraduate Total</b>	<b>3167</b>	<b>2826</b>	<b>5993</b>	<b>634</b>	<b>478</b>	<b>1112</b>	<b>3801</b>	<b>3304</b>	<b>7105</b>
<b>ANU NET TOTAL</b>	<b>4092</b>	<b>3864</b>	<b>7956</b>	<b>990</b>	<b>848</b>	<b>1838</b>	<b>5082</b>	<b>4712</b>	<b>9794</b>

F = Female M = Male

Note: 'Net Total' excludes double counting of students in multiple programs.

<b>DEGREE AND DIPLOMA PROGRAM COMPLETIONS 2000</b>										
ACADEMIC AREA	POSTGRADUATE						UNDERGRADUATE			ALL STUDENTS
	PhD	M(R)	M(C)	Grad Dip	Grad Cert	Total	Bach	Dip	Total	
IAS										
CRES	4	..	..	..	..	4	..	..	..	4
JCSMR	12	..	..	..	..	12	..	..	..	12
RSAA	3	..	..	..	..	3	..	..	..	3
RSBS	8	..	..	..	..	8	..	..	..	8
RSC	10	..	..	..	..	10	..	..	..	10
RSES	8	..	..	..	..	8	..	..	..	8
RSISE	9	1	..	..	..	10	..	..	..	10
RSPAS	41	1	15	3	..	60	..	..	..	60
RSPHYSSE	12	1	..	..	..	13	..	..	..	13
RSSS	21	1	13	..	3	38	..	..	..	38
<b>Total IAS</b>	<b>128</b>	<b>4</b>	<b>28</b>	<b>3</b>	<b>3</b>	<b>166</b>	..	..	..	<b>166</b>
<b>CENTRES</b>										
APSEM	10	..	126	54	17	207	..	..	..	207
NCEPH	7	..	14	7	..	28	..	..	..	28
SMS	6	..	..	..	..	6	..	..	..	6
<b>Total Centres</b>	<b>23</b>	..	<b>140</b>	<b>61</b>	<b>17</b>	<b>241</b>	..	..	..	<b>241</b>
<b>THE FACULTIES</b>										
Faculties										
Arts	26	7	22	30	2	87	421	5	426	513
Asian Studies	6	..	9	7	..	22	93	..	93	115
Economics & Commerce	3	3	7	14	2	29	313	..	313	342
Engineering & IT	7	4	..	..	..	11	137	..	137	148
Law	2	3	33	235	1	274	205	..	205	479
Science	33	3	15	27	..	78	325	..	325	403
NITA	..	10	21	12	2	45	109	14	123	168
<b>Total Faculties and NITA</b>	<b>77</b>	<b>20</b>	<b>86</b>	<b>313</b>	<b>5</b>	<b>501</b>	<b>1494</b>	<b>5</b>	<b>1499</b>	<b>2000</b>
<b>ANU TOTAL</b>	<b>228</b>	<b>34</b>	<b>275</b>	<b>389</b>	<b>27</b>	<b>953</b>	<b>1603</b>	<b>19</b>	<b>1622</b>	<b>2575</b>

<b>UNDERGRADUATE STUDENT ENROLMENTS 2001</b>									
COURSE	FULL-TIME			PART-TIME			ALL		TOTAL
	F	M	Total	F	M	Total	F	M	
<b>BACHELOR - SINGLE DEGREES</b>									
Arts	414	214	628	202	86	288	616	300	916
Art History and Curatorship	30	3	33	9	2	11	39	5	44
Australian Studies	3	1	4	..	..	..	3	1	4
Development Studies	16	4	20	4	3	7	20	7	27
European Studies	8	2	10	2	1	3	10	3	13
Policy Studies	4	5	9	5	2	7	9	7	16
Asian Studies	48	28	76	9	12	21	57	40	97
Asian Studies (Specialist)	41	17	58	6	..	6	47	17	64
Actuarial Studies	25	34	59	2	1	3	27	35	62
Commerce	139	147	286	26	38	64	165	185	350
Economics	17	29	46	6	14	20	23	43	66
Engineering	8	67	75	..	4	4	8	71	79
Engineering Software	16	108	124	1	..	1	17	108	125
Information Technology	23	132	155	..	8	8	23	140	163
IT Information Systems	5	8	13	1	4	5	6	12	18
IT Software Engineering	3	18	21	..	15	15	3	33	36
Law	23	16	39	6	1	7	29	17	46
Law (Graduate)	46	39	85	22	29	51	68	68	136
Science	237	253	490	56	52	108	293	305	598
Biotechnology	5	6	11	..	..	..	5	6	11
Computational Science	2	2	4	..	..	..	2	2	4
Forestry	14	37	51	..	1	1	14	38	52
Medical Science	31	15	46	1	1	2	32	16	48
Psychology	114	45	159	19	4	23	133	49	182
Resource Management & ES	55	35	90	8	12	20	63	47	110
Scientific Communication	2	2	4	..	..	..	2	2	4
ACAT	3	13	16	..	..	..	3	13	16
ITA Music	88	107	195	6	3	9	94	110	204
ITA Visual Arts	221	79	300	9	4	13	230	83	313
<b>Single Degrees Total</b>	<b>1641</b>	<b>1466</b>	<b>3107</b>	<b>400</b>	<b>297</b>	<b>697</b>	<b>2041</b>	<b>1763</b>	<b>3804</b>
<b>BACHELOR — COMBINED DEGREES</b>									
Actuarial Studies/Commerce	42	48	90	2	..	2	44	48	92
Actuarial Studies/Economics	13	18	31	..	..	..	13	18	31
Actuarial Studies/Law	9	8	17	..	..	..	9	8	17
Arts/Asian Studies (Sp)	59	25	84	2	..	2	61	25	86
Arts/Commerce	44	43	87	6	5	11	50	48	98
Arts/Economics	28	38	66	3	5	8	31	43	74
Arts/Forestry	..	3	3	..	1	1	..	4	4
Arts/Law	353	175	528	17	13	30	370	188	558
Arts/Psychology	56	22	78	1	3	4	57	25	82
Arts/Science	155	97	252	24	13	37	179	110	289
Arts/Visual Arts	21	3	24	..	..	..	21	3	24
Asian Studies (Sp)/Commerce	28	10	38	2	..	2	30	10	40
Asian Studies (Sp)/Economics	14	10	24	2	..	2	16	10	26
Asian Studies (Sp)/Law	46	20	66	2	..	2	48	20	68
Asian Studies (Sp)/Science	14	11	25	..	1	1	14	12	26
Asian Studies (Sp)/Visual Arts	3	..	3	2	..	2	5	..	5
Asian Studies/Arts	44	15	59	5	1	6	49	16	65
Asian Studies/Commerce	21	17	38	1	2	3	22	19	41
Asian Studies/Economics	9	5	14	..	..	..	9	5	14

Asian Studies/Engineering	1	2	3	1	..	1	2	2	4
Asian Studies/Forestry	1	..	1	..	..	..	1	..	1
Asian Studies/Law	30	7	37	4	1	5	34	8	42
Asian Studies/Science	16	7	23	3	2	5	19	9	28
Asian Studies/Visual Arts	1	..	1	..	..	..	1	..	1
Commerce/Economics	68	107	175	7	18	25	75	125	200
Commerce/Engineering	2	22	24	2	3	5	4	25	29
Commerce/Forestry	..	3	3	..	..	..	..	3	3
Commerce/IT	68	155	223	5	12	17	73	167	240
Commerce/Law	70	87	157	..	2	2	70	89	159
Commerce/Psychology	15	11	26	..	..	..	15	11	26
Economics/IT	7	34	41	2	1	3	9	35	44
Economics/Law	33	47	80	..	8	8	33	55	88
Economics/Science	..	1	1	..	..	..	..	1	1
Engineering/Arts	1	2	3	..	..	..	1	2	3
Engineering/Economics	6	7	13	..	1	1	6	8	14
Engineering/IT	12	88	100	..	10	10	12	98	110
Engineering/Science	16	61	77	3	5	8	19	66	85
Forestry/Economics	2	4	6	..	1	1	2	5	7
IT/Forestry	1	1	2	..	..	..	1	1	2
Psychology/Science	14	6	20	2	..	2	16	6	22
Science/Commerce	37	24	61	4	..	4	41	24	65
Science/Economics	13	24	37	2	5	7	15	29	44
Science/Forestry	7	8	15	..	1	1	7	9	16
Science/Law	102	57	159	4	3	7	106	60	166
Visual Art/Forestry	2	1	3	..	..	..	2	1	3
<b>Combined Degrees Total</b>	<b>1484</b>	<b>1334</b>	<b>2818</b>	<b>108</b>	<b>117</b>	<b>225</b>	<b>1592</b>	<b>1451</b>	<b>3043</b>
<b>BACHELOR TOTAL</b>	<b>3125</b>	<b>2800</b>	<b>5925</b>	<b>508</b>	<b>414</b>	<b>922</b>	<b>3633</b>	<b>3214</b>	<b>6847</b>
<b>DIPLOMA &amp; NON-AWARD</b>									
Arts	..	..	..	5	3	8	5	3	8
Art History and Curatorship	..	..	..	1	..	1	1	..	1
Classic Studies	..	..	..	1	1	2	1	1	2
European Languages	..	..	..	3	1	4	3	1	4
History	..	..	..	1	..	1	1	..	1
Philosophy	..	..	..	..	3	3	..	3	3
Sociology	..	..	..	1	1	2	1	1	2
Asian Studies	1	..	1	5	8	13	6	8	14
Visual Arts	8	8	16	9	3	12	17	11	28
Non-Award & Cross-Inst'l	33	18	51	100	43	143	133	61	194
<b>Total</b>	<b>42</b>	<b>26</b>	<b>68</b>	<b>126</b>	<b>63</b>	<b>189</b>	<b>168</b>	<b>89</b>	<b>257</b>
<b>UNDERGRADUATE TOTAL</b>	<b>3167</b>	<b>2826</b>	<b>5993</b>	<b>634</b>	<b>477</b>	<b>1111</b>	<b>3801</b>	<b>3303</b>	<b>7104</b>

F = Female M = Male

Note: All enrolment tables relate to sole or major course enrolments only.



<b>HOME REGION OF OVERSEAS STUDENTS 2001</b>										
COUNTRY	POSTGRADUATE						UNDERGRADUATE			ALL OVERSEAS
	PhD	M(Res)	M(Cwk)	GradDip	Other	Total	Bachelor	Other	Total	
<b>Asia</b>										
China	22	2	158	3	1	186	47	1	48	234
Hong Kong	3	..	3	2	..	8	34	..	34	42
Macau	..	..	..	..	..	..	2	..	2	2
Mongolia	..	..	1	3	..	4	..	..	..	4
Taiwan	3	..	3	1	..	7	23	1	24	31
Japan	32	2	11	4	3	52	14	2	16	68
Korea (North)	..	..	1	..	5	6	..	..	..	6
Korea (South)	8	1	10	3	..	22	10	2	12	34
Burma (Myanmar)	..	..	2	2	1	5	4	..	4	9
Cambodia	1	..	2	5	9	17	1	..	1	18
Laos	2	..	3	4	1	10	3	..	3	13
Thailand	10	2	12	2	2	28	23	..	23	51
Viet Nam	7	..	7	7	5	26	14	..	14	40
East Timor	..	..	1	..	..	1	..	..	..	1
Indonesia	22	1	21	8	15	67	21	..	21	88
Malaysia	5	2	6	..	..	13	65	1	66	79
Philippines	6	..	27	16	..	49	1	..	1	50
Singapore	4	1	15	..	..	20	109	..	109	129
Georgia	3	..	..	..	..	3	..	..	..	3
Kazakhstan	1	..	..	1	..	2	..	..	..	2
Tajikistan	..	..	1	1	..	2	..	..	..	2
Turkmenistan	1	..	..	1	..	2	..	..	..	2
Bangladesh	3	..	9	6	5	23	5	..	5	28
Bhutan	..	..	3	7	2	12	..	..	..	12
India	6	2	4	..	1	13	14	..	14	27
Maldives	1	..	..	1	..	2	2	..	2	4
Nepal	..	..	7	5	..	12	2	..	2	14
Pakistan	3	..	1	3	..	7	..	1	1	8
Sri Lanka	1	..	1	1	1	4	6	..	6	10
<b>Asia Total</b>	<b>144</b>	<b>13</b>	<b>309</b>	<b>86</b>	<b>51</b>	<b>603</b>	<b>400</b>	<b>8</b>	<b>408</b>	<b>1011</b>
<b>Europe</b>										
Ireland	1	..	..	..	..	1	1	..	1	2
Denmark	1	..	..	..	1	2	..	..	..	2
Norway	1	..	1	..	..	2	1	..	1	3
Sweden	1	..	..	..	..	1	1	..	1	2
England	20	1	4	1	..	26	3	..	3	29
Scotland	1	..	..	..	..	1	..	..	..	1
Belgium	..	..	..	1	..	1	..	..	..	1
France	2	..	1	..	..	3	3	..	3	6
Germany	22	..	..	..	..	22	2	1	3	25
Netherlands	6	..	..	..	..	6	1	..	1	7
Switzerland	1	..	1	..	..	2	1	..	1	3
Lithuania	1	..	..	..	..	1	..	..	..	1
Russian Fed	8	..	2	1	..	11	1	..	1	12
Slovakia	..	..	..	..	..	..	1	..	1	1
Ukraine	1	..	..	..	..	1	..	..	..	1
Bulgaria	1	..	..	..	..	1	..	..	..	1
Cyprus	1	..	..	..	..	1	..	..	..	1
Greece	..	..	..	..	..	..	1	..	1	1
Romania	4	..	..	..	..	4	..	..	..	4

Yugoslavia	1	..	..	..	..	1	..	..	..	1
Italy	8	..	..	..	..	8	1	..	1	9
Portugal	..	..	..	..	..	..	1	..	1	1
Spain	..	..	1	1	..	2	..	..	..	2
<b>Europe Total</b>	<b>81</b>	<b>1</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>97</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>116</b>
<b>The Americas</b>										
Caribbean	1	..	..	..	..	1	1	..	1	2
Central America	2	..	..	1	1	4	..	..	..	4
Canada	6	..	5	..	2	13	1	..	1	14
USA	12	1	13	4	1	31	10	28	38	69
Argentina	..	..	..	..	..	..	1	..	1	1
Brazil	4	..	..	..	..	4	..	..	..	4
Colombia	..	..	..	2	..	2	2	..	2	4
Ecuador	..	..	..	..	..	..	2	..	2	2
Peru	..	..	1	..	..	1	1	..	1	2
Venezuela	..	..	..	1	..	1	..	..	..	1
Other S America	..	..	1	..	..	1	..	..	..	1
<b>Americas Total</b>	<b>25</b>	<b>1</b>	<b>20</b>	<b>8</b>	<b>4</b>	<b>58</b>	<b>18</b>	<b>28</b>	<b>46</b>	<b>104</b>
<b>Oceania</b>										
New Zealand	66	..	1	3	1	71	12	..	12	83
New Caledonia	..	..	..	..	..	..	1	..	1	1
PNG	4	..	6	5	5	20	6	1	7	27
Solomon Is	1	..	1	..	..	2	..	..	..	2
Vanuatu	..	..	3	..	..	3	..	..	..	3
Fiji	4	..	..	1	..	5	5	..	5	10
Other Oceania	1	..	3	..	..	4	1	..	1	5
<b>Oceania Total</b>	<b>76</b>	<b>..</b>	<b>14</b>	<b>9</b>	<b>6</b>	<b>105</b>	<b>25</b>	<b>1</b>	<b>26</b>	<b>131</b>
<b>North Africa and the Middle East</b>										
Bahrain	..	..	..	..	1	1	..	..	..	1
Iran	2	..	..	..	..	2	1	..	1	3
Lebanon	..	..	1	..	..	1	..	..	..	1
Saudi Arabia	1	..	..	1	..	2	..	..	..	2
Turkey	..	..	..	..	..	..	1	..	1	1
UAE	2	..	..	..	..	2	1	..	1	3
Other	..	..	..	..	..	..	1	..	1	1
<b>N. Afr and M. East Total</b>	<b>5</b>	<b>..</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>4</b>	<b>..</b>	<b>4</b>	<b>12</b>
<b>Africa</b>										
Ghana	1	..	..	..	..	1	..	..	..	1
Nigeria	..	..	..	..	..	..	1	..	1	1
Sierra Leone	..	..	..	..	..	..	2	..	2	2
Botswana	1	..	..	..	..	1	4	..	4	5
Ethiopia	..	..	1	..	..	1	..	..	..	1
Kenya	..	..	3	..	..	3	5	..	5	8
Lesotho	..	..	..	..	1	1	..	..	..	1
Malawi	..	..	..	..	1	1	..	..	..	1
Mauritius	..	..	..	..	..	..	4	..	4	4
Mozambique	1	..	1	2	..	4	1	..	1	5
Namibia	..	..	..	..	..	..	1	..	1	1
South Africa	2	..	..	..	..	2	..	..	..	2
Zambia	..	..	2	..	..	2	..	..	..	2
Zimbabwe	..	..	..	..	1	1	..	..	..	1
<b>Africa Total</b>	<b>5</b>	<b>..</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>18</b>	<b>..</b>	<b>18</b>	<b>35</b>
<b>OVERSEAS TOTAL</b>	<b>336</b>	<b>15</b>	<b>361</b>	<b>110</b>	<b>66</b>	<b>888</b>	<b>483</b>	<b>38</b>	<b>521</b>	<b>1409</b>

Note: The country classification used here is based on the standard DEST classification list

# Cooperation with Government and other institutions

The Australian National University encourages members of the academic staff to give specialist advice and assistance to Federal and State Government departments and to other public institutions, both within Australia and internationally. This help takes many forms — consultancies, membership of committees, involvement in particular projects, secondments, etc. The following list records such cooperation for 2001. This is not necessarily comprehensive.

## Institute of Advanced Studies

### Research School of Astronomy and Astrophysics

BESSELL, Prof. M., immediate past president, Astronomical Society of Australia; member, SOC IAU Commission 26 Photometry.

BICKNELL, Dr G., member, Scientific Organising Committee, Workshop on AGN Variability, Sydney; member, Scientific Organising Committee, Workshop on GPS and CSS sources, Greece.

COLLESS, Dr M., chair, Anglo-Australian Observatory Users' Committee; member, Australian Gemini Science Advisory Committee; chair, 6dF Science Advisory Group; chair, Mid-Term Review Working Group, National Committee for Astronomy; member, National Committee for Astronomy of the Australian Academy of Science.

Da COSTA, Dr G., immediate-past president and member Organising Committee, IAU Commission 37 (Star Clusters and Associations); member, Organising Committee, IAU Division VII (Galactic System); chair, Australian Gemini Steering Committee and member, Board of the International Gemini Project; member, Australian Gemini Science Advisory Committee; member, Australian Astronomy Board of Management; member, Anglo-Australian Observatory Users Committee; member, Scientific Organizing Committee, "Extragalactic Star Clusters", IAU Symposium 207, Pucón, Chile; member, Scientific Organizing Committee and chair, Local Organising Committee, "The Dynamics, Structure and History of Galaxies", Dunk Island.

DOPITA, Prof M., co-chair, Scientific Organising Committee, IAU Symposium #209, Planetary Nebulae: Their Role in the Universe, Canberra; member, Program Committee for SPIE Meeting AS21: *Future EUV-UV Visible Space Astrophysics Missions & Instrumentation*; member, The Inter-Academies Panel; member, Australian Academy of Sciences Sectional Committee 2, Physics & Astronomy; member, Special Nominating Committee, International Astronomical Union; mem-

ber, World Space Observatory Implementation Committee (WIC); member, NASA Science Oversight Committee for the Wide Field Camera 3, Hubble Space Telescope; member, Visiting Committee of the Capodimonte Observatory; member, Advisory Board of the Centre for Stellar and Planetary Astrophysics, Monash University; member, Board of Editors, *Astrophysics and Space Science*; member, Editorial Advisory Board, Publications of the Astronomical Society of Australia.

FRANCIS, Dr P., member, Australian Telescope Allocation Committee (ATAC); member, Education Subcommittee of the Astronomical Society of Australia.

FREEMAN, Prof. K., member, Parkes Multibeam Working Group, Australia Telescope National Facility; past president, International Astronomical Union (IAU) Division VII and IAU Commission 33 (Structure and Dynamics of the Galactic System); receiving editor, *New Astronomy* (Elsevier); member, Scientific Organising Committee, Haro Workshop and Conference "Disks of Galaxies", Puebla, Mexico; member, Anglo Australian Telescope Board; chair, La Palma Observatory Visiting Committee; member, NOVA (Netherlands Research School for Astronomy) International Advisory Board.

FUX, Dr R., member, IAU Commission 33, Structure & Dynamics of the Galactic System.

JACKSON, Dr C., member, Australia Telescope Users' committee; member, International Science Advisory Group for the SKA; member, Australian Science Working Group for the SKA; member, LOC IAU 209 & 4th Stromlo Symposium, Planetary Nebulae; member, SOC Next Generation Astronomical Surveys workshop, University of Sydney.

JERJEN, Dr H., coordinator, Monash University observing course.

KALNAJS, Dr A., member, Organising Committee, IAU Commission 33 "Structure and Dynamics of the Galactic System".

McGREGOR, Dr P., member, Local Organising Committee, "Planetary Nebulae: Their Role in the Universe, IAU Symposium 209", Canberra; member, MNRF Planning Committee.

MOULD, Prof. J., chair, Anglo-Australian Telescope Board; chair, Visiting Committee of the European Southern Observatory.

NORRIS, Prof. J., member, National Committee for Astronomy; member, Australian Astronomy Board of Management; member representative, Assoc. of Universities for Research in Astronomy.

SCHMIDT, Dr B., member, Australian Time Assignment Committee; member, Square Kilometre Array Steering Committee; Councillor, Astronomical Society of Australia; representative, International Time Allocation Committee, Gemini.

SUTHERLAND, Dr R., Local Organising Committee, IAU Symposium #209, Planetary Nebulae: Their Role in the Universe, Canberra.

WOOD, Dr P., member, LOC, IAU Symposium 209 "Planetary Nebulae"; member, SOC, IAU Symposium 209 "Planetary Nebulae"; member, SOC, conference on "Mass-losing Pulsating Stars and their Circumstellar Matter".

## **Research School of Biological Sciences**

### **Comparative Genomics Group**

GRAVES, J.A.M., grant refereeing for Australian Research Council, National Health and Medical Research Council, Anti-Cancer Council, Wellcome (UK), National Institutes of Health (USA).

### **Developmental Neurobiology and Endocrinology Group**

HEARN, J.P., scientific adviser, Parliamentary Committee on Legal and Constitutional Affairs, Inquiry into Cloning; chair, Australian Research Council Expert Advisory Committee in Biological Sciences and Biotechnology; deputy director, Pest Animal Control CRC; member, Board of Greenhouse Accounting CRC; Honorary Research Fellow, CSIRO, Wildlife and Ecology, Gunghalin; member, Asia and Pacific Regional Panel for Research in Reproductive Health, WHO; member, Council, Center for Research Resources, National Institutes for Health, Washington; chair, Australian Society for Reproductive Biology; member, Board, ANUTECH; member, Board, Australian Centre for Intellectual Property in Agriculture; member, Biotechnology Consultative Group, Department of Industry Science and Resources.

MARK, R.F., referee for ARC Reader position.

### **Ecosystem Dynamics Group**

BALL, M.C., member, Planning Committees for the 12th International Photosynthesis Congress held in Brisbane, and for COMBIO 2001 held in Canberra.

GILMORE, A.M., member, Planning Committee for the 12th International Photosynthesis Congress held in Brisbane; organiser, LS2001 Satellite Meeting on Light Stress and Photosynthesis: UV and Visible Light Effects, Heron Island.

NOBLE, I.R., CEO of the Cooperative Research Centre (CRC) for Greenhouse Accounting; chair, Scientific Steering Committee, Global Change and Terrestrial Ecosystems (GCTE); Scientific Committee, Interna-

tional Geosphere Biosphere Program (IGBP; Scientific Steering Committee, Global Analysis, Interpretation and Modelling (GAIM); lead author in the Third Intergovernmental Panel on Climate Change (IPCC) Assessment Report; Core Writing team of the IPCC Synthesis Report; and IPCC Special Report on Biodiversity; Working Group Chair for the Millennium Assessment project on The Condition and Trends of Earth's Systems; member, Global Change Advisory Committee to the Minister for the Environment, National Carbon Accounting System Advisory Board and adviser to Environment Australia on aspects of global change and preparing the National Greenhouse Gas Inventory.

RODERICK, M., member, Advisory Committee to Australian Greenhouse Office on Satellite Remote Sensing of Land Cover Change.

ROXBURGH, S. and NOBLE I.R., expert adviser, draft proposal by the NSW Department of Energy on the use of forests to sequester carbon for offsetting emissions.

### **Environmental Biology Group**

EVANS, J.R., The Green Machine ANU/CSIRO Science Education Centre — ANU representative for the Board of Management; leader, CRC for Greenhouse Accounting Program on Projecting Changes in the Carbon cycle.

FARQUHAR, G.D., Inter-Governmental Panel on Climate Change Third Assessment Report (IPCC); National Carbon Accounting System — High Level Steering Committee. Federation of Australian Scientific and Technological Societies 'Science meets Parliament' participant.

MASLE, J., Australian Academy of Science — French Australian Scientific Exchange, expert referee.

### **Genomic Interactions Group**

DJORDJEVIC, M.A., grant reviewer for the US Department of Agriculture, Human Frontiers, Australian Research Council and the US-Israel exchange BARD.

ROLFE, B.G., grant reviewer for the US Science Foundation, US Department of Agriculture, Australian research Grants Committee; member, boards and review panels of the International Congress on Nitrogen Fixation, the International Symposium on the Molecular Plant-Microbe Interactions and the European Nitrogen Fixation Biennial Conference.

ROLFE, B.G. and WEINMAN, J., participants, CRC for Sustainable Rice Production program studying rice microspore development and tolerance to cold temperatures.

### **Molecular Genetics and Evolution Group**

BALL, E., refereed three grants for the Australian Research Council; refereed two confirmations/promotions for University of Queensland; organised two day-long RSBS contributions to the National Youth Science Forum; organised the Developmental Biology stream of symposia for ComBio 2001 Conference, Canberra.

### **Molecular Plant Physiology Group**

ANDREWS, T.J., reviewed grant applications for the Australian Research Council; discussions with CSIRO Telecommunications and Industrial Physics on the topic of artificial photosynthesis.

BADGER, M.R., reviewed grant applications for the Australian Research Council.

PRICE, G.D. and BADGER, M.R., key organisers, Fourth International Symposium on Inorganic Carbon Utilisation by Aquatic Photosynthetic Organisms (Fourth International Aquatic CCM Conference) Novotel Palm Cove, Queensland.

WHITNEY, S., represented RSBS as an explainer at the Australian Science Festival.

### **Photobioenergetics Group**

AHRLING, K., referee for grant application, Energy Biosciences Program (USA); member, ACT Board of Secondary Studies, Chemistry Panel.

AHRLING, K., CHOW, W.S. and WYDRZYNSKI, T., co-organisers, Satellite Conference (from 12th International Congress on Photosynthesis) on Electron Transfer Processes in Oxygenic Photosynthesis, Stradbroke Island, Qld.

ANDERSON, J.M., House Committee, Sectional Committee 6 and Lemberg Committee (Chair) of the Australian Academy of Science; referee for grant applications for ANU; Australian Research Grants Commission; National Science Foundation (USA); DOE (USA); CCA (Canada); Royal Society.

### **Plant Cell Biology Group**

CLEARY, A.L., explainer at the ANU's Australian Science Festival display.

GUNNING, B.E.S., member, Government Department of Industry, Science and Research Committee for the International Conference Support Scheme, representing the Australian Academy of Science.

HARDHAM, A.R., member, CRC for Tropical Plant Protection Executive Committee; member, CRC for Tropical Plant Protection Governing Board; member, National Committee for Plant Science, Australian Academy of Science; member, Sectional Committee 6, Plant and Microbial Sciences, Australian Academy of Science.

HARDHAM, A.R. and JONES, D., two projects within the CRC for Tropical Plant Protection portfolio.

JOHN, P.C.L., supervisor, CSIRO Student Research Scheme.

JONES, D.A., reader, Australian Research Council; organiser and chair for the Plant Disease Resistance Symposium at ComBio 2001 Canberra; supervisor, CSIRO Student Research Scheme.

WASTENEYS, G.O., referee for grant applications for Netherlands Organisation for Scientific Research (NSF); co-designer of ANU display at the Australian Science Festival.

### **Visual Sciences Group**

SRINIVASAN, M.V., grant reviewer for Australian Research Council, Australian-German Joint Research Cooperation Scheme; co-organiser, international conference on "The Art of Seeing and the Seeing of Art", Canberra.

### **Research School of Chemistry**

Prof. M.G. BANWELL, consultant, Fine Chemicals Program of CSIRO Molecular Science, Melbourne; consultant, Genencor International Inc, Palo Alto; consultant, Biota Holdings Ltd, Melbourne; member, editorial boards, *Australian Journal of Chemistry*, *Indian Journal of Chemistry (Section B)*, *Journal of the Chemical Society, Perkin 1*, *New Journal of Chemistry*, *Synlett*; associate editor, *Methods in Organic Synthesis*; member, advisory board, Special Centre for Green Chemistry, Monash University; assessor/reader, ARC grant applications.

Dr A.G. CHRISTY, associate editor, *Mineralogical Magazine*.

Dr M.A. COLLINS, committee member, Physical Chemistry Division, Royal Australian Chemical Institute.

Prof. C.J. EASTON, member, policy committee, Federation of Australian Scientific and Technological Societies (FASTS); secretary and chair elect, Organic Chemistry Division, RACI; president elect/president, ACT Branch, RACI; member, advisory board, Centre for Chiral and Molecular Technologies, Deakin University; member, editorial board, *ARKIVOC*; member, referee panel, *Chemical Communications*; member, International Advisory Board, 2002 EUCHEM Conference on Organic Free Radicals; member, Policy Committee, RACI.

Dr N.E. BRASCH, committee member, ACT Branch, RACI; committee member, Inorganic Chemistry Division, RACI.

Dr N.E. DIXON, member, organising committee, ComBio 2001 Conference, Canberra; visiting lecturer,

School of Chemistry, University of Sydney; assessor, NH&MRC grant applications.

Prof. D.J. EVANS, permanent visiting scientist, National Institute of Standards and Technology, Department of Commerce, USA; chair, Sectional Committee 3, Australian Academy of Science; member, Information and Communications Technology Sub-Committee, Australian Academy of Science; member, Flinders Medal and Lecture Selection Committee, Australian Academy of Science; member, Merit Allocation Committee, Australian Partnership in Advanced Computing (APAC); member, organising committee, 5th Liblice Conference on Statistical Mechanics of Liquids, Spinleruv Mlyn, Czech Republic, June 2002; member, editorial advisory board, *Chemical Physics*; member, editorial boards, *Molecular Simulation*, *Molecular Physics*; assessor/reader, ARC grant applications.

Dr G. A. HEATH, honorary fellow, Australian War Memorial; member, Raman Microscope Steering Committee, University of Canberra; adviser, National Museum of Australia; member, International Advisory Board, *Dalton Transactions*

Prof. A. F. HILL, member, Synthetic and Biological College, Engineering and Physical Sciences Research Committee, (UK) (EPSRC); assessor, EPSRC grant applications; Editor, *Advances in Organometallic Chemistry* (Academic Press).

Dr E. R. KRAUSZ, assessor, National Science Foundation (USA) and Department of Energy (USA) grant applications.

Prof. L.N. MANDER, member, Council member, Australian Academy of Science; member, Government Legislation Sub-committee of the Policy Committee of the RACI; member, editorial advisory boards, *Current Organic Chemistry*, *Dictionary of Organic Compounds*, *Heterocycles*, *Journal of the Chemical Society*, *Perkin 1*, *Natural Product Reports*, *Synthesis*, *Synlett*; member, Board of Consulting Editors, *Tetrahedron*, *Tetrahedron Letters*; PhD supervisor, Pascasarjana Universitas Padjadjaran, Bandung, Indonesia; assessor/reader, ARC grant applications.

Dr D.L. OLLIS, assessor, ARC and NHMRC grant applications.

Prof. L. RADOM, vice-president, World Association of Theoretically Oriented Chemists; member, International Advisory Committee, 16th IUPAC Conference on Physical Organic Chemistry, San Diego, USA, August 2002; member, editorial advisory boards, *Advances in Quantum Chemistry*, *Australian Journal of Chemistry*, *European Journal of Mass Spectrometry*, *Journal of the Chemical Society*, *Perkin Transactions 2*, *Journal of Computational Chemistry*, *Journal of Molecular Structure*, *Theochem*, *Journal of Physical Organic Chemistry*; assessor/reader, ARC grant applications.

Mr M.H. SMITH, member, Sydney Corporate Sustainability Network, University of Technology; team member, Australian Conservation Foundation's Natural Advantage Blueprint for a Sustainable Australia; founder, Australian Universities Environmental Manager's Network.

Dr E. WENGER, guest-editor, *Inorganica Chimica Acta* (Special issue to be published 2002).

Prof. T.R. WELBERRY, president, Society of Crystallographers in Australia and New Zealand (SCANZ) (until 10 July 2001), past president (since 10 July 2001) and member of Council, Society of Crystallographers in Australia and New Zealand (SCANZ); member, National Committee for Crystallography of the Australian Academy of Science; chair and Organiser, Microsymposium on Diffuse Scattering, 2002 International Union of Crystallography Congress.

Prof. J.W. WHITE, president, RACI; chair, National Committee for Crystallography (Australian Academy of Science); chair, Scholarships Committee, Oxford Australia Fund; member, Australian Synchrotron Research Program Policy and Review Board; member, Council of the Asian Crystallographic Association; member, Board of Governors, Consortium for Advanced Radiation Sources, CARS, University of Chicago; member, Science Advisory Committee, Central Laboratory of the Research Councils, UK; member, ISIS Scheduling Panel, Rutherford Appleton Laboratory, UK; member, Beam Instruments Advisory Group, Australian Nuclear Science and Technology Organisation; member, Steering Committee, Oxford Australia Fund; member, Council, Australian Academy of Science; member, Council, Australian Institute of Nuclear Science and Engineering; member, Neutron Scattering Specialist Committee, Australian Institute of Nuclear Science and Engineering; member, Advisory Committee, School of Chemistry, University of Sydney; member, Australian Academy of Science/Royal Society Exchange Program Committee; Vice-president, Australian Neutron Beam Users Committee; member, CSIRO, Chemicals and Plastics Sector Advisory Committee; chair, International Advisory Panel for Japanese Atomic Energy Research Institute/KEK Joint Project; member, International Review Committee, KEK-JAERI, Japan; member, International Advisory Panel, Faculty of Science, National University of Singapore; member, International Advisory Committee, International Workshop on Nano-materials, Saha Institute of Nuclear Physics; member, International Advisory Panel for the United Kingdom Higher Education Funding Council's Research Assessment Exercise; member, FASTS Council and Executive; chair, Canberra Fellows Group, Australian Academy of Science; member, Governing Board, Centre for Australian Cultural Studies; member, editorial boards, *Advances in Physics*, *Current Opinion in Solid State and Materials Science*, *Journal of Materials Chemistry*, *Physical Chemistry Chemical Physics*; assessor/reader, ARC grant applications.

Dr S.B. WILD, consulting editor, *Tetrahedron: Asymmetry*; member, editorial advisory board, *Main Group Chemistry*; member, selection committee, Australian-German Research Cooperation Scheme.

Dr R.L. WITHERS, session organiser and chair, AsCA '01, Fourth Meeting of the Asian Crystallographic Association, Bangalore, India, November 2001; consultant, Electron Diffraction Commission of the International Union of Crystallography; member, Aperiodic Commission of the International Union of Crystallography; expert external examiner, Professorship in Structural Chemistry, Department of Physical, Inorganic and Structural Chemistry, Stockholm University.

## Research School of Earth Sciences

Dr A.J. BERRY, with Dr M. James, Australian Nuclear Science and Technology Organisation (ANSTO) on neutron diffraction studies of humite minerals.

Mr C.M. FANNING, with Geological Surveys of South Australia, Victoria, and Queensland; with Mr G. Teale, Teale and Associates, and a number of mineral and petroleum exploration companies.

Mr C.J. HEATH (PhD student), Dr I.H. Campbell and Dr J.M. Palin, investigation of the origin and composition of ore-forming fluids in the super giant Golden Mile gold deposit in collaboration with Kalgoorlie Consolidated Gold Mines and support from the ARC Linkages scheme.

Prof B.L.N. KENNETT, chair, subcommittee on Seismology and Physics of the Earth's Interior, Australian Academy of Science; chair, Academy Committees for Postdoctoral Opportunities in Japan and exchange arrangements with NE Asia (China, Japan, Korea, Taiwan); chair, Australian Academy of Science Committee for the Frederick White Conferences; deputy director, Australian National Seismic Imaging Resource (ANSIR); President, International Association for Seismology and the Physics of the Earth's Interior (IASPEI); member, Executive Committee of the International Union of Geodesy and Geophysics (IUGG).

Prof K. LAMBECK, Foreign Secretary and member of Council, Australian Academy of Science; chair, Antarctic Science Advisory Committee; member, AUSLIG Geodesy Reference Group; member, AUSAID Technical Advisory Group; member, Pangea Resources International Science Review Board.

Dr F.E.M. LILLEY, member, Geomagnetism and Aeronomy Subcommittee, Australian Academy of Science; member, ACT Branch, Geological Society of Australia.

Prof M.T. McCULLOCH, cooperative research with Dr Patrice de Caritat, Geoscience Australia, on Sr isotopes in Australian groundwaters.

Dr H. McQUEEN, with staff, Australian Surveying and Land Information Group (AUSLIG) on absolute

gravity measurements and instrument calibrations at the Mt Stromlo Gravity Station in support of the Superconducting Gravimeter installation.

Dr M. NORMAN, with Dr R. Skirrow, Geoscience Australia, on dating the timing of certain types of mineralisation in South Australia using a new method developed at RSES.

RSES ION MICROPROBE SUBGROUP, with Geoscience Australia (GA) geochronologists, sharing expertise, standards, time, costs and maintenance responsibilities re the SHRIMP I and II ion microprobes.

Dr M. SAMBRIDGE, member, Committee of Visitors which reviewed the Instrumentation and Facilities Program, National Science Foundation, Washington DC, USA.

Dr N. SPOONER, with Dr P. Hughes, HEH Pty Ltd, acting for Coal & Allied Ltd, utilising optical dating to study the formation of source bordering dunes in the Hunter Valley region, NSW.

Ms A. STOLTZE (PhD student), Dr I.H. CAMPBELL and Dr J.M. PALIN, study of fluid pathways around mesothermal gold deposits in the Laverton region of Western Australia with Placer Granny Smith Pty Ltd and support from the ARC Linkages scheme.

Dr I.S. WILLIAMS, with Australian Scientific Instruments Pty Ltd in the manufacture and marketing of SHRIMP ion microprobes.

Mr N.G. WARE, with Mr B.W. Robinson, CSIRO Division of Exploration and Mining, on the AutoGeoSEM project.

## Research School of Information Sciences and Engineering

### Computer Sciences Laboratory

Dr Katalin BIMBÓ, reviewer, mathematical reviews of the American Mathematical Society

Dr Raj GORÉ, program co-chair, International Joint Conference on Automated Reasoning; member, program committee, Conference on Proof Theory in Computer Science

Prof. John LLOYD, vice-president (Pacific Rim), International Federation for Computational Logic; member, advisory board, Theory and Practice of Logic Programming; member, editorial board, *New Generation Computing*; member, editorial board, *Journal of Functional and Logic Programming*; member, editorial board, *The Computer Journal*

Dr Bruce MILLAR, president, Australian Speech Science and Technology Association Inc; chair, ASSTA Spoken Language Database Committee; member, editorial board, *Speech Communication*; member, advisory council, International Speech Communication Associa-

tion; member, permanent council, International Congress of Phonetic Sciences; member, permanent council, International Conference on Spoken Language Processing; member, coordinating committee for Speech Databases and Assessment; rapporteur for Oceania Region, Coordinating Committee for Speech Databases and Assessment; member, Board of Summer Institute of Linguistics Australia; chair, School Committee of the Board of SILA; member, International Committee of Workshop on Innovative Speech Processing (2001); member, Technical Program Committee, Audio-Video Biometric Person Authentication; member, Scientific Committee, 7th European Conference on Speech Communication and Technology; member, Advisory Committee, International Conference on Speech Processing; member, Open Speech Forum, SpeechWorks International; chair, Telephone-based Voice Recognition Industry Conference; member, Scientific Committee, EUROSPEECH Workshop on "Existing and Future Corpora: Acoustic, Linguistic and Multi-Modal Requirements", Aalborg, Denmark, September 2001.

Dr Alex SMOLA, member, editorial board, *Journal of Machine Learning Research*; member, Governing Board, Kernel-Machines.Org; member, Program Committee, International Conference on Computational Learning Theory

Dr Sylvie THIÉBAUX, member, editorial board, Electronic Transactions on Artificial Intelligence — Planning and Scheduling Section; member, Technical Program Committee, European Conference on Planning; reviewer, Transportation Research Part C; reviewer, International Joint Conference on Artificial Intelligence

### **Department of Systems Engineering**

Prof. Brian ANDERSON, president, Australian Academy of Science; director, Australian Foundation for Science; member, Board of the Australian Research Council; member, Australian Research Council; director, Cochlear Ltd; trustee, Ian Clunies Ross Memorial Foundation; consultant, Bandspeed Inc (USA and Melbourne); consultant, Scientific Review Group, Pangea Resources International, Baden, Switzerland; lifetime adviser, International Federation of Automatic Control; member, advisory committee, Centre for Integrated Dynamics and Control; member, editorial board: *Applied and Computational Control, Signals, and Circuits*; member, editorial board: *Communications in Information and Systems*; member, editorial board: *Journal of Multidimensional Systems and Signal Processing*; member, editorial board: *International Journal of Adaptive Control and Signal Processing*; member, editorial board: *International Journal of Robust and Nonlinear Control*; member, editorial board: IEEE Control Systems Society, "Major Impact Papers" Volume; member, Asian Control Professors Association; member, Prime Minister's Science Prize Committee; member, Prime

Minister's Science, Engineering and Innovation Council (PMSEIC); member, PMSEIC Standing Committee — Priority Setting Working Group; member, IEEE James H. Mulligan, Jr. Education Medal Committee, 2001 & 2002

Dr David AUSTIN, chair, ACT RoboCup Junior Organising Committee, RoboCup Junior Australia.

Mr Chanop SILPA-ANAN, treasurer, Thai Students' Association of Canberra; president, Thai Students' Association of Canberra.

Prof. Alex ZELINSKY, chief executive officer, Seeing Machines Pty Ltd; reader, Australian Research Council, Robotics Program; member, editorial board, *International Journal of Robotics Research*; chair, International Committee on Field and Service Robotics; member, Program Committee, 2001 IEEE/RSJ International Conference on Intelligent Robots and Systems; general co-chair, 10th International Symposium of Robotics Research; regional program chair, 2001 IEEE International Symposium on Robotics and Automation.

Dr Uwe ZIMMER, council member, NAISO International Academic Advisory Council (IAAC); reviewing board member, Robotics and Autonomous Systems; tutorial/workshop chair, International Congress on Autonomous Intelligent Systems (ICAIS '02); chair, Workshop on Autonomous Artificial, Systems exploring Hostile Environments, Dubai.

### **Department of Telecommunications Engineering**

Prof. Rod KENNEDY, associate editor, IEEE Transactions on Communications, Data Communications in the Area of Modulation and Signal Design; member, editorial board, *Journal of Adaptive Control and Signal Processing*; member, Acoustical Society of America; grant proposal referee, Australian Research Council; member, Signal Processing for Communications committee, IEEE Signal Processing Society.

Prof. Bob WILLIAMSON, chair, 14th Annual Conference on Computational Learning Theory; member, editorial board, *Systems and Control Letters*; member, editorial board, *Journal of Machine Learning Research*.

### **The John Curtin School of Medical Research**

Prof. G.L. ADA, chair, Vaccine Working Group, National Centre in HIV Epidemiology and Clinical Research (NCHECR), Sydney; member, Australian Influenza Vaccine Committee; member, Program Advisory Committee and Program Executive Committee, Australian HIV Vaccine Consortium (director, Prof. David Cooper, head of NCHECR); scientific patron, Austin Research Institute, Melbourne; referee for manuscripts submitted to Adis International Ltd., New Zealand.



Dr R. BAKER, director and vice-president of Genome Conference Inc.; director, Australian Society for Medical Research; member, organising committee for ComBio Conference, Canberra; convener, first Australian Workshop on Ubiquitin-dependent Proteolysis; expert consultant, Human Gene Nomenclature Committee, London.

Dr S.A.F. BAIN, vice president, Australian Veterinarians in Ethics Research and Teaching, member, Animal Welfare Advisory Committee to ACT Government, ACT rep on the NEC, Aust&NZ Soc for Laboratory Animal Science.

Dr J. BANYER, participant, CSIRO 2001 Student Research scheme and the Australian Institute of Sport Student Work Experience scheme.

Dr J. BEKKERS, ACT representative on the Council, Australian Neuroscience Society; consultant for Axon Instruments Inc., Union City, California.

Prof. R.V. BLANDEN, member, editorial boards of *Immunology and Cell Biology*, and the *Asia-Pacific Journal of Biotechnology*; chair, the Scientific Advisory Committee, National Centre in HIV Virology Research; ANU representative on the Participant Council, CRC for Pest Animal Control.

Dr P. COOPER, consultant for ANUTECH (until July) and to Glaxo SmithKlein Corp.

Dr A. DULHUNTY, consultant for BIOTRON; reader for ARC and an assessor for NHMRC and NHF.

Prof. S. EASTEAL, editor, *Molecular Biology and Evolution*; chair, Board of Directors, Australian Association for Bioinformatics; advisory board, Sydney University Biological Informatics and Technology Centre; research committee, Australian Institute of Sport; advisory committee, NHMRC Centre for Mental Health Research; chair, Management Committee, Australian Partnership for Bioinformatics; Bioinformatics Industry Opportunity Taskforce Department of Industry, Science and Resources; NHMRC Genetics Project Grant Review Panel; Scientific Advisory Board, Entigen Inc, Sunnyvale, California; councillor, Society for Molecular Biology and Evolution; organising committee, Symposium on Evolutionary Genomics, Atami, Japan; Organising Committee, Frank and Bobbie Fenner Conference on Bioinformation Science; Organising Committee, XIX International Congress of Genetics.

Dr P. FOSTER, associate editor, *Pharmacology and Therapeutics*; member, executive committee, International Eosinophil Society; member, working group for the basic science section of the International Eosinophil Meeting, Banf; NHMRC reviewer for Program & Project grants; Stage 2 review of CRC for asthma.

Dr C. FREEMAN, co-covener, Silver Jubilee meeting, Matrix Biology Society of Australia and New Zealand, Canberra.

Prof. P.W. GAGE, president, Australian Physiological and Pharmacological Society; member, editorial committee, *Journal of Cellular and Molecular Neurobiology*, and the Scientific Board, Motor Neurone Disease Research Institute of Australia; reader for ARC and an assessor for NHMRC and NHF grants.

Prof. C. GOODNOW, member, Australian Society for Immunology, member, American Association of Immunologists; member, American Association for the Advancement of Science; member, number of advisory boards including: Appointments and Promotions Committee, Walter and Eliza Hall Institute; Scientific Advisory Board, Australian Genome Research Facility and the Scientific Advisory Board, Illumina, Inc., San Diego; Scientific Advisory Board, Genome Institute of the Novartis Foundation, San Diego; member, editorial boards, *Journal of Experimental Medicine*, *Immunological Reviews*, *International Immunology*, *Current Biology*, and *Genome Biology*.

Dr J. GREADY, chair, organising committee, 7th Australian Molecular Modelling Workshop (MM2001); symposium organiser for ComBio2001 (Canberra), and convener, Australian Society for Biochemistry and Molecular Biology Bioinformatics Special Interest Group; reviewer, *Journal of the American Chemical Society*, *Journal of Physical Chemistry*, *Journal of Molecular Modeling*, *Journal of Molecular Graphics and Modeling*, and *Journal of Computational Chemistry*; reviewer for NHMRC.

Prof. I.A. HENDRY, science adviser, board of the Wenkart Foundation; member, John James Memorial Ethics Committee; member, editorial board, *International Journal of Developmental Neuroscience*, assessor for the National Health and Medical Research Council, Australian Research Council, Medical Research Council (NZ), and National Science Foundation (USA).

Dr C.E. HILL, member, NHMRC Training Awards Committee; organiser, Vascular Connectivity and Function Symposium, 7th World Congress for Microcirculation, Sydney, Australia; NSW and ACT representative for the ANZ Microcirculation Society; presenter of prizes for National Grand Final of World of Trivia, held for Grade 6 students from around Australia, in aid of Epilepsy and Muscular Dystrophy; involved in the assessment for Sylvia and Charles Viertel Senior Medical Research Fellowship and assessments of project grants for NH&MRC, National Heart Foundation of Australia.

Prof. D.A. JANS, member, Joint Commission for the Selection of Candidates for Italian Govt. Scholarships; delivered lectures and practical classes in 3rd year Biochemistry (BC3020) Biochemistry and Molecular Biology Dept., at James Cook University of North Queensland, Townsville. member, editorial boards, *Australasian Journal of Cancer* and *Current Drug Targets*

Dr P.D. JEFFREY, member, Advisory Council of the Australian Science Festival.

Dr K. MATTHAEI, consultant for the Australian Quarantine Inspection Service.

Dr P. McCULLAGH, president, National Brain Injury; appointed to the NHMRC Working Party on the Persistent Vegetative State; honorary medical adviser to the Vietnam Veterans Association of Australia, Legacy and the Returned and Services League of Australia.

Prof. C. PARISH, editor-in-chief, *Immunology and Cell Biology*, member, Panel of Evaluators of Current Drugs; member, Medical Research Advisory Committee, Australian Cancer Research Foundation.

Prof. S.J. REDMAN, member, editorial boards of *Journal of Neurophysiology*, *Synapse*, *Neuroscience*, *Journal of Neuroscience Methods*, *Neuroreport*, *Trends in Neuroscience*, *Journal of Computational Neuroscience*, *European Journal of Neuroscience*, *Journal of Clinical Neuroscience and Clinical and Experimental Pharmacology and Physiology*; chair, NH&MRC Discipline Panel; member, Wellcome Trust interviewing Committee for International Fellowships; assessor, National Science Foundation, Ramaciotti Foundation and Wellcome Trust; deputy chair, Gordon Conference on Synaptic Transmission to be held in 2002; member, executive committee, International Brain Research Organization; member, Scientific Advisory Committee, Prince of Wales Medical Research Institute; The Australian National University representative for the National Health Sciences Centre.

Dr P. SAH, member, Discipline Committee for NH&MRC grants 2001.

Dr C. SIMEONOVIC, member, editorial board, *Cell Transplantation*, elected member of Council, the Transplantation Society of Australia and New Zealand; member, Local Organising Committee for The Canberra Hospital 8th Annual Scientific Meeting, the Canberra Hospital 2001.

Dr R. SLATTERY, organiser of 7th Autoimmunity Workshop; contribution to lay community for diabetes awareness: invited speaker, Canberra Diabetes Group; invited speaker Official Corporate Launch Walk for the Cure; invited speaker to launch local JDRF chapter in Griffith.

Dr G. STUART, project Grant assessor for NH&MRC, teacher at the International Brain Research Organisation School of Neuroscience in Hong Kong, and Australian Neuroscience Society representative at the Federation of Australian Scientific Societies "Science meets Parliament" Day.

Dr S.A. THOMSON, co-organiser for the 2001 Australasian Society for Immunology Conference, Canberra.

Dr D. TREMETHICK, invited analyst for Chemtract, Biochemistry and Molecular Biology; organiser for the COMBIO Meeting, Canberra.

Dr B. WALMSLEY, associate editor, with Neuroscience Letter, co-organiser (with Professors S.J. REDMAN and B Sakmann), IUPS International Satellite Symposium of Synaptic Transmission, Herron Island, Australia; reviewer for *Nature*, *Nature Neuroscience*, *Journal of Neuroscience*, *Journal of Physiology*, and *the Journal*.

Dr H.S. WARREN, member, editorial board, *Immunology and Cell Biology*.

Prof. J. WHITWORTH, chair, High Blood Pressure Research Council of Australia; Honorary Ambassador for Canberra; member, NHMRC Discipline Panel; member, NHMRC Program Grant Interview Committee; chair, Sylvia and Charles Viertel Charitable Foundation Medical Advisory Board; trustee, Foundation for High Blood Pressure Research; member, WHO Global Advisory Committee on Health Research; member, Ad Hoc Committee for Stroke, World Heart Foundation member, Canberra Clinical School Board of Studies; co-chair, WHO/ISH Guidelines Writing Committee; member, WHO/ISH Liaison Committee; Honorary Advisory Board, *Australian & New Zealand Journal of Medicine*, member, Review Panel for Centres of Clinical Excellence in Hospital Based Research Program Evaluation Committee; member, WHO Expert Advisory Panel on Health Science & Technology Policy; member, Task Force on Cardiovascular Disease Education for Women, Joint World Heart Federation/WHO; member, Committee of Deans of Australasian Medical Schools; chair, Research & Development Advisory Committee, Institute for International Health; chair, Mental Health Initiative Advisory Group, Colonial Foundation Limited; External Research Adviser, University of Tasmania.

Dr D.O. WILLENBORG, member, International Advisory Board, International Society of Neuroimmunology; editorial board member, *Journal of Neuroimmunology* and *Journal of Neuropathology and Experimental Neurology*, associate editor, *Journal of Immunology*.

Prof. I.G. YOUNG, editor, journal, *DNA Sequence*, consultant to Boehringer-Ingelheim; member, Biological Defence Advisory Committee, Department of Defence.

## Research School of Pacific and Asian Studies

### Division of Economics

ATHUKORALA, Prof. P., reviewer: Oxford University Press; Routledge; Edward Elgar; referee: Oxford Economic papers; *Economic Journal*, *World Economy*, *Journal of Development Studies*, *Journal of International Money and Finance*, *Economic Record*, *Journal of the Asia Pacific Economy*, *Bulletin of Indonesian Economic Studies*; consultant, Asia Recovery Information Centre, Asian Development Bank, Asia Recovery Report (Web-

site publication); lead economist in World Bank research team; consultant on industrial competitiveness in UNIDO team advising Nepalese government on industrial development policy (ongoing project); presented papers at Economic Society of Australia, 30<sup>th</sup> annual conference of economists, Perth.

CHAND, Dr S., team leader, Pacific Islands economic report for Vanuatu, Asian Development Bank, Manila; financial sector stability and development, Apia, at invitation of International Monetary Fund and the Pacific Financial Assistance Centre; commentary to *Australian Financial Review*.

DRYSDALE, Prof. P., member: Economic Society of Australia and New Zealand; Royal Economic Society; United States Academy of Political Science; Japan Economic Association; East Coast, United States; Japanese Studies Association of Australia; Asian Studies Association of Australia; Korean Studies Association of Australia; Australian Studies Association of Japan; advisory board, Ritsumeikan University, Kyoto; panel of international advisers, Korea Institute for International Economic Policy; project advisory group New Institutionalism in Asia, Asia Center, Harvard University; international advisory board, Asia-Pacific Institute, Waseda University; academic advisory board, Asia Pacific Center for Business and Economics, Brandeis University; board of The Australian Proteome Analysis Facility, Macquarie University; international advisory board, China Center for Economic Research, Peking University; board of the Sydney Institute, international steering committee, PAFTAD; coordinator, international secretariat, Pacific Trade and Development conference; distinguished associate, Asia/Pacific Research Center, Stanford University; international associate member, Foundation for Advanced Information and Research (FAIR), Japan; research associate, Center on Japanese Economy and Business, Columbia University; member, editorial boards: *Journal of Economic Studies*, *Journal of Asian Pacific Economic Literature*, *Japanese Studies*, *Pacific Review*, *Pacific Economic Papers* and *Asian Development Research Forum*; reviewer: World Bank book series; Routledge Economics/Asian Studies series; *International Relations of the Asia Pacific* (journal); Institute of International Economics; Oxford University Press; consultant, Blake Dawson Waldron and BHP; adviser: APEC; China APEC Studies Center and Chinese Ministry of Foreign Affairs on agenda for Shanghai APEC summit; member, Asia Pacific advisory committee, Minister for Foreign Affairs; adviser, DFTA study on strengthening Australia-Japan relationship; co-coordinator, joint Japanese and Australian fund research program on regional financial integration; co-organiser: conference on trade and monetary systems in the Asia Pacific region, Kobe; future financial arrangements in East Asia, Tokyo; regional financial arrangements in East Asia, Canberra; regional financial markets and centres, Sydney; organiser: PAFTAD 27: the new economy: challenges for East

Asia and the Pacific, Canberra; perspectives on East Asian development: agenda for Australia-Japan cooperation in East Asia, Tokyo; presenter, Asia Pacific conference on APEC in the new millennium and the Shanghai Process, Beijing; keynote panelist, international conference on economic interdependence shaping Asia Pacific in the 21<sup>st</sup> Century, Tokyo; presenter, 'Asia Vision 21', Cambridge; presenter and discussant, Asia development research forum, Singapore; Sydney Institute; presenter: Asian values and Japan's options conference, Singapore; 4<sup>th</sup> Australia-Japan Relations symposium, Melbourne; Keidanren 'East Asian Perspectives' seminar, Tokyo; contributor, *The Australian Financial Review*.

DUNCAN, Prof. R.C., president-elect, The Australian Agricultural and Resource Economics Society; member, editorial board, *The Australian Journal of Agricultural and Resource Economics*; member, editorial advisory board, *Asian-Pacific Economic Literature*, editor, *Pacific Economic Bulletin*, reviewer, World Bank; referee: *The Australian Journal of Agricultural and Resource Economics*, *Asian-Pacific Economic Literature*, *International Economic Journal*; member, Australian competition tribunal; AusAID program strategies committee; Foreign Minister's aid advisory council; Asian Development Bank Institute advisory council; lecture to U3A on globalisation and income inequality, Canberra.

FANE, Dr G., reviewer: *Bulletin of Indonesian Economic Studies*, *Pacific Economic Bulletin*, *Economic Record*, *Journal of the Asia Pacific Economy*, *Australian Journal of Labour Economics*, *Economic Analysis and Policy*; jointly with P G Warr, international conference on poverty and growth, World Institute for Development Economics Research, United Nations University, Helsinki.

GARNAUT, Prof. R., chair, Papua New Guinea international advisory group, privatisation program; Asia Pacific Economics Group Pty Ltd; Korea economy program; China economy and business program; foreign affairs council; Asia society, New York; Asia Society AustralAsia Centre, Melbourne; China Centre for Economic Research; member, advisory boards, Beijing, Centre for Strategic and International Studies, Indonesia; review board, public policy research grants program, Beijing; Economic Society of Australia; Australian Institute of International Affairs; fellow, Academy of the Social Sciences; chair, editorial board, *Asia-Pacific Economic Literature*, chair, international advisory board, *Bulletin of Indonesian Economic Studies*; member, *Australian Economic Review*; chair, international advisory group to Papua New Guinea; federal financial relations review; Lihir Gold Ltd; member, advisory council, Minister for Foreign Affairs; Pacific economic outlook (PEO) forecasters meeting, Osaka, Japan and San Francisco, USA; Australian Institute of International Affairs, Sydney; 14th Pacific economic cooperation council meeting (PECCA XIV), Hong Kong; international conference on regional economic cooperation, The Australian Institute of International Affairs, Canberra;

contributor, *The Australian Financial Review*, *The Australian*; numerous appearances on national and international television and radio, including BBC World Service, BBC Channel 5, ABC Late Line and China CCTV.

HILL, Prof. H.C., board, East Asian Economic Association; member, Economic Society of Australia; member, editorial board: *Asian-Pacific Economic Literature*, *World Development*, *Journal of Asian Business*; Oxford development studies; *Journal of Asia-Pacific Economy*, *Monash Mt Eliza Business Review*, *ASEAN Economic Bulletin*, *Bulletin of Indonesian Economic Studies*, *Journal of Philippine Development*; Cambridge University Press Asia-Pacific series; referee: Cambridge University Press; Routledge; Institute of Southeast Asian Studies; *ASEAN Economic Bulletin*, *Asian Studies Review*; Oxford Development Studies; *Journal of Development Studies*, *Journal of Asian Economics*, *Bulletin of Indonesian Economic Studies*, *World Development*, *Journal of Asian Studies*; adviser: East Timor economic development, Asian Development Bank; AusAID; World Bank research program on the future of East Asia's economy; co-organiser, Dili economic policy forum, Dili, East Timor, with East Timor study group and the Asian Development Bank; presentation to Westchester County (New York) luncheon speakers group; contributor, *Far Eastern Economic Review*; News Radio Singapore; ABC Radio; ABC Radio; CNBC Asia (TV); National Public Radio (Boston).

JHA, Prof. R., member, think tank of Bombay Chamber of Commerce and Industry, Bombay, India; adviser to Central Institute of Road Transport, Pune, India; associate editor: *International Tax and Public Finance*, *International Journal of Development*; reviewer: Routledge; Kluwer; *Journal of Public Economics*, *International Tax and Public Finance*, *Journal of Development Studies*, *Journal of Comparative Economics*, *Journal of the Asia Pacific Economy*, *Pacific Review*, *Empirical Economics*; author, country strategic opportunities paper for India for the international fund for agricultural development, Rome; organiser, conference to mark ten years of economic reforms in India, Canberra; South Asia studies group, Melbourne; Canadian economics society, Montreal, Canada; International Economic Association, Athens, Greece; lecture, to South Asia Society Melbourne; lecture, Australia-India Academic collaboration, Australia-India Update Seminar, University of Canberra; invited Op-ed pieces in: *Sydney Morning Herald*, *Economic Times*; ABC radio news and ABC Nightline.

McKIBBIN, Prof. W., member, United Nations global modeling forum; advisory board member: Economic Society of Australia, Canberra branch; American Economic Association (USA); Econometric Society (USA); Royal Economic Society (UK); Harvard University Asian economic panel; fellow, Australian Academy of Social Sciences; reviewer, book proposals for Edward Elgar; editorial board: *Economic Modeling*, *Asia-Pacific*

*Economic Review*, *Open Economics Review*; reviewer: *Journal of International Trade and Development*, *Economic Modeling*; board member, Reserve Bank of Australia; consultant, International Monetary Fund; reports for: Office of National Assessment, Australian Treasury, Department of Foreign Affairs and Trade, Cabinet Office, Prime Minister of Japan; US White House; Office of Minister for Environment; Office of Minister for Resources; consultant: Australian Greenhouse Office; US Congressional Budget Office; Canadian Department of Finance; Salomon Smith Barney, Hong Kong; co-author: report for Korea Institute of Economic Policy; spring 2001 international forum of collaboration projects, Economic and Social Research Institute, Japanese Cabinet Office, Tokyo; discussant of paper on economic growth in Asia, Harvard University, Asian economic panel meeting in Cambridge Mass, USA; keynote presenter, conference on macroeconomics, University of Warwick, England; Harvard University, Asian Economic Panel in Seoul, Korea; lecture to U3A on climate change policy; various interviews with Australian and international radio, TV, internet and magazines.

McLEOD, R.H., editor, *Bulletin of Indonesian Economic Studies*; associate editor, *Agenda*; reviewer, Routledge; participation in round table discussions on Indonesia at the Office of National Assessments and the Australian Agency for International Development (AusAID); session chair, Indonesia Update conference, Canberra; Op-ed piece, *Jakarta Post*; interviews, various Indonesian newspapers.

MENG, Dr X., member, American Economic Association; Society of Labor Economics; referee: *Journal of Comparative Economics*, *Australian Journal of Labour Economics*, *Economic Record*, *China Economic Review*, *Journal of Comparative Economics*, *World Bank Economic Review*, *Education Economics*.

RESOSUDARMO, Dr B.P., council member: Pacific Regional Science Conference Organisation; Indonesian Regional Science Association; member, American Agricultural Economics Association; East Asian Economic Association; co-author of policy report on Investment Strategy in Marine and Fishery Sectors, Department of Marine and Fishery, Indonesia; co-author, report on Regional Development Index, Bappenas, Indonesia; co-organiser, 3<sup>rd</sup> Indonesian Regional Science Association International Conference, Jakarta, Indonesia; 17<sup>th</sup> Pacific Conference of the Regional Science Association International, Portland, Oregon, USA; participant, Salzburg Seminar, Environment, Energy, and Economics in Asia, Salzburg, Austria.

SONG, Dr L., reviewer: Edward Elgar; Routledge; referee, *Journal of the Asia Pacific Economy* (JAPE); co-organiser with Prof. P Drysdale, trade and monetary system in the Asia-Pacific region, Kobe University, Kobe Japan.

WARR, Prof. P.G., fellow, Academy of the Social Sciences in Australia; editorial board member, *Agricultural Economics (Journal of the International Association of Agricultural Economists)*; *Asia Pacific Economic Literature*; referee: *Asian Economic Journal*; *The World Economy*; *Bulletin of Indonesian Economic Studies*; *Journal of Development Studies*; adviser: Australian Ambassador, Thailand on Thailand's economic policies; national economic and social development board, Government of Thailand, on poverty reduction strategies and their relation to Thai government's ninth five-year economic and social development plan; keynote speaker, international poverty forum, Asian Development Bank, Manila; speaker: international conference on Asian financial architecture, Chulalongkorn University, Bangkok; speaker: international conference on growth and poverty, World Institute for Development Economics Research, United Nations University, Helsinki.

WEN, Dr M., urbanisation in China: challenges and strategies of growth and development, Xiamen, China; frontiers of modern western economics, Wuhan, China; China's economy: confronting restructuring, stability, and international competitiveness, Wollongong, Australia; two other papers, international symposium on the economics of e-commerce and networking decisions, Monash University, Australia.

### Division of Pacific and Asian History

BAKKEN, Dr B., board member, research group 34, International Sociology Association; committee member, World Congress meeting in Brisbane in 2002; board member, *Chinese Sociology and Anthropology*; *The Copenhagen Journal of Asian Studies*; reader, Hurst Publishers, London; book reviewer: *International Sociology*; *The Copenhagen Journal of Asian Studies*; Association for Asian Studies 2001 conference, Chicago, Illinois; Chinese Studies Association of Australia, 7<sup>th</sup> biennial conference, ANU; seminar, University of Melbourne; lecture, Hall Rotary Club, Canberra; contributor, *Aftenposten* (Evening News), Norway; interview, National Radio P4, Oslo, Norway; member, China advisory group, Norwegian Institute of Human Rights, Oslo; member, resource group, Danish Centre for Human Rights, Copenhagen; co-ordinator, scholar exchange programme between Scandinavia and Australia; supervisor, PhD students, Aarhus University, Denmark, University of Oslo, Norway; examiner, PhD theses, Griffith University, Macquarie University and Aarhus University, Denmark

BALLARD, Dr C., co-editor, *Bulletin of Irian Jaya Development*; monograph reviewer, *University of Hawai'i Press*; reviewer: *Contemporary Pacific*; *War and Society*; *Asia-Pacific Viewpoint*; briefing sessions to Ministers for Foreign Affairs and Immigration; consultant: Mining, Minerals and Sustainable Development (MMSD) project; International Institute for Environment and Development (IIED), London, UK; risk Assessment adviser, British Petroleum, London, UK; co-convener,

informal session, annual meeting of the Association for Social Anthropology in Oceania, Miami; address to Australian Member Committee of The Council for Security Cooperation in the Asia Pacific (AUS—CSCAP), University House, Canberra; seminar, Centre for Recherche et de Documentation sur l'Océanie, Marseilles; seminars, Ecole des Hautes Etudes en Sciences Sociales, Paris; participation in field research project, with Ms M Wilson and the Vanuatu Cultural Centre; organiser, exhibition, Tropenmuseum, Amsterdam; contributor, *President Megawati and Irian Jaya*, Antara, (published as 'Dr Chris Ballard: Separatisme di Irja Perlu Ditangani Serius').

BARMÉ, Prof. G.R., fellow, Academy of Humanities, Australia; member, editorial boards: *The China Journal*; *Renditions*; *Chinese Perspectives*; reviewer, Harvard University Press; (co-presenter, Dr G Davies, Monash University), Internet and Chinese Intellectuals Conference, Harvard University, Harvard; commentator on Prof. J Wasserstrom's paper, Shanghai and 20<sup>th</sup>-Century China Conference, Harvard University, Harvard; organised exhibition of collaborative work with New York photographer, Ms L Conner; opening address, exhibition, Sherman Galleries, Paddington, Sydney; briefed ABC, SBS, *The Australian* and the BBC journalists.

DENNOON, Prof. D., fellow, Academy of Humanities, Australia; member, editorial boards: *Cambridge Asia-Pacific Series*, Department of Foreign Affairs documentary publications; New Zealand Historical Association, Christchurch, New Zealand; draft policy paper at UNESCO Conference, Bangkok; Family and Friends for Drug Law Reform; Family Drug Support (telephone counseling); member of Council, University of Papua New Guinea.

ELVIN, Prof. J.M.D., fellow, Academy of Humanities, Australia; member, editorial boards: *The China Journal*; *China Review International*; Chinese Studies Association of Australia Biennial Conference, Canberra; with co-authors, Dr D Crook, Dr R Jones and Prof. J Dearing, Liverpool University, UK at Socio-Economic History of Southeast China Conference, Hangzhou, PRC.

FEALY, Dr G., member, Asian Studies Association of Australia; reviewer: Allen and Unwin, Sydney; *Asian Studies Review*; *Bulletin of Indonesian Economic Studies*; consultant: AusAID, Canberra; BP, International; The Asia Foundation, Jakarta; participant: Australian government-US State Department closed conference on Southeast Asian Islam, Honolulu, Hawaii; Office of National Assessments and US State Department roundtable discussion on Indonesian political developments; adviser, BHP; open conference on Indonesia, Melbourne University; Monash annual Indonesia lecture; address, U3A, Canberra; Australian Institute of International Affairs, Canberra; contributor: *The Age*; *Sydney Morning Herald*; *The Australian Financial Review*; *The Australian Magazine*; *Christian Science Monitor*; inter-

views with various Australian and international radio, TV and news agencies.

JACKSON, Dr P., member, editorial board, *Intersections: Gender, History and Culture in the Asian Context*; co-organiser: AsiaPacifiQueer: A Researchers' Workshop, Sydney; Second Australian Thai Studies conference, Melbourne; co-convenor, the second Asia-PacifiQueer conference, Brisbane; keynote address, international conference Southeast Asian Religious Mosaic in the Third Millennium, Mahidol University, Bangkok; keynote address, Perpetuating Cities workshop, National University of Singapore, Singapore; co-organiser and lecturer in Anthropology, Macquarie University.

LAL, Prof. B.V., president: Council of Fiji Institutions of Australia; Pacific History Association; fellow, Academy of Humanities, Australia; correspondent, *The Contemporary Pacific: A Journal of Island Affairs*; member, editorial board, *Pacifika Library*; editor, *Conversations*; consultant, Refugee Tribunal, Sydney; assessor, Australian Research Council grants; Asia Pacific Council lecture, Griffith University; Australian Catholic University, Ballarat; talk, Council of Fiji Institutions in Australia, Brisbane; contributor, *The Canberra Times*, *Fiji Sun*; commentator and analyst, Radio National, BBC, Radio NZ, Fiji Broadcast Service, on current affairs in Fiji; examiner, PhD thesis, University of the South Pacific.

McCORMACK, Prof. G., fellow, Academy of Humanities, Australia; member, editorial boards: *New Zealand Journal of Asian Studies*; *Japanese Studies*, *Transitions—Asia and Asian—America*; member, International editorial advisory committee, *Sekai*; reviewer: Cambridge University Press; Allen and Unwin; Routledge; *Journal of Oriental Studies*, *Journal of Asian Studies*; lecture, Centre for Defence and Strategic Studies, Canberra; keynote lecture: (in Japanese), Symposium, Takatsu Shimin Kaikan, Kawasaki City; lecture, Tokyo University of Foreign Studies, Japan; seminar, Daiwa Anglo-Japanese Foundation with the British Association of Japanese Studies, Daiwa Foundation Japan House, London, supported by Japan Foundation; lecture, Chinese studies group, University of Aberdeen, Scotland; keynote speaker: joint East Asian Studies conference, University of Edinburgh, Scotland; Okinawa and the US-Japan Alliance conference, University of Sheffield, UK; seminar, East Asian studies program, Princeton University, USA; seminar, History and Humanities workshop, inter-college committee on East Asian Studies, History Department and Japanese, University of Maryland, College Park, Maryland; seminar, Yale University, Newhaven, USA; seminar, Edwin O Reischauer Institute of Japanese Studies, (Japan Forum), Harvard University, Massachusetts, USA; seminar, East-West Center, University of Hawaii, USA; adviser to ABC Radio and BBC Radio.

MARR, Prof. D.G., international secretary and fellow, Academy of Humanities, Australia; corresponding member, editorial advisory board, *Modern Asian Studies*; lecture, Australian Political Exchange Council; lecture and seminar, Australian Centre for Defence and Strategic Studies, Canberra; co-organiser, Vietnam Update Conference, Institute of Southeast Asian Studies, Singapore; History of Vietnam 1945–1975 Symposium, Science Bibles, University of Paris; lecture, Canberra Grammar School; interviewee: *New York Times*, *Asian Wall Street Journal*, *Mainichi Shimbun* (Tokyo); book reviewer, *Sydney Morning Herald*, ABC, Radio Australia and Voice of Vietnam

MORRIS-SUZUKI, Prof. T., president, Asian Studies Association of Australia; member, steering committee Centre for Pacific Asia Social Transformations, Wollongong and Newcastle Universities; member, advisory committee, Research Centre for Intercommunal Studies, University of Western Sydney; fellow, Academy of Humanities, Australia; international assessor, Asian Studies Section, research assessment exercise, UK; general editor, *ASAA East Asian Monograph Series*; member, editorial boards: *Asia-Pacific Studies Series*, Cambridge University Press; *Asian Studies Review*, *Humanities Review*, *Traces*, *Positions: East Asia Cultures Critique*; member, advisory board, *Inter-Asian Cultural Studies*; member, Foreign Affairs Council; symposium, Tokyo University of Foreign Studies; War Violence and Memory in Asia Conference, Cebu; keynote address, International Workshop, Seoul National University; conference, University of Singapore; plenary address, conference, Sakhalin Regional Museum, Russia; examiner, PhD theses, University of Sydney; co-director, Asian Studies in Asia participation scheme, which sponsors younger scholars from Asian institutions to present papers on Asian Studies at international conferences.

NELSON, Prof. H., fellow, Academy of the Social Sciences in Australia; adviser, DFAT; assessor, Australian Research Council large and small grants; briefed journalists and quoted in *The Canberra Times*; adviser, ABC Radio; collaboration with the National Museum for a planned exhibition.

OAKMAN, Mr D., contributor, *The Canberra Times* (Panorama).

ROBERTS, Ms C., Chinese Studies Association of Australia, 7<sup>th</sup> Biennial Conference, ANU.

## **Division of Politics and International Relations**

### **Department of International Relations**

ELLIOTT, Dr L., invited member, Australian National Committee, International Human Dimensions Program; member: research committee, Australian Institute of International Affairs; American Political Science Association; senior Vice-President, ACT Council; associate editor, *Australian Journal of International*

*Affairs*, member editorial boards: *Australian Journal of International Affairs*, *Journal of International Relations and Development*, *Pacifica Review*, referee: *The Pacific Review*, *Environmental Politics*; *Australian Journal of International Affairs*; *Pacifica Review*; *Journal of International Relations and Development*; *Global Environmental Politics*; *Women's Studies International Forum*; University of New South Wales Press; invited lecturer, Australian Defence College; Australian member, Council for Security Cooperation in the Asia-Pacific (CSCAP); member, Murray Darling Basin Commission, workshop; steering committee, Land and Water Australia; United Nations University workshop on conflicting sources of legitimacy and the management of security crises in a multilateral setting, New York; Australian CSCAP member, CSCAP Working Group Workshop, Wellington, New Zealand; Lecturer, Australian Defence Force Academy.

FRY, Mr G., organised short course on world politics for Department of Foreign Affairs and Trade Graduate Trainees; member, organising committee, gender and globalisation in Asia and the Pacific: feminist re-visions of the international workshop, Canberra; contributor, *The Canberra Times*, media commentary, ABC Late-line; examiner, Honours theses, Politics Department, Flinders University.

HARRIS, Prof. S., member, Trilateral Commission; Council for Asia-Europe Cooperation; Commonwealth Foreign Affairs Council; adviser, Japan Centre for International Exchange; co-chair, the Australian Committee of CSCAP; interaction council meeting, regional and global security, Osaka; keynote speaker, China Studies association of Australia annual conference; Australian CSCAP member, globalisation and economic security, CSCAP workshop, Shanghai; presented two seminars, U3A; referee: *The Pacific Review*; *Asian Survey*, *China Perspectives*, Cambridge University Press; contributor, *Australian Financial Review*, *The Australian*, *Australian Financial Review*, *The Australian*, *The Age*; media commentary, Australian and international radio and TV and newspapers.

KEAL, Dr P., member, Australian Political Studies Association; British International Studies Association; seminars (two), short course for DFAT graduate trainees; Australian Institute of Aboriginal and Torres Strait Islander Conference, ANU; annual conference of the Australasian political studies association, Brisbane; Australian CSCAP member, CSCAP working group workshop, Wellington, New Zealand; provided background information to SBS.

KERR, Dr P., referee: *Global Networks*; *Journal of Transnational Affairs*; *Pacifica Review*; *Australian Journal of International Affairs*; Australian member, CSCAP; presentation on human security in Asia-Pacific, graduate training course, DFAT; advice to Australian Defence College (ADC); Department of Defence; examiner,

Australian Staff Command College, ADC; examiner, Masters theses, La Trobe University.

REUS-SMIT, Dr C., interviews: *Sydney Morning Herald*, *Canberra Times*, *Time Magazine*, Radio 3AW, 3AK.

ZHANG, Dr Y., New Zealand Asian Studies Society 14<sup>th</sup> International Conference on Asian Futures, Asian Traditions; New Zealand Political Studies Association annual conference; discussant, new directions in political science and international relations conference, Beijing; ISA conventions on globalisation and its challenges in the 21<sup>st</sup> century, Hong Kong; interviews: SBS TV, SBS Radio, TV Ten, ABC Radio, Radio Australia, Radio International Singapore, Agence France-Presse, and the Voice of America; examiner, PhD thesis, University of Sydney; examiner, MA thesis, University of Queensland; chair supervisor, PhD candidate, University of Auckland; guest lecturer, Strategic and Defence Studies Centre, the Australian Defence College; presented a series lectures to the School of International Studies, Renmin University, Beijing, China.

ZHU, Dr T., participant, CSAA conference; interview, ABC Radio.

### **Department of Political and Social Change**

AMYX, Dr J., member, Association for Asian Studies; Australasia Political Studies Association; consultant, Oxford Analytica (UK); referee: *American Journal of Political Science*; *Australian Journal of Political Science*, *Comparative Political Studies*; invited lecturer, Australian Defence College; Australasia Political Studies Association annual meeting, Brisbane; interviews, ABC, SBS radio and TV and the BBS.

ASPINALL, Dr E., consultant, Australian Agency for International Development Assistance (AusAID); reviewer: UNSW Press; Lexington Books; *Political Studies*; consultant, Australian Agency for International Development Assistance (AusAID); (with Mark T. Berger), International Studies Association, Hong Kong; speaker to Amnesty International about human rights in Aceh; board member of IRIP, publisher of *Inside Indonesia*; contributor, *The Canberra Times*, *Inside Indonesia*; *Asian Analysis* website; interviews, ABC and SBS radio and TV.

BARLOW, Dr C., member, editorial board: several South Asian and Southeast Asian journals; *Bulletin of Indonesian Economic Studies* (ANU); keynote speaker, The Future of Perennial Crops, Yamoussoukro, Cote d'Ivoire, organised by CIRAD at Montpellier, France with Economic and Social Institute in The Hague and Ivorian government.

COLLIER, Dr C., interviews: ABC television news; SBS television news.

CROUCH, Dr H., contributor, *International Herald Tribune*, *International Herald Tribune*.

DINNEN, Dr S., co-organiser, Solomon Islands conflict and peace process workshop, Canberra.

KERKVLIIET, Prof. B., member, advisory group, Social Sciences Translation Project in Vietnam, funded by Ford Foundation, headed by Professors David Marr, ANU and Phan Huy Le, Hanoi National University; member, international advisory board, Institute of Popular Democracy, Quezon City, Philippines; examiner, PhD dissertations: one each for Monash University, University of New South Wales, and Melbourne University; manuscript evaluations for the following peer-reviewed journals: *Development and Change*, *Pacific Affairs*, *Critical Asian Studies*; *Sojourn*, *Philippine Political Science Review*; editorial and/or advisory board member, *Critical Asian Studies* (formerly the *Bulletin of Concerned Asian Scholars*); *Philippines Political Science Review*; *Pilipinas: A Journal of Philippine Studies*; *Sojourn: Journal of Social Issues in Southeast Asia*; *Southeast Asia Research*; book manuscript evaluation for Cambridge University Press; co-organiser, Vietnam Update conference, Institute of Southeast Asian Studies, Singapore; participant: workshop in Japan, organised by Faculty of Asian Studies (ANU) and the Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies; paper, New Zealand Asian Studies Society's 14<sup>th</sup> International Conference; commentary, Australian and international radio.

MAY, Dr R.J., consultant, Oxford Analytica, UK; member: consulting network, Centre for International Strategic Analysis, Perth; interim executive committee, Australian chapter, forum of democratic leaders in the Asia-Pacific region; series editor, *Regime Change and Regime Maintenance in Asia and the Pacific*; member, editorial boards: Cambridge University Press Asia-Pacific Studies; *TaimLain. A Journal of Contemporary Melanesian Studies, Asian Ethnicity, Theoretical Perspective* (University of Dhaka); evaluated book manuscripts: Cambridge University Press; Crawford House Publishing; Routledge; evaluated manuscripts submitted to *Pacific Studies, Asian Ethnicity, Pacifica Review*; provided submission and briefs to Joint [Parliamentary] Committee on Foreign Affairs, Defence and Trade; to the Minister and personnel for Foreign Affairs and Trade; presenter, Australian Defence College and Australian Command Staff College courses; Australian Defence Studies Centre, Griffith University conference; Australian Defence Studies Centre, Strategic Update 2001; workshop participant, organised by Centre for Peace and Conflict Studies, University of Sydney; regular contributor to *Aseanfocus*; interview, various overseas radio and newspapers; Adjunct Faculty, Center for Civil Military Relations, Naval Postgraduate School, Monterey, US; took part (as faculty) in workshop for Vanuatu Police Force, Port Vila; establishment of relationships between the CCPCSAP and several overseas institutions (currently in Philippines, Indonesia and US); these examiner, University of Queensland and University of Wollongong; external assessor, PhD

scholar, University of Canberra; Asia Pacific Security Outlook 2001, Japan Center for International Exchange, Tokyo, and East-West Center, Hawai'i.

O'COLLINS, Emeritus Prof. M., Nation States Conference, Adelaide University Research Centre for Humanities and Social Sciences; participant and contributor to seminars, National Library; attended Senate Federation Centenary celebration, Parliament House; attended Independence Day celebrations, Papua New Guinea High Commission; organised discussion groups for visit by Prof. J Midgley, Dean of Social Welfare, Berkeley, California; facilitator, community contacts for student research project; supervisor, PhD student, Curtin University and Masters student, Australian Catholic University; member, Advisory Board, Australian Catholic University School of Social Work, examiner, Masters thesis, University of Papua New Guinea; provided research and thesis preparation advice for several other students at the Australian Catholic University, the University Papua New Guinea, La Trobe University, and Curtin University..

SPRIGGS, Ms R., facilitator, member of Summit Planning Committee, Bougainville Womens Summit, Arawa; Conciliatory Resource Centre, London; commentary on Anthony Regan's paper on power-sharing in Bougainville and Papua New Guinea in the newly signed (30 August) Bougainville autonomy agreement, with Lauterpacht Research Centre for International Law, University of Cambridge.

## Division of Society and Environment

### Department of Anthropology

BROOKFIELD, Emeritus Prof. H., fellow, Academy of the Social Sciences in Australia; member, editorial boards: *Global and Environmental Change: Human and Policy Dimensions*, *Land Degradation and Development*, *Asia-Pacific Viewpoint*, *The Contemporary Pacific*; co-organiser, managing biodiversity in agricultural systems, Montreal, Canada.

IDRUS, Ms N.I., 3<sup>rd</sup> sex conference on Belief systems and desires, University of Melbourne; interview, ABC Radio Australia.

KIPNIS, Dr A., member, Chinese Studies Association of Australia; Asian Studies Association of Australia; Association for Asian Studies (USA); fellow: American Anthropological Association; American Ethnological Society; Society for Cultural Anthropology; Society for Linguistic Anthropology; Chinese Studies Association of Australia; Australian Anthropological Society member, editorial board, *The China Journal*; reviewer: National Science Foundation; Princeton University Press; Duke University Press; *Journal of Asian Studies*, *Comparative Studies in Society and History*, *American Ethnologist*, *Asian Survey*; East Asia cultures critique: *The China Journal*, *Journal of Linguistic Anthropology*, *Ethos: Journal of the Association for Psychological Anthro-*



*pology*; co-organiser, 2001 Chinese studies association of Australia bi-annual conference, Canberra.

MOSKO, Prof. M., fellow: American Anthropological Association; Royal Anthropological Institute of Great Britain and Ireland; American Ethnological Society; Association for Social Anthropologists in Oceania; board member, The Polynesian Society; executive board member, Association of Social Anthropologists in Aotearoa/New Zealand; member: Pacific Studies Association; European Society for Oceanists; Australian Anthropological Society; reviewer: *Anthropological Forum*; *Journal of the Royal Anthropological Institute of Great Britain and Ireland*; *Journal of the Polynesian Society*; workshop, Manchester University, United Kingdom; conference, University of Cambridge, United Kingdom.

NEONBASU, Mr G., collaboration on development planning with Governor of East Nusa Tenggara (NTT), and two regencies (Kabupaten) — TTU, North Central Timor, TTS, South Central Timor.

ROBINSON, Dr K., fellow: American Anthropological Association; Australian Anthropological Society; member, Asian Studies Association of Australia; reviewer: Routledge; *Pacific Affairs*, *Asian Studies Review*; Coffey MPW, AusAID gender and community participation adviser; gender specialist, BAREG Project (Regional Environmental Agency), Bali; IDSS for AusAID gender and community participation specialist, project identification mission, Indonesia water supply and sanitation AusAID; consultant: land titling in Indonesia project IDSS for AusAID; consultant: Demography Institute, University of Indonesia, for the Asian Development Bank; convener, 6th Women in Asia Conference, for the Women's Caucus of the Asian Studies Association of Australia and the National Institute for Asia and the Pacific; co-organiser (with Dr Bessell, APSEM), Indonesia Update 2001, gender equity and development in Indonesia, for the Indonesia project; paper at workshop, organised by The Asian Meta Centre for population and sustainable development analysis, National University of Singapore (NUS), family studies research program, commission on gender and geography, international geographical union; lecture, Darma Wanita Persatuan (Indonesia Embassy), Canberra; interviews, ABC Radio National, *Sunday Mail*, Brisbane.

SOARES, Mr D., contributor/interviews, *Suara Timor Lorosae*, *Timor Post*, *Suara Timor Lorosae*, *Timor Post*, *Buletin Lian Maubere*, *The Voice of East Timor* and *Republika*.

TAPP, Dr N., paper at conference, Xiamen, China; discussant on panel, joint spring annual meeting of the American Ethnological Society and Canadian Anthropological Society, Montreal; annual Barbara Ward memorial lecture, Hong Kong Anthropological Society, Hong Kong Museum of History.

WALKER, Dr A., board member, National Thai Studies Centre; reviewer: *Journal of Southeast Asian Studies*, *Asian Ethnicity*; social impacts adviser, World Bank — social and environmental sustainability of the mining sector in Lao PDR; Australian Anthropological Society annual conference.

### Department of Archaeology and Natural History

AMBROSE, Mr W., provided experimental data to Australian Antarctic Division from joint work with Dr I Godfrey, Western Australia Maritime Museum; University of Auckland, Archaeometry conference; working group on wet organic archaeological materials, conference, Swedish national heritage board, Stockholm.

ANDERSON, Prof. A.J., international committee, International Council for Archaeozoology; member, editorial boards: *Archaeofauna*; *International Journal of Osteoarchaeology*; *Anthropological Science*; interview on film, University of the Balearics (Spain).

HOPE, Prof. G.S., membership secretary, Australasian Quaternary Association; member: Institute of Australian Geographers; Australian Archaeological Association; Phytolith Association; Southern Connections; member, editorial committee, ANH publications; reviewer: *Palaeogeograph*; *Palaeoclimatology*; *Palaeoecology*; *Australian Journal of Botany*; *Australian Journal of Ecology*; *Quaternary Research*; *Ecological Monographs*; *Quaternary International*; *Southeast Asian History*; *Australian Geographer*; *Bogong*; *Canberra Environment Centre*; *Journal of Biogeography*; *The Holocene*; expert panel member, Cape York natural heritage significance, Environmental Protection Agency, Queensland Parks and Wildlife Service; member: advisory committee on Wingeecarribee Reserve, Sydney Catchment Authority; advisory board *Seven Summits project*, Public Broadcasting, Boston; Lemberg Award advisory committee, Australian Academy of Science; ARC award assessments, ARC, DETYA; New Zealand Research award assessments, Foundation for Research, Science and Technology, New Zealand Government; speaker, workshop, Canberra, Australian alps liaison committee, NSW, ACT and Victorian national parks and State environment authorities; lecture on Lake George, Rotary Club, Belconnen.

KENNEDY, Dr J., referee: *Current Anthropology*, *Journal of the Polynesian Society*; executive member, Save the Ridge, ACT.

MACPHAIL, Dr M., member, American Association of Stratigraphic Palaeontologists; Association of Australasian Stratigraphic Palaeontologists; Paleobotanical and Palynological Association of Australasia; Royal Society of Tasmania; Northern Ceramic Society; research on plant microfossils, with Dr P O'Brien, Australian Geosciences; plant microfossils, with Dr N Exon, Australian Geosciences; comparison of trans-Tasman petroleum provinces, Adj. Prof. C Foster, Australian Geosciences; historical archaeology of the Catholic Ed-

ucation Office site, Newcastle, M Carney and D Stelle; historical archaeology of sites in Royal Botanic Gardens, Sydney, M Kelly, Godden Mackay Logan heritage management consultants; historical archaeology of NSW Conservatorium of Music site, Sydney, M Casey, Casey & Lowe Associates (Sydney); historical archaeology and reconstruction of convict era gardens at Port Arthur, Tasmania, R Reid and G Jackman: Port Arthur historic site management authority (Tasmania).

O'CONNOR, Dr S., member, Australian Archaeological Association; Australasian editorial adviser, *Antiquity*; keynote speaker: Queensland Public Library Associations annual conference; American Association for Australian Studies annual conference; European Association for Australian Studies bi-annual conference; involved with Land Councils to ensure that research results applied, where relevant, to Native Title cases; archaeologists report for Goldfields land council for central west claim; interviews, *Sydney Morning Herald*, *The Age*, *The Australian*, *ABC radio and TV*.

SPRIGGS, Prof. M., reviewer, articles for *Ancient Civilisations Encyclopaedia*, White-Thompson Publishing Ltd, Lewes, Sussex, UK; consultant, East Timor Cultural Centre, World Bank funded consultants; invited participant, round table discussion, Cambridge University; invited lectures: University of Manchester, School of Art History and Archaeology; Institute of Archaeology, UCL, London; conference planning with J Zilhao, Director, Instituto Portugues de Arqueologia, Lisbon, Portugal.

### Department of Human Geography

ALLEN, Dr B.J., guest editor, with Ms E Lowes and Dr C Ballard, *Asian Pacific Viewpoint Special Issue: Agricultural Transformation and Intensification*, invited editor, *ACIAR Proceedings No 99*; business partner, Dames and Moore Pty Ltd, Adelaide; adviser, Australian agency for international development, Canberra.

BOURKE, Dr R.M., president, ACT and Southern NSW Branch, Australian Institute of Agricultural Science and Technology; member, editorial board and reviewer: *Papua New Guinea Coffee*; *Papua New Guinea Journal of Agriculture, Forestry and Fisheries*; *Harvest*; Scientific editor, *ACIAR Proceedings No 99*; business partner and consultant, Dames and Moore Pty Ltd, Adelaide; adviser, Australian agency for international development, Canberra; contributor, ABC Radio National and Radio Australia (English and Tok Pisin).

GIBSON, Prof. K.D., council member, Institute of Australian Geographers; assessor, Marsden Research Fund; member, editorial boards: *Environment and Planning D: Society and Space*; *Geoforum*; *New Zealand Geographer*; assessor, Australian Research Council; workshop facilitator: training workshop on community economies for Unlad Kabayan Migrant Services Inc. Manila and Asian Migrant Centre, Hong Kong, Cagayan de Oro, Mindinao, Philippines; trainings for

agricultural extension officers employed by the Oil Palm Industry Corporation at Hoskins and Popondetta, Papua New Guinea.

McKAY, Dr D., member, Institute of Australian Geographers, Asia-Pacific migration research network; reviewer: *Environment and Planning D: Society and Space*, *Journal of Intercultural Studies*, *Communal/Plural*; APRU Fellows program, UCLA and Beijing University; international convention of Asia scholars, Freie Universität, Berlin; migration and the 'Asian Family' in a globalising world, National University of Singapore.

PRETES, Mr M., member, editorial board, *The Northern Review*; referee: *Annals of Tourism Research*; *The Northern Review*; *World Development*; interviews, *ABC Television*.

### Department of Linguistics

ARKA, Dr I.W., member, editorial board, *Linguistika*; member, organising committee, annual conference of the Australian Linguistic Society; guest speaker, Australia-Indonesia Association.

BOWDEN, Dr J., organiser, workshop, Leiden, Netherlands; co-organiser, workshop, Moluccam Museum, Utrecht, Netherlands; member, organising committee, annual conference of the Australian Linguistic Society; presenter, Fifth international symposium on Malay and Indonesian linguistics, Max Planck Institute for Evolutionary Anthropology, Leipzig; interview, ABC radio.

PAWLEY, Prof. A., member, editorial boards: *Oceanic Linguistics*; *Typological Studies in Language*, *Terra Lingua*; reviewer: *Language*, *Australian Journal of Linguistics*; Oxford University Press; principal investigator, Kalam people of Papua New Guinea project, funded by Exgenix Operations Ltd, Melbourne; external adviser, Department of Literature and Language, University of the South Pacific; chair, steering committee, international conference on Austronesian linguistics; adviser, Summer Institute of Linguistics; Max Planck Institute for Evolutionary Anthropology, Leipzig; Free University of Berlin; at Keil University; at Bochum University; Max Planck Institute for Psycholinguistics, Nijmegen.

ROSS, Dr M., vice-president, Australian Linguistic Society; associate editor, *Oceanic Linguistics*; member, editorial board, *Asian Linguistics Series*; adviser, Summer Institute of Linguistics; chief organiser, annual conference of the Australian Linguistic Society.

TRYON, Dr D., member, Pacific Islands senior visiting fellowship scheme advisory committee, Department of Foreign Affairs and Trade; organiser, fieldworkers' workshop (hosted by the Vanuatu National Museum), Port Vila, Vanuatu.

### Contemporary China Centre

KIPNIS, Dr A., co-organiser, biennial conference of the Chinese Studies Association of Australia, ANU.

UNGER, Prof. J., research Fellow, Asia Research Centre, Murdoch University; member, The Society for Comparative Research; public officer, China Studies Association of Australia; editor: *The China Journal*; member, editorial boards: *Chinese Sociology and Anthropology*, *China Information*, *Critical Asian Studies*; *Chinese Perspectives (Perspectives Chinoises)*; *Kaifang Shidai (Open Times)*; *Studies in Contemporary China*, book series Oxford University Press; editor, *Contemporary China Books* (M E Sharpe publishers); member, publications committee, Contemporary China Institute, School of Oriental and African Studies, University of London; adviser and consultant, AusAID; organiser, biennial conference, Chinese Studies Association of Australia, ANU.

VAN NESS, Dr P., organiser, panel presentations, International Studies Association meeting, Hong Kong; American Political Science Association; International Studies Association, U.S.; The Biennial Conference of the Chinese Studies Association of Australia, ANU.

### Gender Relations Centre

BYFORD, Dr J., member, International Women's Development Agency; UNIFEM, ACT branch; Public Health Association; American Anthropological Association; Australian Anthropological Society; Australian College of Midwives Inc.; International Federation of Midwives; Association for the Improvement in Maternity Services; consultant, Australian Volunteers International; consultant, Oxfam Community Aid Abroad; member, Sustainable Planning Advisory Committee for Placer Dome, Misima Mines Ltd, PNG; Adjunct appointment, University of Canberra; guest lecturer, Postgraduate Diploma in Midwifery, University of Canberra; supervision of Masters of Public Health student from University of Cape Town, South Africa; member, advisory committee for the development of the Bachelor of Midwifery between University of Technology, Sydney, Southern Cross University, and University of Canberra.

EVES, Dr R., presenter, Australian Anthropological Society annual conference.

JOLLY, Prof. M., member, Australian Anthropological Society; American Anthropological Association; fellow, Academy of the Social Sciences in Australia (ASSA); Australian Anthropological Society (AAS): co-organiser of panel on past survey and future trends in graduate education in Australia; member, editorial board, *Journal of Pacific History*, referee: *Journal of Pacific History*; *American Ethnologist*; *International Journal of Feminist Politics*; *East Asian History*; *Medical Anthropology Quarterly*; referee, manuscripts for Cornell University Press, University of Minnesota Press, Harwood; advisory board member, State, Society and Governance in Melanesia Project, conjointly funded by ANU, Department of Foreign Affairs and Trade, and AusAID; consultant on ANUTECH contract with AusAID on gender and development; member, international organising com-

mittee, belief systems and the place of desire conference, University of Melbourne; American Anthropological Association, Centenary Meetings, Washington DC; discussant of papers, Australian Anthropological Society conference, La Trobe University; interview with and provision of materials to *TIME* Magazine; Co-editing volume with Prof. B Hindess, RSSS, from Annual Symposium and Cunningham Lecture 2000 on *Thinking Peace, Making Peace*.

LUKERE, Dr V., member, Pacific History Association; referee, *Medical Anthropology*; member, editorial board, *Journal of Interdisciplinary Studies*; convener, HIV/AIDS panel, Australian Anthropological Society annual conference, La Trobe University.

### Transformation of Communist Systems Project

MILLER, Dr R.F., foreign member, editorial board, *Filozofija I Društvo (Philosophy and Society)* a serial publication of the Institute of Philosophy and Social Theory of China, Belgrade; interpreter for journalists, House Committee on Foreign Affairs, Defence and Human Rights, Parliament House, Canberra; lecture, invited speaker series, Institute of Philosophy and Social Theory, Belgrade; participant, 6<sup>th</sup> International Congress on AIDS in Asia and the Pacific (ICAAP), Melbourne; presenter, Australian Anthropological Society annual conference, La Trobe University; interview, ABC Radio.

### Non-divisional Groups

#### Director's Section

FOX, Prof. J., membership committee, Academy of the Social Sciences of Australia; UN accredited international observer with the Carter Center for the East Timorese constituent assembly elections; member, editorial board, *Anthropological Forum*, *Sojourn Ethnos* and *Paid-euma*; speaker: annual conference of Netherlands heads of mission in Southeast Asia and the Pacific; Australia-Indonesia Business Council; participant: AusAID workshop on Indonesian development; interdepartmental meeting on traditional Indonesian fishermen, Agriculture, Fisheries and Forestry — Australia; various interviews, ABC and BBC radio and ABC, SBS and Prime television; member, Review Committee, Sociology Department, National University of Singapore; participant, InterAction Council expert group meeting, Sejong Research Institute, Seoul, South Korea; participant, Council of Asia Europe Co-operation, Task Force Meeting, Sanur, Bali; participant, International Symposium on Austronesian Cultures, Academia Sinica, Taipei.

#### Internet Publications Bureau

CIOLEK, Dr T.M., editor, *Asian Studies WWW Monitor* e-journal (ISSN 1323-9368); <[coombs.anu.edu.au/asia-www-monitor.html](http://coombs.anu.edu.au/asia-www-monitor.html)>; editor, *Pacific Studies WWW Monitor: Electronic Journal* (ISSN 1443-8976); <[coombs.anu.edu.au/pacific-www-monitor.html](http://coombs.anu.edu.au/pacific-www-monitor.html)>; spe-

cial adviser, *The Korean-American Science and Technology News* (KASTN), e-journal, Duke University, USA; ECAI: towards an electronic cultural atlas: e-publishing and knowledge management in the humanities, Sydney University, Sydney; internet political economy forum 2001: internet and development in Asia, The National University of Singapore, Singapore.

### **Pacific Manuscripts Bureau**

Archival assistance: National Archives of Australia; Yap State Archives and the Yap State Legislature, Federated States of Micronesia; Cook Islands National Archives, Ministry of Cultural Development; Air New Zealand; Solomon Islands National Union of Workers; Kiribati Overseas Seamen's Union; Secretariat of the Pacific Community, Suva.

MAIDMENT, Mr E., executive committee member, Australian Society for the Study of Labour History, Canberra branch; editor, 'International Notes', *Archives and Manuscripts* (the journal of the Australian Society of Archivists); co-convener, Pacific Islands sessions, 7<sup>th</sup> national labour history conference, Canberra; 9<sup>th</sup> biennial conference of the Pacific regional branch of the international council on archives, Koror, Palau; delegate, ACT Trades and Labour Council executive committee.

### **Research Management in Asia-Pacific Program**

FILER, Dr C., member, Association of Social Anthropologists; Australian Anthropological Society; member, Assurance Group for the Mining, Minerals and Sustainable Development Project, sponsored by World Business Council for Sustainable Development, implemented by International Institute for Environment and Development; preparation of tender, with Project Design and Management Ltd, for World Bank funded consultancy for the Department of Mining, Papua New Guinea; project with Environment Australia, Conservation International, and the United Nations Development Program; consultant, Aurora Gold Ltd, for Morobe Gold Project, Papua New Guinea; organiser, NGOs Eye Mining Companies in Indonesia and Papua New Guinea Symposium, ANU; social impact planning workshop, University of Wollongong; panel discussant, American Anthropological Association conference, Washington; chair, managing mineral wealth workshop, organised by the Mining, Minerals and Sustainable Development Project, London; examiner, PhD thesis Wageningen Agricultural University, The Netherlands.

McWILLIAM, Dr A., member, Royal Institute for Linguistics and Anthropology (KITLV); fellow, Australian Anthropological Society; reviewer, Asia Pacific Press; technical adviser, AusAID; teamleader, Project Identification Mission — Sulawesi Tenggara and Flores (Indonesia); principal consultant, Indonesian Water Supply and Sanitation Sector Study (AusAID); AusAID-GRM: East Timor Water Supply and Sanitation Project design appraisal; GRM (Industry):

preparation of Indigenous Land Corporation review — terms of reference; consultant, Northern Land Council on Aboriginal Land Disputes and Native Title procedures; examiner, PhD and MA theses, University of Melbourne.

MAJID-COOKE, Dr F., panel organiser, the second international conference of Asian Scholars, Freie University, Berlin.

### **State, Society and Governance in Melanesia Project**

DINNEN, Dr S., member, Australian committee, Council for Security Cooperation in the Asia-Pacific (AUS-CSCAP); associate of the Centre for International Strategic Analysis, Perth, WA; consultant: Papua New Guinea Law and Justice Sector Working Group; Papua New Guinea ombudsman commission; adviser, Radio Australia 13-part series on governance in the Pacific Islands; guest lecturer, Australian Defence Force Academy; invited speaker, Australian Council for overseas aid; 15<sup>th</sup> meeting of Australian committee of the Council for security cooperation in the Asia-Pacific (AUS-CSCAP), Canberra; Australasian Law Teachers Association conference, Port Vila, Vanuatu; examiner, MA thesis, University of Wollongong; seminar on Solomon Islands Conflict, University of Heidelberg.

DOUGLAS, B., reviewer, *Comparative Studies in Society and History*; briefed Roger Plant Asian Development Bank consultant; participant, SSGM project dialogue with DFAT on the Pacific; SSGM project briefing of the UNDP governance for sustainable human development program in the Pacific; Association for Social Anthropology in Oceania annual meeting, Miami, Florida; 70th Anglo-American conference of historians, Institute of Historical Research, London; seminars at Geisel Library, University of California, San Diego, USA, and Institut für Ethnologie, Universität Heidelberg, Heidelberg, Germany; seminar at Département d'Anthropologie, Université de Montpellier 3, Montpellier, France; seminar at Frobenius-Institut, Universität Frankfurt, Frankfurt am Main, Germany.

HEGARTY, Mr D., member, Australian committee, Council for Security Cooperation in the Asia-Pacific (AUS-CSCAP); associate, Centre for International Strategic Analysis, Perth, WA; led international peace monitoring team, Solomon Islands; invited speaker, Australia/South Pacific business council annual meeting, Sydney; invited panellist on Australia's regional strategic outlook, Australian Defence Force, Canberra; island state security conference, Asia-Pacific Center for Security Studies, Honolulu, USA; contributor, *Time*; interviews, *New Zealand Herald*, Solomon Islands Broadcasting Corporation.

REGAN, Mr A.J., principal constitutional adviser to Bougainville parties, Bougainville peace process; adviser, East Timor Constituent Assembly; presented papers at conference, Cambridge, UK; Conciliation Resources,

London; initiative on conflict resolution and ethnicity (INCORE), University of Belfast.

SSGM Project members, convener and administrator — ongoing liaison with AusAID and DFAT; organised a series of six in-house seminars for AusAID's PNG Branch; SSGM Associates involved in consultancy work for UNDP; collaboration strengthened with Vanuatu Cultural Centre, Solomon Islands College of Higher Education.

SSGM Project — Solomon Islands Workshop — building peace and stability, ANU; Governing for the Future: Young People and Vanuatu's Governance Agenda, with Vanuatu Cultural Centre, University of the South Pacific, Vanuatu.

### **Strategic and Defence Studies Centre**

BALL, Prof. D., member, Council of the International Institute for Strategic Studies (IISS); co-chair: Council for Security Cooperation in the Asia Pacific (CSCAP); Australian Committee of CSCAP; presentations, Australian universities and research institutes; talks for NGOs, such as keynote speech, 'Refugees along the Thailand-Burma Border', ACT Refugee Week; extensive interviews with national and international media.

DUPONT, Mr A., member, International Institute for Strategic Studies, London; research associate, Centre for International Strategic Analysis, Perth; higher education representative, ACT accreditation and registration council; reviewer: Cambridge University Press; Routledge; Allen and Unwin; *Australian Journal of International Affairs*; *Asian Survey*; special adviser, Ministry for Foreign Affairs, East Timor; consultant: AusAID; National Crime Authority; Department of Defence; keynote speaker, 15<sup>th</sup> Asia-Pacific Roundtable, Kuala Lumpur; attended conference, A Vision for the 21<sup>st</sup> Century, Sydney, at invitation of Foreign Minister and Minister for Trade; contributor/interviewee, various Australian and international newspapers, journals, radio and TV.

HORNER, Prof. D., member, Australian Army military history projects committee; head, Australian Army's Land Warfare Studies Centre.

HUISKEN, Dr R., consultant, Department of Defence; CSCAP CSBM Working Group, Washington DC; contributor/interviewee, various Australian and international TV and newspapers.

### **Research School of Physical Sciences and Engineering**

Dr Ken BALDWIN (Laser Physics Centre) with Dr Aidan BYRNE and Dr Nanda DASGUPTA (Nuclear Physics) visited 10 ACT Secondary Colleges under the Australian Institute of Physics 'Adopt-a-Physicist' program.

The Plasma Research Laboratory hosted a visit by students attending the Australian Industrial Development Corporation Forum.

The Plasma Research Laboratory hosted a visit and conducted discussions with engineers from The Australian Nuclear Science and Technical Organisation.

Peter ALEXANDER, Orson SUTHERLAND, James CONSTABLE and Rod BOSWELL, organisers, OZeCulture conference, Melbourne and demonstrated the WEDGE.

Peter ALEXANDER and Rod BOSWELL (Plasma Research Laboratory) demonstrated the WEDGE at the Apple Users Consortium, Academic and Developers Conference 2001, Townsville.

Dr Tim THOMPSON (Public Relations Unit), conducted tours of the School by Year 11 students under the National Youth Science Forum with help from the following staff and students: Dr Vince CRAIG (Applied Mathematics); Dr Maarten VOS (Atomic and Molecular Physics Laboratories); Dr Mladen PETRAVIC, Dr Jenny WONG-LEUNG, Mr David BRETT, Mr Sanju DEENAPANRAY and Mrs Lan FU (Electronic Materials Engineering); Dr Aidan BYRNE, Dr Nanda DASGUPTA and Dr Greg LANE (Nuclear Physics); and Prof. Jeff HARRIS (Plasma Research Laboratory).

### **Director's Unit**

Prof. J.D. LOVE, talks on photonics: National Science Festival, Canberra Convention Centre; Curtin University of Technology, Perth; Gwangju Institute of Science and Technology, Korea; and during the Siemens Science & Engineering Experience; member, adjudication panel, Lidcombe TAFE judging student presentations.

### **Nuclear Physics**

Dr Aidan BYRNE (NP), presenter, Heavy-Ion Facility, to Narrabundah College; presented a talk to Wanniasa School; supervised student project for the Narrabundah College IB program.

Dr Keith FIFIELD, organised and presented a 3-hour laboratory session on accelerator mass spectrometry for the Australian Defence Force Academy's (ADFA) Environmental Physics course; also guest lecture on the nuclear fuel cycle as part of the ADFA 3<sup>rd</sup> year Nuclear and Particle Physics course.

Dr Andrew STUCHBERY, gave a seminar at University College ADFA, UNSW.

### **Theoretical Physics**

Dr S. KUYUCAK gave a 12-lecture course on ion-channels in Okazaki National Research Institutes, Japan.

## Research School of Social Sciences

### Australian Dictionary of Biography

Dr G. CLEMENTS, committee member, Canberra One Parent Family Support Group.

Ms B. DAWSON, president, Schoolhouse Museum Board of Management

Prof. J. MOLONY, president, Independent Community for Refugees, Australia; trustee, Eureka Stockade Memorial Trust; adjunct professor, Australian Catholic University.

Prof. J. RITCHIE, member, executive committee Academy of the Social Sciences in Australia; member, advisory committee, *Australian National Dictionary Centre*.

### Centre for Immigration and Multicultural Studies

Dr J.JUPP, adjunct professor RMIT University; international member, Refugee Studies Centre, York University, Canada; member, Canberra Regional Committee on Migration, Planning and Settlement, Department of Immigration and Multicultural Affairs; advisory board, European Studies Centre, University of New South Wales; member, International Relations Committee, Academy of the Social Sciences in Australia; member, Asia Pacific Migration Research Network of the UNESCO-MOST program; executive committee member of the Politics and Ethnicity Committee of the International Political Science Association; committee member, Friends of Peace in Sri Lanka; lecturer in the Chinese student law program, University of Canberra; member, Policy Research Network, National Institute for Governance.

### Centre for Tax Systems Integrity

Dr E. AHMED, member, reference group, bullying & violence in school, ACT Family Planning (HealthPACT).

Dr V. BRAITHWAITE, chair, ethics committee, Australian Institute of Criminology; member, cash economy task force, Australian Taxation Office; plenary paper on crime, risk and compliance presented at the Australian Institute of Criminology's 4th National Outlook Symposium on Crime in Australia: New Crimes or New Responses? Canberra.

Dr B. MORRISON, initiator, Safe School/Safe Community EXPO, funded by Federal Government through FACS; member, International Children's Week Committee; member, Gender and Violence Educators (GAVE) Coalition; member, reference group, bullying & violence in school, ACT Family Planning (HealthPACT); adviser, Outward Bound Australia; public address at the Canadian High Commission on Regulating Safe Schools/Safe Communities.

## Demography and Sociology Program

Dr M.J. ABBASI-SHAVAZI, member, postgraduate committee, Faculty of Social Sciences, University of Tehran; social sciences committee, Deputy for Research, University of Tehran; secretary, Population Association of Iran.

Dr H. BOOTH, consultant, Syngenta Crop Protection P/L; council member, Australian Population Association.

Dr T.H. HULL, member, board of trustees, ICDDRDB: Centre for Health and Population Research, Dhaka, Bangladesh; consultant, AusAID activities in Indonesia.

Prof. G.W. JONES, honorary treasurer and member, executive committee, Academy of the Social Sciences in Australia; international organising committee, South-East Asian Regional Population Conference, sponsored by the International Union for the Scientific Study of Population, to be held in Bangkok; nominations committee, International Union for the Scientific Study of Population; presenter, the Sultan S. Hashmi Memorial Lecture at the Pakistan Society of Development Economists Conference, Islamabad.

Dr S. KHOO, member, ethics committee, Australian Institute of Health and Welfare; reference group, General Social Survey, Australian Bureau of Statistics.

Prof. P. McDONALD, keynote speaker on Sydney's population future for Sustainable Population Australia; on Canberra's future population for the A.C.T. Government and the University of the Third Age, Canberra; methodological advice, comment on forthcoming publications, media commentary, the Australian Bureau of Statistics; comment on Defence Personnel Environmental Scan, the Department of Defence; contract work and policy discussion, the Department of Immigration and Multicultural Affairs; addresses on population futures for Australia, the Australian Public Service Futures Group and the Australian Public Service Band 3 Officers Policy Discussion Group; Commonwealth-State Population Workshop; chair, working group on low fertility, organisation of conference and conference sessions, the International Union for the Scientific Study of Population; consultation in Washington on future fertility rates in the United States, the U.S. Bureau of the Census; member, board of trustees and chair, research program committee, International Centre for Population and Health; external users committee, the Housing, Incomes and Labour Dynamics Australia Survey; training, Australian Defence College; vice president, Relationships Australia, Canberra and region; chair, panel A committee, Academy of the Social Sciences of Australia; paper on low fertility, Population Reference Bureau; article on housing projections for magazine, *National Shelter*.

Dr T. SCHINDLMAYR, consultant, Defence Personnel Environment Scan 2020; principal researcher, Directorate of Strategic Personnel Planning and Re-

search, Australian Defence Organization; facilitator, Regional Seminar on Population and Development, Secretariat of the Pacific Community.

### **Development Studies Network**

Dr P. THOMAS, technical adviser to the Department for International Development, United Kingdom; technical adviser to AusAID on the Papua New Guinea Women's and Children's Health Project; member, technical advisory group for AusAID's Pacific Children's Program; member, technical advisory group for AusAID's Pacific Non Communicable Diseases Program; member, communication research advisory group for the Geneva Centre for Humanitarian Demining; keynote speaker, Department of Health and Aged Care and World Health Organisation workshop, Sydney.

Economics Program (*incorporating the Centre for Economic Policy Research and the Social Policy Evaluation, Analysis and Research centre*)

NB: As much of the output of the Economics Program, CEPR and SPEAR is performed across the boundaries of each area, their services have been combined in this section.

Dr D. COBB-CLARK, consultant to Department of Family and Community Services; member, Ministerial Advisory Council on Government Schooling; member, reference committee, Household Income and Labour Dynamics in Australia (HILDA) panel survey, University of Melbourne.

Dr Denise DOIRON, adviser, UNSW Social Policy Research Centre, ABS and other government departments; co-organiser, Labour Econometrics Workshop, UNSW; invited discussant, Department of Family and Community Services workshop; invited Discussant, Labour Econometrics Workshop, UNSW; invited discussant, Unemployment Conference, Melbourne Institute of Applied Economic and Social Research; thesis examiner, University of Melbourne PhD candidate; work on Melbourne Institute Tax and Transfer Simulator using the Melbourne Institute labour supply model based on micro-simulations.

Prof. R.G. GREGORY, consultant, NSW Board of Vocational Education and Training; consultant, AusAid, Phase 2 for the China Capacity Building Program; member, Economic Statistics User Group, Australian Bureau of Statistics; member, SPIRT Project Steering Committee, Victoria University of Technology; invited speaker, Victoria University of Wellington; panel member, Inaugural National Women's Conference hosted by the Commonwealth Office of the Status of Women; invited discussant, Conference on Unemployment – MIAESR; invited discussant, PhD Conference in Economics and Business, University of Western Australia; invited speaker, NSW Dept of Education and Training; external member, Review Committee, Review of the

School of Economics, University of Queensland; plenary lecture, European Society of Population Economics 15th Annual Conference, Athens; invited speaker, Society of Labor Economists, Annual Meetings, Austin, Texas; invited speaker, Symposium Integration Pressures, Lessons from around the World, Harvard University; invited seminar speaker, University of Melbourne and Monash University; invited speaker, APESMA Industrial Staff Conference, Melbourne.

Dr M. KEATING, chair, Independent Review of Project Development Approval System in Western Australia.

Dr J. KELLEY, issues in Education Policy with M.D.R. Evans, Public Economics Forum (sponsored by the University of Melbourne), Canberra; Public Attitudes to Economic Reform, Business Economics Forum (sponsored by the University of Melbourne), Melbourne.

Prof. A.R. PAGAN, invited speaker, Korean International Economic Association; chair, Selection Committee, University of Sydney.

Dr R. VAITHIANATHAN, member, Interim Advisory Committee on the Recognition of Medical Specialities, The Australian Medical Council.

### **Centre for Economic Policy Research**

Dr Bob BREUNIG, academic adviser to Department of Family and Community Services, Australia (FACS), for development of Pilot Surveys on Welfare Reform; academic adviser to Department of Family and Community Services, Australia (FACS), on general econometric modelling issues; invited course giver: 3 day course in Panel Data Techniques for government and non-government users (organised through the Social Policy and Economic Research, (SPEAR) Centre).

Prof. Bruce CHAPMAN, adjunct professor, Melbourne Institute of Applied Economic and Social Research, University of Melbourne; adviser/consultant, National Centre for Vocational Education Research, with Dr Louise Watson, UCan, and Ms Leesa Whelan, Victoria University of Technology; adviser/consultant, Department of Health and Community Services, with Dr Chris Ryan; chair, reference committee, Household Income and Labour Dynamics Australian (HILDA) Panel Survey, Melbourne Institute, University of Melbourne; commentator for Department of Family and Community Services, Canberra; consultant, UK Department for International Development; consultant, Department of Employment, Workplace Relations and Small Business, with Dr B. Hunter and Dr M Gray, ANU; invited addresses, National Centre for Vocational Education and Training, presented to the CEPR/University of Canberra Workshop; invited address, National Press Club, Canberra; invited addresses, University of Melbourne's Institute for Applied Economic and Social Research,

Sydney and Canberra; invited address, University of Nottingham, at the Future Funding Options for Higher Education conference, UK; invited expert witness, Australian Parliament, Senate Inquiry on Higher Education Financing, Canberra; invited member, International Forum of Labour Economists; invited presentation, Economics Society of Australia, of the 2001 Distinguished Fellow Award to Prof. Robert Gregory, 39th Annual Conference of Australian Economists, University of Western Australia, Perth; member, Labour Market Data Advisory Committee, Australian Bureau of Statistics; report for Department of Health and Aged Care, Canberra; research associate, National Institute of Labour Studies Flinders University; research associate, Centre for Labour Market Research (a consortium of Curtin University, Edith Cowan University, Murdoch University and the University of Western Australia); service to the Society of Australian Labour Economists, established the Society with Prof. Peter Kenyon, Curtin University of Technology; elected vice president of the Society.

### History Program

Dr G. BOWEN, treasurer, Australian and New Zealand American Studies Association; member, organising committee, Australians in Antarctica Forum.

Dr G. BRISCOE, member, History committee, Institute of Aboriginal and Torres Strait Islander Studies.

Dr T. GRIFFITHS, member: board of the Australian Science and Technology Heritage Centre; scientific advisory board, Earthwatch Australia; member, organising committee, Australians in Antarctica Forum; member of the Joint Academies Committee on Sustainability.

Prof. B.W. HIGMAN, chair, organising committee, 4th Biennial Conference of the Australian Association for Caribbean Studies; president, Australian Association for Caribbean Studies; member, Elsa Goveia Prize committee, Association of Caribbean Historians.

J. THOMPSON, expert examiner for the appraisal of applications for the export of Australian cultural property under the terms of the Australian Government's Protection of Moveable Cultural Heritage Act administered by the Department of Communications, the Arts and Information Technology; chair, board of *Muse* Inc. Canberra's independent arts monthly magazine.

### Law Program

Prof. J. BRAITHWAITE, advisory council, International Institute for Restorative Justice; advisory committee, Centre for the Analysis of Risk and Regulation, London School of Economics; Victoria University Law School; Institute of Criminology, University of Sydney; Board of Trustees, Law and Society Association; council member, American Society of Criminology; consultant, NSW Attorney-General's; director, Foundation for Effective Markets and

Governance; honorary consultant fellow, World Innovation Foundation; honorary consultant, Australian Law Reform Commission; International Affairs Committee, Law and Society Association; Scientific Advisory Board, Drug Use Monitoring in Australia.

Prof. P. CANE, secretary and treasurer, Australian Society of Legal Philosophy; non-UK adviser, Research Assessment Exercise (RAE 2001); Legal Research Foundation visiting fellow, University of Auckland; Arhens Visiting Professor of Tort Law, Washburn University.

Dr S. COURVILLE, consultant, development of socio-economic indicators of coffee production and processing for integration into ISO 14001 Certified Management Systems, Institute for Sustainable Commodities, the Netherlands; member, advisory committee, Australian Environmental Labelling Association.

Ms I. MAHER, member, editorial board, *Irish Law Times*

Mr D. ROCHE, convener, NSW Youth Justice Conferences.

Mr C. SCOTT, rapporteur to members of the European Parliament and wrote consultation document for the European Internet Foundation (co-chairs Pia-Noora Kauppi MEP, Nick Clegg MEP and Neena Gill MEP) (Brussels, European Internet Foundation); lead consultant for the OECD and drafted a report; led a research team under contract to a number of UK government departments (Cabinet Office, Department of Trade and Industry, Small Business Service) and wrote the final Research Report for the Cabinet Office, Department of Trade and Industry and Small Business Services (London, Cabinet Office, 2001); legal consultant to Eurostrategy Consultants Limited in their contract with the European Commission to carry out a study on Access to Third Generation Mobile Networks in the EU.

Prof. C. SHEARING, seconded to the Centre for International Studies and the Department of Political Science at the University of Toronto; Professor Extraordinary at the University of the Western Cape.

Prof. J. STAPLETON, academic associate, Fountain Court Chambers, The Temple, London; adviser, American Law Institute, Restatement of the Law (Torts): General Principles; consultant, I&L Securities; National Blood Authority (UK); ESO Class Action Joint Claims Syndicate; Professor of Comparative Private Law, European University Institute; Statutory Visiting Professor in Law, University of Oxford.; visiting academic speaker, Oslo University; Legal Research Foundation Visiting Fellow, University of Auckland.

Mr E. WILLHEIM, conduct course on 'Current Legal Issues' for University of the Third Age, including lectures; conduct a review under s203FB of the *Native Title Act 1993* for the Aboriginal and Torres Strait Islander Commission; pro bono assistance to a non-



government human rights organisation in relation to possible intervention as *amicus curiae* in the High Court in the *Tampa* proceedings.

Prof. L.R. ZINES, expert adviser to ACT Federation Centenary Committee; member, centenary national advisory panel of the Founding Documents Website project managed by the National Archives; member, Advisory Board of the British Institute of International and Comparative Law and the Board's Commonwealth Law Section; member, advisory committee on the reference on the Judiciary Act of the Australian Law Reform Commission.

### **Philosophy Program**

Prof. Martin DAVIES, adjunct professor, Macquarie Centre for Cognitive Science; working in collaboration with Prof. Max Coltheart, (Research Affiliate with RISS), Dr Robyn Langdon and Dr Nora Breen on the Belief Formation Project.

Prof. Michael SMITH, member, Executive of the Australian Society for Legal Philosophy.

### **Political Science Program**

Dr I. MARSH, director, Australian Business Foundation; member, Forum and Indigenous Leaders Committees, Foundation for Young Australians.

Dr M. SAWER, member, international consultative committee, Research Centre on Women and Politics, University of Ottawa; public affairs committee, Academy of the Social Sciences in Australia; political science accreditation panel, Board of Senior Secondary Studies, ACT; executive, Research Committee 19 (Sex Roles and Politics), International Political Science Association; social responsibility committee, YWCA Australia; steering committee, Australian Women's Constitutional Network; convener, Pamela Denoon Lecture Committee.

Dr J. UHR, adviser, Victorian Royal Commission on Metropolitan Ambulance Service; Constitutional Commission, Government of Victoria; adviser on ethics, AusIndustry, Department of Industry, Science and Resources; invited witness, Senate Finance and Public Administration Committee; consultant, Public Service Reform, ACT Legislative Assembly; editorial committee, centenary of federation history project, Parliamentary Library; centenary history, Australian National Audit Office.

### **Social and Political Theory Program**

Prof. H.G. BRENNAN, president, Relationships Australia, Canberra/region; vice-president, Relationships Australia, nationally; consultant, Anglican Primate's Committee on Tax Reform

Prof. John DRYZEK, keynote speaker, Conference on Deliberation and Decision: Constitutional Economics

Meets Discourse Ethics, Centre for Global Ethics, Wittenberg, Germany; keynote speaker, New Zealand Political Studies Association conference; guest lecturer, Australian Defence College; gave seminars at Keele University and University of Birmingham (both UK); presented papers at European Consortium for Political Research Joint Sessions, Grenoble, France, American Political Science Association annual conference, San Francisco.

Prof. R.E. GOODIN, chair, Harrison Prize Committee, for the best article published in *Political Studies* in the previous calendar year, 2001; Power & Democracy Project, Oslo, 2001; executive committee (Australian Representative), Society for the Advancement of Socio-Economics; member, Founding Board, Committee on the Political Economy of the Good Society (PEGS)

Prof. Philip PETTIT, member, advisory board, Law and Philosophy Center, Columbia University, New York; member, Panel C Committee, Academy of Social Sciences in Australia 1997-; member, advisory board, The McDonnell Project in Philosophy and the Neurosciences, Simon Fraser University, Vancouver; member, International Advisory Committee for Ford Foundation Conference on Political Philosophy and Political Reform Conference in Beijing; member, Board of Academic Advisors, Freedom Project, John Templeton Foundation 1999-; member, panel of selectors, Imre Lakatos Award, 2000; member, non-UK based adviser for Philosophy in the UK Higher Education 2001 Research Assessment Exercise; member, Social Sciences and Humanities Library Advisory Committee, ANU, 2001-02; external assessor for chair appointment, Bristol University 2001.

Dr Gerry MACKIE, volunteer consultant, Tostan, a non-governmental organisation devoted to basic education and development in Thies, Senegal (pioneer in abandonment of female genital cutting).

### **Research Evaluation and Policy Project**

Ms L. BUTLER, member, AVCC expert group to provide advice on the 2000 audit of publications.

Dr J. GLÄSER, committee member, German "Gesellschaft für Wissenschafts- und Technikforschung"

## **The Faculties**

### **Faculty of Arts**

#### **Australian National Dictionary Centre**

Dr MOORE, member, steering committee for the national place names project; committee member, Australian Lexicographical Association.

### Centre for Arab & Islamic Studies

Prof. SAIKAL, a statement to the Australian Parliament's Public Hearing on *Australia's Relations with the Middle East*; formal and informal consultant to Government and non-governmental bodies, including the Department of Immigration and Multicultural Affairs, the Refugee Review Tribunal, the Australian Federal Police, Parliamentary staff members and legal firms.

Dr KOEPKE, advice to UNESCO and Netherlands Government's Prince Klaus Fund on cultural practices in Afghanistan.

### School of Archaeology & Anthropology

Dr ATTENBOROUGH, chair CAR New Initiatives Committee; member of appointment committee NCEPH member editorial board, *Journal of Physiological Anthropology*.

Dr GROVES, consultant to Australian Museum's revision of *Tracks Through Time* exhibition.

Dr HISCOCK, advice to Northern Land Council re Darwin Native Title claim; chair, Human Research Ethics Committee; editorial board member, *Paleoanthropology and Archaeology in Oceania*.

Dr LYON, editorial board member, *Health: An Interdisciplinary Journal for the Study of Health, Illness and Medicine*.

Prof. MERLAN, member, National Advisory Board of Centre for Cross-Cultural Research; member, Australian Academy of the Humanities; member editorial board, *Oceania* and *Ethnos*; expert witness' statement regarding anthropological use of concepts of tradition and change, commissioned by legal advisers to the Northern Land Council, Darwin, NT.

Dr PETERSON, member, Honorary Degrees Committee; member, editorial board *Australian Aboriginal Studies*; adviser to the Torres Strait Regional Authority.

Prof. SPRIGGS, research associate, Bernice P. Bishop Museum, Honolulu, Hawaii.

### School of Humanities

Prof. CAMPBELL, member, ACT Law Reform Commission.

Dr CLARK, organiser of seminar co-hosted by Manning Clark House and the Australia Institute.

Ms CLELLAND conducted acting workshops for Canberra Repertory fringe and a judge for Rock Eisteddfod 2001 and The Globe Society Shakespeare Competition.

Mr CULLUM, member of Media Studies Panel, ACT Secondary Colleges; responsible for Creative Writing Fellowship with ADFA and University of Canberra.

Prof. CLARK served on the Council of the Australian Archaeological Institute in Athens; honorary secretary, Australian Academy of the Humanities.

Prof. CURTHOYS, board member, Senate Dictionary of Biography; member, Academy of Social Sciences of Australia Workshop Committee; member, executive committee, International Australian Studies Association; editorial board member, *Aboriginal History*, *Australian Feminist Studies*, *Labour History*, *UTS Review*, *Feminist Review* (UK-Corresponding Editor), *Public History Review*, *Journal of Australian Studies* and *Hecate*.

Dr DESLIPPE, ANU representative, History Panel, ACT Board of Senior Secondary Studies.

Prof. GREENHALGH, cooperation with the National Gallery of Australia regarding the Gallery's website; and with the School of Design at the University of Canberra over use of databases for electronic teaching and learning.

Dr HAINES, editorial board member of *The Critical Review*.

Dr HIGGINS, ANU representative on the ACT English panel, Board of Secondary School Studies.

Dr HYSLOP, member of Editorial Board of *Health and History*; ACT correspondent for *Australian Historical Studies*; and Public Officer for the Australian Historical Association Inc.

Dr LAMB, teacher and course developer at Narrabundah College; course developer for Postgraduate Teaching Certificate in Religion and Philosophy for St Mark's National Theological Centre.

Dr LO, international vice-chair and secretary, Association for Commonwealth Language and Literature Studies (ACLALS), co-convenor of the 12<sup>th</sup> ACLALS Triennial conference; organising committee member, Australian Association for Caribbean Studies Conference, advisory board member, Centre for the Studies of the Chinese Southern Diaspora and the Asian-Australian Arts Centre.

Dr MATTHEWS continued her involvement with the Beryl Henderson Foundation, the Pamela Denoon Foundation and the Women's Archives Project.

Prof. McBRYDE, member, Editorial Board of *Aboriginal History*; member, Board of Management of Uluru Kata Tjuta National Park in Central Australia; patron of the Richman River Historical Society in Northern NSW.

Dr MOLITERNO, member, Scholarship Committee, Australian Foundation for Studies in Italy; member, Management Committee for the Australasian Centre for Italian Studies.

Prof. PETTMAN, co-editor and home base editor, *International Feminist Journal of Politics*.

Dr RUSSELL, consultant to Sydney Theatre Company's production of *The School for Scandal*, directed by Judy Davis.

Prof. WRIGHT, external member, review, Department of English, University of New South Wales; board member, Institute of the Arts; honorary secretary, Cambridge Australia Trust; involved in the administration in Australia of the new Gates Cambridge Scholarships established by the Bill and Melinda Gates Foundation; editorial board member, *The International Journal of Scottish Theatre History*, *Meridian*, and *Southern Review*; member, Steering and Executive Committees, International Association of University Professors of English. Member of the Scots-Australia Council.

### School of Language Studies

Dr BROWN, consultant with the National Gallery of Australia for preparation of their exhibition *Rodin – A Magnificent Obsession*.

Ms CARROLI, nominated by the Italian Embassy as academic member for Italian Government Scholarships panel; member, International Society of Italian Linguistics and Philology; Australasian Literature and Language Association; Applied Linguistics Association of Australia; coordinator, project with local Italian Radio to produce a web page developed by students, teachers, radio and embassy staff to facilitate access to teaching materials for schools, universities and students in their home.

Mr GRIEVE, consultant translator for the French Nobel Prize winning non-government organisation, Medecins Sans Frontieres.

Dr JANSEN, ANU representative, German Accreditation Panel; editorial board member, *Australian Review of Applied Linguistics*; member, organising committee, *Australian Federation of Modern Language Teachers Association* for its national conference; presenter of a LIFT workshop for language teachers.

Dr KELLY, vice-president and executive committee member, Australian Society for Classical Studies; president, ANU Branch of the National Tertiary Education Union, a member of the ACT Division Council and the National Executive of this union.

Prof. KUHN and Mrs Kuhn established a foundation in Copenhagen "Weyse Fonden", to rescue music from the Danish Golden Age and promote the recording, publishing and performance of this music.

Dr MAURER, member, ACT Accreditation Panel, Board of Secondary Studies for French.

Dr MINCHIN with University of Canberra introducing students studying Museology to issues involved in the administration of a small museum; member, ACT Accreditation Panel, Board of Secondary Studies for Latin; ANU representative, executive committee, Australian Society for Classical Studies; Classics at ANU

representative, Council of the Australian Archaeological Institute of Athens; vice-president, ANU Friends of the AAIA.

Dr MOFFATT, talks on classical and medieval Sicily for teachers visiting Sicily in 2002; representative, Council of the Australian Archaeological Institute at Athens (AAIA) and Secretary, ANU (Canberra) Friends of the AAIA; committee member, Australian Association for Byzantine Studies; Australian contributor to the bibliographical journal *Byzantinische Zeitschrift*.

Dr MULLER, organiser, national essay competition and board member, Contemporary European Studies Association of Australia; ACT CESAA liaison member, National Europe Centre.

Ms SCHMIDT, committee member, Australian Goethe Society; member, German Academic Exchange Service's selection committee for research scholarships and Embassy's selection committee for essay competition honouring Australia's Centenary of Federation.

Prof. WEAVER, acting secretary, Australian Academy of the Humanities, member, committee reviewing the Department of Classics and Ancient History, University of Western Australia.

### School of Social Sciences

Mr ADAMS, advisory committee member, Public Service and Merit Protection Commission's project on the Centenary of Federation.

Dr DENT, member, Medical Workforce Advisory Committee, Royal Australasian College of Physicians; statistical consultant, editorial board, *Australian and New Zealand Journal of Surgery*.

Dr GEORGE, member, international advisory board, *European Journal of International Relations*, Munich, Germany; member, Governing Council of the International Studies Association (USA); member, editorial board, *Antepodium: An Antipodean Journal of World Affairs; Borderlands*; member, editorial advisory board of *Millennium Journal of International Studies* (London School of Economics)

Dr GRAY, deputy convener, Australian Women's Health Network; member Coalition of Australian Participating Women's Organisation Steering Committee; secretary, Reproductive Health Services Ltd; member, Family Planning Board of the ACT; member ACT Women's Electoral Lobby, member, organising committee for the Fourth National Australian Women's Health Conference and the 2002 Women's Convention.

Prof. PAPADAKIS, member, executive, Contemporary European Studies Association of Australia; session coordinator, new technologies and the environment, for Research Committee 24 of the 15th World Congress of Sociology; organiser, National Europe Centre Workshop on European Studies Research.

Dr SAHA, editor-in-chief, *Social Psychology of Education: An International Journal*.

Dr SIMMS, coordinator, workshop on the Federation and Political Parties for the NSW Council for the Centenary of Federation; promotions assessor for North American universities.

Dr STANDISH assisted the Parliamentary Library "Vital Issues" seminar; research adviser, film makers on the 2002 election in Papua New Guinea; administration assistance, workshop on the Solomon Islands held by the State.

Prof. WARHURST, member, editorial boards of *Policy Organisation and Society*, *Australian Journal of Politics and History*, and *Commonwealth and Comparative Politics*; chair, ACT Chapter, Australasian Study of Parliament Group; board member, Catholic Welfare Australia; member, Australian Catholic Social Justice Council; convener, ACT Branch, Australian Republican Movement; joint organiser, Workshop on 2001 Federal Elections, sponsored by the Academy of the Social Sciences in Australia; panel member, Australian Institute of Management Symposium on Caretaker Government; assessor for senior promotions at University of Sydney, University of Queensland and University of New England; selection committee member, program for international research linkages, Canadian High Commission, Canberra and Parliamentary Fellowship, Department of the Parliamentary Library, Canberra.

Dr WHITE, elected to board of the Cancer Council of the ACT; appointed member, Medical and Scientific Advisory Board, Cancer Council of the ACT.

## Faculty of Asian Studies

Faculty members remained in strong demand from both national and international print and electronic media for commentary and background advice on the contemporary, historical, sociological, economic and cultural affairs of the Asia region.

Members of Faculty have engaged in an exceptionally wide range of public activities. Examples of these activities in 2001 are Dr Quinn's vigorous media and NGO activity regarding Timor problems, the Faculty's participation in two major public fora on 'Asia in Australia's Future' and our expanded participation in the Commonwealth Government's Foreign Affairs Council. The Faculty contributes to the private sector through our work for the business group, ASEAN Focus, and our increased emphasis on internships in industry for students.

Dr Tomoko AKAMI, Canberra representative, executive board, Japanese Studies Association of Australia.

Ms Alison BROINOWSKI, editor, *Asian Analysis* monthly virtual journal in <<http://www.aseanfocus.com>>.

Ms Diana CARROLL, editor's assistant, ASAA South-east Asia Publications Series.

Dr Anita CHAN, editing tasks for *The China Journal*, member, advisory board, Contemporary China Research Centre, City University of Hong Kong; specialist referee, Hong Kong University and Polytechnic Grants Committee, Hong Kong Research Grants Council; member, editorial board, journal *Perspectives Chinoises*, member, editorial board, electronic journal *Labour and Management in Development*, member, International Council of Advisors of the International Labor Rights Fund, Washington D.C.; member, advisory committee, Chinese Sociology & Anthropology; president, Australian Association for Communist and Post-Communist Studies 1999-2002.

Dr R. R. C. de CRESPIGNY, president, Chinese Studies Association of Australia.

Dr Anthony DILLER, delivered special Lao language training courses for the Department of Foreign Affairs and Trade and for AUSAID; delivered orientation talks on Thailand for group such as the Sir Edward Weary Dunlop Asia Leadership Program.

Dr J. FUNSTON, delivered lectures and tutorials on ASEAN to Australian Defence Force Academy (ADFA).

Dr Nijmeh HAJJAR, promotion of Arabic language in the ACT college system assisted by the Embassy of the United Arab Emirates; expert adviser to NSW Board of Secondary Studies and Department of Education and Training in language teaching methodologies; expert adviser to Australia Council for the Arts and the Powerhouse Museum in Sydney.

Dr Timothy HASSALL worked with ACT Secondary teachers (Indonesian) and assisted meetings of CITA (Canberra Indonesian Teachers Association).

Dr Peter HENDRIKS, member, review panel for JET Programme applications to the Embassy of Japan in Australia; review panel, International Baccalaureate examinations in Japanese; consultant on Japanese examinations for the University of Oslo; panel member, 'Ask a Linguist' panel of LINGUIST (an electronic forum for the discussion of matters linguistic).

Prof. Virginia HOOKER, sessions chair, 'Indonesia Update', 'Women in Asia' and the 'Malaysia Forum' conferences; examiner, candidate for the degree of Doctor of Creative Arts, University Technology Sydney; external examiner, History Department, university in Brunei Darussalam; member, editorial board, journal *Review of Indonesian and Malaysian Affairs*, reviewer, manuscripts submitted to the Southeast Asia Publications Series run jointly by the ASAA and Allen & Unwin; reviewer, manuscript for the *International Journal of Feminist Politics*; member, Foreign Affairs Council (Department of Foreign Affairs and Trade), member, editorial advisory board, *Encyclopaedia of Women in Islamic Cultures* (Leiden, Brill); assisted by

the Australia-Indonesia Institute (DFAT) brought peace mediator, Arifah Rahmawati (Centre for Strategic and Peace Studies, Gadjah Mada University) to Australia for a lecture tour.

Mr Shun IKEDA, liaison with the Heiwa-Nakajima Foundation discussing funding for the Intensive Course of the Year-in-Japan Program; discussions with President of the Tokyo University of Foreign Studies, negotiating exchange arrangements; liaison on recruiting matters with NSW State Government office in Tokyo.

Deborah JOHNSON, regular contributor, SBS World Guide and the ASIAN ANALYSIS website.

Mr Preecha JUNTANAMALAGA, organiser, staff training project for academic personnel at Khonkaen University in Thailand focusing on teaching Thai as a foreign language; with Thai staff at the University of Sydney planning teaching activities and the use of technology in Thai language instruction; assisted DFAT providing cultural orientations for the Australian Youth Ambassadors program.

Dr Ann KUMAR, lecture on the state of the Indonesian nation at the Melbourne Indonesia Conference; vice president and treasurer, Australian Academy of the Humanities; editorial committee — Leiden University monograph series, *Semaian*; member, Australia-Japan workshop on the nation in Southeast Asia, and invited member, Harvard Conference on Indonesia.

Dr Duck-Young LEE, member, ACT Board of Secondary Education Japanese Accreditation Panel; member, editorial board for *e-Journal of Asian Linguistics & Language Teaching*.

Prof. Anthony MILNER, member, Government's Foreign Affairs Council; active participation with private business group — ASEAN Focus.

Dr Li NARANGO, co-editor, EAJRS-Newsletter (European Association of Japanese Resource Specialists).

Dr C. John POWERS, series editor, *Studies in Buddhism and Tibetan Culture*, Snow Lion Publications; Curzon Press, Critical Studies in Buddhism series, *Journal of Indian Philosophy and Religion*.

Dr Ian PROUDFOOT, member, advisory board, Indonesia and the Malay World.

Dr George QUINN, member, Indonesian Accreditation Panel, ACT Board of Senior Secondary Studies and the National Reference Group, Australian Consortium of In-Country Indonesian Study (ACICIS); invited by Government of Japan (Ministry of Foreign Affairs), he participated in an International Symposium on Conflict Prevention, Tokyo; represented the ANU's Faculty of Asian Studies as a co-host of the New Ideas New Voices on Australia in Asia Roundtable, a forum of 20 eminent young Australians, supported by the Myer

Foundation and co-hosted by The Asialink Centre (University of Melbourne), The Asia-Australia Institute (UNSW), IDP Education Australia, and the ANU, Roundtable held at the University of New South Wales, Sydney.

Dr Craig REYNOLDS, member, editorial advisory committee, *Journal of the Siam Society*.

Ms Tiejun YANG, consultant, Department of Education and Youth Affairs, the Department of Family and Community Services and the Australian Political Exchange Council on matters relating to mutual accreditation of tertiary qualifications between countries, social security matters and briefings to official delegation going overseas; liaison officer, 2001 Australian National Chinese Eisteddfod; member, ACT Secondary Education Accreditation Panel.

## Faculty of Economics and Commerce

### School of Business and Information Management

ADAMSON, B., adviser, NSW Parliamentary Committee on 'Sale of Government Owned Assets and Utilities'.

BARTON, A.D., Commonwealth Parliamentary Joint Committee of Public Accounts and Audit (JCPAA); consultant on Accounting for Heritage Assets, Victorian Parliamentary Public Accounts Committee; treasurer and member of Executive Committee, Cambridge Australia Trust; chair of Committee, CPA, Research Lecture in Public Sector Accounting.

BIRT, J.L., organising committee, AAANZ Accounting Education Special Interest Group.

BURRITT, R.L., external adviser on Progress Reporting to the Australian Greenhouse Challenge Office; editorial advisory board and editorial panel of *Accounting Forum* and *Journal of Environmental Management*, guest editor for *Accounting, Auditing and Accountability Journal*.

CRAIG, R.J., editorial board, *Accounting Commerce and Finance: The Islamic Perspective*, *Asian Review of Accounting*, *The Journal of Akuntansi* and *Auditing, Indonesia*; associate editor, *Accounting Education: An international Journal*; member, organising committee, ANU/CPA Annual Research Lecture in Government Accounting, external adviser to the Malaysian Graduate School of Management; representative, NSW/ACT CPA Australia Universities Committee.

FREEMAN, C., research consultant to the Government of the Republic of Tajikistan with the Asian Development Bank; research consultant to the Vietnam National Health Insurance with Thailand-Australia Social Protection Fund.

GREGOR, S., IT, communications and outsourcing committee, Canberra Business Council; Information Strategy Committee; associate editor. International Federation of Information Processing E-commerce Workshop (IFIP TC8); Collector Electronic Commerce Workshop, Research Grants Council of Hong Kong.

JUBB, P.B., member, ICAA/CPA, Joint Legislation Review Committee.

TRAN, A.V., provision of research consulting services to Business Skills Section, Department of Immigration and Multicultural Affairs, Commonwealth Government of Australia.

VAN DER ENG, P., editor, *The Australian Economic History Review, Modern Economic History of Southeast Asia* for Palgrave Press (UK); editorial board, *Social Science History*.

### **School of Economics**

BREUNIG, R., adviser, Department of Family & Community Services; adviser, United States Department of Agriculture.

CORNISH, S., chair, ACT Board of Senior Secondary Studies.

GRANT, S., external expert for the Economics & Econometrics Panel of the UK's 2001 Research Assessment Exercise (RAE); member of Council of Econometric Society.

MENEZES, F., external expert for ACCC, NECG.

QUIGGIN, J., adjunct Professor, Queensland University of Technology; member, American Agricultural Economics Association; board member, Queensland Competition Authority.

SKEELS, C., member, ACT Branch of Marketing Research Society of Australia; member, National Higher Education Committee of the Marketing Research.

### **School of Finance and Applied Statistics**

BRAILSFORD, T.J., Council, Accounting Association of Australia and New Zealand; auditor, Asia-Pacific Finance Association; chair, Technical Committee, Accounting Association of Australia and New Zealand Annual Conference; Research Policy Committee, Securities Industry Research Centre of Asia; editor, *Accounting Research Journal*; editorial board *Accounting and Finance, Accounting, Accountability and Performance*; co-editor McGraw-Hill Series in Advanced Finance.

MARTIN, M.A., associate editor, *Journal of Statistical Computation and Simulation, Australian and New Zealand Journal of Statistics*.

NICHOLLS, D.F., Statistical Society of Australia: Accreditation Committee, Strategic and Operational Planning Committee and Marketing; vice-president,

Statistical Society of Australia; consultant Australian Quarantine Inspection Service, Australian Science Festival, Canberra Taxi Drivers Association.

OLIVER, B.R., chair, Applications Committee, CPA Australia.

O'NEILL, T.J., associate editor, *Biometrics*; council member, Statistical Society of Australia, Canberra Branch; Central Council Delegate, Statistical Society of Australia; consultant Department of Health and Human Services, Bureau of Transport Economics and Victorian Department of Natural Resources and Environment.

PITT, D., IAAust Prizes and Awards Committee; IAAust Continuing Professional Development Committee; adviser, Reserve Bank of Fiji; consultant Australian Business Research Group.

SERVICE, D.A., IAAust Part III Taskforce; IAAust Council; IAAust Disability Committee; Contributions Review Panel under the Education Services for Overseas Students Act 2000.

STERN, S.E., associate editor, JRSSB; consultant Department of Health and Human Services, Xenopharm.

## **Faculty of Engineering and Information Technology**

### **Department of Computer Science**

Dr Clive BOUGHTON, involved with 4th year software engineering projects with external customers that included the CRC for Satellite systems, CSIRO Centre for Mathematics and Information Science, and St Xavier College.

Dr Clive BOUGHTON, Dr Jeremy DAWSON and Dr Rajeev GORÉ, consultants to the ACT Electoral Commission in the planning, design and delivery of the electronic voting and vote counting system (eVACS) used in the 2001 ACT Election.

Dr Henry GARDNER, as director of the eScience Applications and Technology project, with CSIRO Centre for Mathematics and Information Science Virtual Environment Laboratory presented demonstrations and supervised student projects.

The eScience program cooperates with the Powerhouse Museum in Sydney in the development of interactive virtual reality demonstrations on their Wedge theatre. The Wedge theatre itself was initially developed at the ANU. A curator from the Powerhouse Museum sits on the Management Committee of the eScience Project

### **Department of Engineering**

Prof. Andrew BLAKERS continued his collaborative research and development work on renewable energy systems with funding from the Australian Research Council, the Australian Greenhouse Office, the Austral-

ian CRC for Renewable Energy, the ACT R&D Fund, the Sustainable Energy R&D Fund of NSW, ACTEW-AGL, Origin Energy, Solarhart and Western Power.

## Faculty of Law

Mr D K ANTON, president, Environmental Law Alliance Worldwide — Australia; member, National Environmental Law Association; World Conservation Union (IUCN) Commission on Environmental Law; American Bar Association section on International Environmental Law; Universite de Limoges expert group on Environmental Law; policy analyst, Environmental Law Institute (Washington, DC); co-editor, *Asia-Pacific Journal of Environmental Law*; provided evidence to the Commonwealth Parliament Joint Standing Committee on Treaties Inquiry into Australia's relationship with the World Trade Organization; provided evidence to the Commonwealth Senate Community Affairs Committee in its Inquiry into the Gene Technology Bill 2000.

Dr J BEHRENS, part-time member, Social Security Appeals Tribunal; member, Violence Sub-Committee, Family Law Council; member, editorial board, *Australian Journal of Family Law*, reviewing articles submitted for publication; member, National Editorial Advisory Board, *Women Against Violence: An Australian Feminist Journal*; guest opinion piece writer, *Sydney Morning Herald* contributed an opinion piece on the Family Court's decision-making on relocation.

Prof S C BOTTOMLEY, member, executive committee, Corporate Law Teachers' Association; advice given to Law Faculty, Monash University on proposal for SJD; legal adviser, Senate Standing Committee on Regulations and Ordinances; director, Credit Union of Canberra (to February 2001); member, editorial committee, *Australian Journal of Corporate Law*.

Mr S BRONITT, member, criminal law committee, ACT Law Society; chair, Domestic Violence Prevention Council (ACT); Associate, Australian Institute of Criminology.

Prof A BYRNES, collaboration with Centre for Comparative and Public Law, Faculty of Law, University of Hong Kong, on the preparation of a compilation of international and comparative case law relating to women's human rights; co-rapporteur, Committee on International Human Rights Law and Practice, International Law Association (primary author of report prepared for 2002 ILA conference); correspondent, Butterworths Human Rights Cases; international resource person at a meeting organised by the Office of the United Nations High Commissioner for Human Rights, Geneva as part of the dialogue on human rights between the High Commissioner's Office and the Chinese government; Regional Workshop on International Human Rights Law and Domestic Activism, Bangkok, organised by Forum Asia, the Law & Society Trust, Interights, and the International Women's Rights Watch

(Asia-Pacific) for lawyers from a number of South Asian countries); member, external advisory group on gender, Asian Development Bank; advisory committee, International Women's Rights Watch (Asia-Pacific).

Prof M D COPER, trustee, The Lionel Murphy Scholarship Foundation; chair, Transport Industry Accreditation Council.

Prof H C CHARLESWORTH, expert assessor, Australian Research Council; co-patron, Australian Law Students' Association National Conference; member, Foreign Affairs Council of the Minister for Foreign Affairs; president, Australian and New Zealand Society of International Law; counsellor, American Society of International Law; member, Harvard Club of Australia/ANU Frank Knox Scholarship Selection Committee; the Manley Hudson Visiting Professor of Law, Harvard Law School; member, Global Law Faculty, New York University; witness, Joint Standing Committee on Foreign Affairs, Defence and Trade; editor, Australian Year Book of International Law; member, board of editors, *American Journal of International Law*; member, advisory board: *Leiden Journal of International Law*; *Melbourne Journal of International Law*; *Australian Feminist Law Journal*; reviewer: *Canadian Journal of Women and the Law*, *Australian Journal of Political Science*, *Australian Journal of Human Rights*, *Monash Law Review*, *Sydney Law Review*.

Prof J L R DAVIS, member, editorial board, *Torts Law Journal*, occasional refereeing of contributed items; legal adviser, Senate Standing Committee for the Scrutiny of Bills; provision of written legal advice at the conclusion of each sitting week of the federal Parliament in relation to all Bills introduced into either chamber of the Parliament as to whether any provision in any Bill falls within the Committee's Terms of Reference, and attendance at each meeting of the Committee to provide oral advice thereon.

Ms A KENT, editorial board, *China Information* (Leiden)

Dr P MATHEW, expert, United Nations High Commissioner for Refugees, participant in 2 day round table on refugee law forming part of the "global consultations" in the context of the 50<sup>th</sup> anniversary of the 1951 Convention Relating to the Status of Refugees; member, editorial board, *Australian Yearbook of International Law*; referee of article, *Federal Law Review*, chapter on refugees in a text on globalisation and international law; expert advice, United Nations High Commissioner for Refugees, concerning the border protection legislation; Senate Legal and Constitutional Committee inquiry on the changes to the Migration Act in the wake of the Tampa incident, written submission and oral evidence on 21 September; expert, Senate, letter written to all Senators concerning the border protection legislation.

Prof J D McMILLAN, referee for PhD candidature by publication, Griffith University; president, Australian

Institute of Administrative Law; member, editorial board, *AIAL Forum*; external referee, Queensland University of Technology, *Law Journal*; member, editorial board, *Federal Law Review*; consultant, providing advice to firms and government agencies Government Service Group, Clayton Utz: one day per week on government law issues; research director (with Ms R Creyke), National Administrative Law Forum, "Administrative Law — the Essentials", Canberra; research director, Public Law Weekend, "Constitutional Law Intersections", Canberra; member, Federal Offenders Review Panel, commenting on draft decisions regarding release of federal offenders; member, Commonwealth Government Agencies Annual Reports Award Selection Committee, Australian Institute of Public Administration.

Mr W MORGAN, lecturer in overseas program: Master of Arts in International Relations, jointly run by Flinders University and Nankai University (China), lecturing an intensive course in international economic law; editor, *Australasian Gay and Lesbian Law Journal*; submission to Tasmanian Parliamentary committee on recognition of significant personal relationships; consultant, Gilbert and Tobin, Solicitors, advising on a UN Human Rights Committee case.

Dr M RIMMER, board member, *Muse Magazine*; member, Copyright and Intellectual Property Advisory Group, Australian Library and Information Association; Australian Digital Alliance; National Tertiary Education Union; reviewer, *Federal Law Review*; policy advice to Plant Breeder's Rights Office; Rural Research and Development Corporation; training courses to Defence Science and Technology Organisation, Canberra; Department of Defence.

Ms P SPENDER, instructor, Australian Graduate School of Management, examiner, PhD Thesis, Monash University; editor, *Corporate and Business Law Journal*; advice to editors of *Journal of Political Philosophy* regarding legal aspects of a contribution.

Mr J STELLIOS, secretary, ACT Branch International Commission of Jurists.

Mr D J STEWART, director, board of management, Welfare Rights and Legal Centre, ACT; acting editor, *Federal Law Review*, vol 29 (1); guest editor, Special Issue on Administrative Law, *Federal Law Review*, vol 29(3); "Innovations in Intellectual Property", Legal Edge Seminar Series, Centre for Commercial Law, Australian National University; "Introduction to IP", presentation to Department of Defence, Intellectual Property Conference; "The Don Bradman Letters", interview on ABC Canberra Radio.

Ms A STONE, visiting scholar, Columbia University School of Law, USA; member, management committee, Women's Legal Centre, ACT and Region; editor, *Federal Law Review*.

Dr F D WHEELER, associate, Centre for Comparative Constitutional Studies, Faculty of Law, University of Melbourne; member, advisory committee, *Review of the Judiciary Act 1903*, Australian Law Reform Commission; comments editor, *Public Law Review*; referee: *Federal Law Review* and *Public Law Review*.

Prof P C WEEKS, legal member, Social Security Appeals Tribunal; convener, ACT Chapter of the Australian Labour Law Association; director, The Credit Union of Canberra; chair, ACT Government Sex Industry Consultative Group; observer, Council of the Law Society of the ACT; editorial committee, *Australian Journal of Labour Law*; consultant, Phillips Fox.

## Faculty of Science

### Department of Chemistry

Dr M.G. HUMPHREY, honorary treasurer, Royal Australian Institute of Chemistry Inorganic Division; president, ACT Branch of the RACI, and the RACI's alternate as Federation of Australian Scientific and Technological Societies (FASTS) Board member; ACT branch of the RACI; Dr BARROW was treasurer; Dr CIFUENTES was memberships officer; Dr CHAI, ACT representative for the Organic Division.

Dr G. SALEM, member, General Science Accreditation Panel, ACT; director, Program of the Chemistry Olympiad; ACT representative, Chemical Education Division Standing Committee of the RACI; member, newly formed RACI Education Committee.

Dr M. STERNS, collaborative work with the Australian Transport Safety Bureau and the Australian War Memorial.

### Department of Geology

Prof. R.J. ARCULUS, cooperative research with the Solomon Islands Geological Survey; collaborative research with the Australian Geological Survey Organisation; CSIRO Exploration & Mining.

Dr P. CHOPRA, Geoscience Australia supported Trevor Page's honours project by providing valuable data for the student's research; invited lectures from staff at Geoscience Australia: Dr Roderick Ryburn and Mr Keith Porritt; committee member, Geological Society of Australia Specialist Group in Geoscience Computing; committee member, ACT Division, Australian Society of Exploration Geophysicists; Australian Earth Data On-Line Project with ACT Emergency Services Bureau; Hot Rock Energy Project, NSW Hunter Valley with Pacific Power.

Dr J.D.A. CLARKE, with AGSO on the Glimore project, with PIRSA on the Eucla and Murray Basins.

Prof. S.F. COX continued the supervision of University of Newcastle PhD student, Mr K Ruming; collaborated with Drs Boullier (Universite Joseph Fourier, Greno-



ble), N Mancktelow (ETH, Zurich) and G Pennachioni (University of Padova) in research on evolution of fluid flow patterns in the Mont Blanc and Aar Massifs in the European Alps; the collaboration forms part of an ARC Large Grant project, held in the Geology Department, The Faculties; continued a research collaboration with geoscientists at WMC Resources Ltd St Ives Gold Operations, at Kambalda, WA dealing with structural controls on development of lode gold mineralisation. In 2001, WMC Resources fully funded an honours research project on one of their gold deposits.

Dr P. De DECKKER, member, committee evaluating research proposals in Earth Sciences for the Australian Antarctic Division (ASAC Committee); member, Steering Scientific Committee of PAGES on past climate changes, part of IGBP.

Prof. R.A. EGGLETON, Cooperative Research Centre for Landscape Evolution and Mineral Exploration with Geoscience Australia, the University of Canberra, CSIRO Exploration and Mining; Cooperative Research Centre for Landscape, Environments and Mineral Exploration with Geoscience Australia, the University of Canberra, CSIRO Exploration and Mining, Curtin University, Primary Industries South Australia, NSW Dept of Mineral Resources, University of Adelaide, AMIRA; Centre for Australian Regolith Studies, with University of Canberra.

Peter HANCOCK, research paper and presentation, Minerals Sector and Sustainable Development for Parliamentary Library Research Group, Parliament House, Canberra; assistance to Mexican Embassy and visiting minister on developments in Australian mineral sector, issues and sustainable development; with South African High Commission to establish scholarship for South African and Australian students and forthcoming conference on bilateral interests in trade and investment pertaining to the mineral sectors of the two countries; research paper jointly with M Roarty of Parliamentary Library for and in collaboration with Mining Minerals and Sustainable Development (MMSD) Australia program through Ameer including providing workshop presentations for industry, NGOs and others in Perth, Brisbane, Adelaide and Melbourne; compiling and presenting professional core values for AusIMM providing advice to AusIMM on emerging policy issues for mineral resource development as member of AusIMM Emerging Issues Task Force; associate editor of *Meteoritics and Planetary Science*, member, Publications Committee, The Meteoritical Society; member, Planning Committee for exhibition "Journeys into Space" for the National Museum of Australia; chair, House Committee, Australian Academy of Science.

Dr J.W. MAGEE, member, Willandra Lakes Region, World Heritage Property, Technical and Scientific Advisory Committee; Australian representative, International Geological Correlation Program (IGCP)

Project 413: Understanding Future Dryland Environmental Changes from Past Dynamics.

Dr G.C. YOUNG, corresponding member, Subcommittee on Devonian Stratigraphy, International Union of Geological Sciences.

### Department of Physics

A.F.P. HOUWING, with the Centre for Hypersonics University of Queensland and Jet Propulsion Laboratory Pasadena, USA with the Centre for Hypersonics University of Queensland and Jet Propulsion Laboratory Pasadena, USA; National Aerospace Laboratory, Kakuda, Japan; with DLR Germany; National Aerospace Laboratory, Kakuda, Japan.

S.M. SCOTT, LIGO, Caltech, USA; LCGT/TAMA, Japan; Adelaide University.

H.A. BACHOR, with the Laboratoire Kastler-Brossel, a joint laboratory of the Ecole Normale Supérieure, the Université Pierre et Marie Curie and the Centre National de la Recherche Scientifique in Paris; Laser Zentrum Hannover, Universität Hannover; this was supported by a Fedor Lynen Fellowship for Dr Roman Schnabel.

J.D. CLOSE, University of Melbourne, ADFA

P.K. LAM, with Stanford University, Ginzton Laboratory; with Erlangen-Nürnberg University, Modern Optics Centre; with Laboratory of Kastler Brossel, Paris University

D.E. McCLELLAND, LIGO, Caltech, MIT; University of Florida plus a number of US Universities through the LIGO Scientific Collaboration; University of Glasgow; University of Hannover; TAMA/LCGT, Japan; VIRGO, France/Italy; ACIGA (UWA, AU, Monash and ANU)

### School of Biochemistry and Molecular Biology

Dr J.G. ALTIN, reviewed papers for the journals: *Immunology and Cell Biology* and *Analytical Biochemistry*, member, organising committee, Australasian Society for Immunology Conference, Canberra; organiser, Tumour Immunology Workshop, ASI.

Dr C. BEHM, archivist, council member, and chair, Education Committee, Australian Society for Parasitology; referee, *Biochimica et Biophysica Acta*, *Parasitology Today*, *Parasitology*, *International Journal for Parasitology*, *Molecular and Biochemical Parasitology*, *Folia Parasitologica*; assessor, Wellcome Trust (UK; examined two PhD theses, from UNSW and the University of Melbourne; attended *Science Meets Parliament*, organised by FASTS, as a nominee of the Australian Society for Parasitology, discussions with Senator Alan Eggleston (WA) and Senator Paul Calvert (Tas).

Dr S. BRÖER, member, editorial board, *Neurochemical Research*; managing editor, *Cellular Physiology and Bio-*

*chemistry*; reviewed papers for *EMBO Journal*, *Biochemical Journal* and *European Journal of Physiology*.

Prof. I. CLARK, member, editorial boards of *Experimental Parasitology*, the *International Journal for Parasitology*, and *Malaria Journal*; referee for *Lancet*, *Journal of Infectious Disease*, *Transactions of the Royal Society of Tropical Medicine and Hygiene*, *Journal of Immunology*, *Parasitology Today*, *Infection and Immunity*, *Parasitology*, and *International Journal for Parasitology*; reviews grant applications for NHMRC, ARC, National Heart Foundation, Wellcome Trust, Tropical Disease Research section of the World Health Organization, University of Queensland, Bi-national (US/Israel) Science Foundation, Canadian MRC, and the National Research Foundation of South Africa; president, National Association of NHMRC Research Fellows (NARF); maintains the NARF homepage; member of the NHMRC's Grantnet Users Reference Group, representative on the Grantnet Management Committee, overseeing the technical and managerial aspects of the new electronic grant application system; presented two invited papers in the US.

Dr S.M. HOWITT, refereed papers for the *Australian Journal of Plant Physiology*.

Dr P. JANSSENS, external examiner of PhD theses for James Cook University, Townsville

Prof K. KIRK, member of the following Boards and Committees: Council of the Australian Society of Biochemistry and Molecular Biology, (ASBMB, A.C.T. representative), Organising Committee for ComBio2001, ASBMB Meeting (Chair); refereed papers for *Nature*, *Science*, *Molecular Microbiology*, *Molecular Pharmacology*, *British Journal of Pharmacology*, *American Journal of Physiology*, *Biochemical Journal*, and *European Journal of Physiology*; also refereed grant applications for the ARC, the NHMRC, the Wellcome Trust and the Leverhulme Trust.

Dr D. LAVER, reviewed papers for the *Journal of General Physiology*, *Biophysical Journal* and *FEBS letters*

Dr R.L. MARTIN, reviewer of grants for NHMRC, ARC and National Heart Foundation.

Dr H.C. O'NEILL, member, editorial board and reviewer, *Immunology and Cell Biology*, member, review panel, *Journal of Immunology*, referee of NH&MRC project grant applications

Dr B. POGSON, reviewed papers for *Photosynthesis Research*, *Plant Physiology*, *Plant Molecular Biology* and the *Australian Journal of Plant Physiology*; reviewed grants for the United States Dept. of Agriculture NCGRIP; member, Australian Planning Committee for the International Photosynthesis Congress, Brisbane 2001.

Dr G.D. SMITH, referee for the journal *Applied and Environmental Microbiology* and reviewed grant applications for the ARC.

Dr B. VAN LEEWEN, ANU Education Officer (to June 2001) and Education Program Manager (from July 2001) for the Pest Animal Control Cooperative Research Centre.

Dr N.K. VERMA, member, Biology Accreditation Panel, ACT Board of Senior Secondary Studies; reviewed grant applications for the NHMRC and ARC.

## School of Botany and Zoology

Julian ASH, a remote sensing land-use initiative to develop the geographic information systems database necessary for sustainable land use planning in Papua New Guinea. This project, initiated and developed by Phil Shearman to support his PhD proposal, has obtained backing from the Government of Papua New Guinea, University of Papua New Guinea, German Development Services, United Nations Development Program, European Union and Conservation International, amongst others. The project has US\$ 1.416 million funding/support for 2001-2003.

Mike CRISP, collaboration in teaching and in joint supervision of six honours and postgraduate students with the Centre for Plant Biodiversity Research, CSIRO and CSIRO Entomology; development of a joint proposal for a lectureship in 'Plant-microbe interactions'; joint organisation of the Fourth International Legume Conference with CSIRO and Royal Botanic Gardens, Melbourne.

Andrew COCKBURN, editor, *Behavioural Ecology & Sociobiology* and *Behavioural Ecology*; participated in Australian Academy of Science seminar program for senior citizens; member, Biological Sciences and Biotechnology Advisory panel, Australian Research Council.

Howard BRADBURY, carried out research funded by the Australian Agency for International Development (AusAID) aimed at assessing cyanide in food, particularly in cassava in Africa.

William FOLEY, collaborations with Parks and Wildlife Commission of the NT, the Forestry Commission NSW and AQUIS.

David GORDON, ongoing collaboration with the NSW Department of Agriculture (population dynamics and genetic structure of *Escherichia coli* in pigs); recently new links established with Macquarie University and Sydney Water (source of coliform contamination).

David HAPPOLD, collaboration with the following museums: The Natural History Museum, London, U.K.; Musee National d'Histoire Naturelle, Paris, France; Musee d'Afrique Centrale, Tervuren, Belgium; Museum Alexander Koenig, Bonn, Germany; Museum Schloss Rosenstein, Stuttgart, Germany; Naturhistorisches Museum, Vienna, Austria.

Rob HEINSOHN, collaborations with the Queensland Department of Environment concerning conservation

of large parrot species and Green Pythons on Cape York Peninsula; also collaborates with the Wildlife Conservation Society (New York) over similar projects in Papua New Guinea.

Scott KEOGH, expert reviewer for “Evaluation of Research Output” for National Research Foundation of South Africa; refereed PhD thesis for the University of Adelaide; refereed Masters thesis for Illinois State University; National Secretary and Treasurer, Australian Society of Herpetologists; member, Editorial Board of *Contemporary Herpetology*.

Menna JONES, completed the third year of an ARC Australian Postdoctoral Fellowship and first year of an ARC Large Grant for the project “Sexual selection in a large dasyurid, the Tasmanian devil”; the field program included international volunteers and a research assistant; associate editor, *Australian Mammalogy*.

Rob MAGRATH, editor, *Journal of Avian Biology*, based in Sweden.

Murali NAYUDU, BISACT (Biological Sciences in ACT), science outreach program taking science to the community. In 2001 ran the full year program at seven ACT primary schools run by Dr Murali NAYUDU, Terry MURPHY, Dr Merv ASTON, Margaret HILTON, and Dr John VRANJIC. BISACT was the major display for the ANU at the Great Exhibition of the Australian Science Festival.

Penny OLSEN, member, ACT Flora and Fauna Committee and Birds Australia’s Research Committee; consultant with Environment Australia.

Dr Rod PEAKALL and Prof. Peter Smouse of Rutgers University, USA offered an intensive National Graduate Workshop on ‘Genetic Analysis for Population Studies’; collaboration with Australian Federal Police, Canberra Institute of Technology, Australian Hemp Resource and Manufacture Pty Ltd, Department of Land and Water Conservation of NSW, Royal Sydney Botanic Gardens, New South Wales National Parks and Wildlife Service.

Dave ROWELL, links with LaTrobe University on forest invertebrate conservation, ongoing links with Macquarie University; examined Masters of Science, University of Sydney.

John TRUEMAN, collaboration with Jill Silsby (UK) on popularising science on dragonflies, the book (Silsby, *Dragonflies of the World*, CSIRO Publishing, Melbourne) published in 2001, with an interactive key (Silsby & Trueman) in press; member, Threatened Species Task Force set up by Sydney Water and NPWS (NSW) following the collapse of Wingecarribee Swamp; working on the biology and distribution of the giant dragonfly *Petalura gigantea* on behalf of NPWS; member, editorial board of *Systematic Biology*.

## School of Psychology

Prof. William LEVICK, member, House and Grounds Committee, Australian Academy of Science that oversees Heritage-supported refurbishment of Academy of Science Dome at a project cost of more than \$1.5m.

## School of Resources, Environment and Society

Dr R. BAKER, facilitated a workshop reviewing the joint management arrangements at Uluru Kata Tjuta National Park working closely with Environment Australia.

Dr J. BAUHUS, chair, Research Working Group 4 (Native Forest Management); editorial board member, Australian Forestry; member of BRS Advisory Group on Private Native Forest Inventory; member of Technical Reference Group for BRS National Greenhouse Strategy Implementation Project: Forest Sustainability Criteria and Indicators.

Dr U.N. BHATI, wrote and distributed four ANU Forestry market reports; the work was carried out in association with Australian Forest Growers, and was supported by public R&D bodies: RIRDC, L&W Australia and FWPRDC.

Dr C. BRACK, reviewed and assisted in the development of technical manuals for the measurement of carbon and other wood products for the Bush for Greenhouse (Australian Greenhouse Office) and National Farm Forest Inventory (Bureau of Rural Sciences); collaborated with State Forestry of NSW, CSIRO, Sydney Futures Exchange and others on the potential development of a set of Carbon Accounting Standards which led to work on developing a Carbon Accounting Toolbox with CSIRO.

Dr G. CARY, appointed to the ACT Bushfire Council.

Dr R. GREENE, president, Australian Association of Natural Resource Management; member, McKell Medical Advisory Panel; secretary of the Australian Clay Minerals Association; member, organising committee for COST 623 meeting in January 2003 in Spain on “Dispersion, soil erosion and piping”; member, DLWC advisory panel on woody weeds and erosion; marked a masters thesis for University of La Trobe and refereed three journal papers.

Dr R. JAMES, member, CRC Sustainable Production Forestry; member National Farm Forestry Silviculture Project, AFFA, JVAP.

Prof. P.J. KANOWSKI, co-facilitated, with Michael Williams and Associates, community stakeholder workshops under the NSW Western Regional Agreement Process, for Planning NSW; co-organised and co-facilitated a professional development program in forest policy, in association with the 16th Commonwealth Forestry Conference and Western Australia’s Conservation and Land Management; co-organised a workshop on sustainable forest management, supported by the

Crawford Fund Forestry Program, with the Centre for International Forestry Research; co-supervised research student projects with colleagues from CSIRO Centre for Plant Biodiversity Research, CSIRO Forestry and Forest Products, and the Queensland Forestry Research Institute; member, Crawford Fund Forestry Program Committee.

S. LAFFAN, continuing membership of the Snowy Information Sharing Group (SISG), an informal collaboration of stakeholders working in the Snowy Catchment who hold GIS datasets to enable better utilisation of these datasets than would otherwise be possible due to cost; providing GIS expertise and a link to students; professional contract gained through this group (Salinity Hazard Scoping Study).

Dr B. MACKEY, major analysis on the natural heritage significance of Cape York Peninsula for the State Government of Queensland; chair, Expert Advisory Committee on Conservation Planning on the Cape; organised a workshop on the use of the Earth Charter in ethical investment at Parliament House, hosted by Woodside Petroleum and Judy Moylan MP, attended by representatives of the investment industry and national civil society organisations.

Dr S. MAHENRARAJAH, with Aidan Flanagan, of Forest Industries of AFFA in developing marketing tools, especially, game theory for forest industries development; with Dr Velu Rasiah, Dept of Natural Resources, Mareeba, North Queensland on optimal nitrate management in sugarcane and banana growing for mitigation of pollution externalities at Great Barrier Reef; member, Accreditation Panel for Agriculture, Board of Senior Secondary Studies, reviewing and approving college course initiatives; member, Forest Economics research group, CRC — based in University of Tasmania.

Dr D. RACE, member, Sustainable Silviculture Program, CRC Sustainable Production Forestry; member, AFFA's Reference Group for National Farm Forestry Coordinator.

Dr C R. TIDEMANN, member, editorial board of *Acta Chiropterologica* (Warsaw) and referee for a number of scientific journals; member, CRC for Vertebrate Pests and member, Flora and Fauna Committee and Vertebrate Pest Advisory Committee of the ACT Government; provided advice on wildlife management to several government agencies in other States; member, three IUCN (World Conservation Union) Specialist Groups: Chiroptera (Bats); Sustainable Use of Wildlife; Invasive Species.

Dr B. TURNER, member, Research Working Group 2 (Forest Measurement and Information) and Forest Planning & Spatial Information Working Group, Standing Committee on Forestry; member, Standards Australia Committee EV/15 on Carbon Accounting;

member, Expert Data Reference Group, Dept Natural Resources & Environment, Victoria.

### **Centre for Public Awareness of Science**

Collaborations with the following: Questacon — the National Science and Technology Centre; Australian National Committee for UNESCO; UNESCO Apia Office; University of Reading; Shell; Cootes Holdings; National Science Museum, Bangkok, Thailand; Several Universities in Thailand; University of Glasgow/Glasgow Science Centre.

## **University Schools and Centres**

### **Asia-Pacific School of Economics and Management**

Heinz ARNDT with Debra GROGAN, consultancy with AusAID, Asian-Pacific Economic Literature Journal Subscription.

Jeff BENNETT, member, Economic Society of Australia; Branch Councillor, Australian Agricultural and Resource Economic Society (Canberra Branch); member, Centre for Independent Studies Advisory Council; member, Environment Institute of Australia; associate editor, *Australian Journal of Agricultural and Resource Economics*; member, editorial advisory board, *Australian Journal of Environmental Management*; member, Editorial board, *Ecological Management and Restoration*; Centre for independent studies, member of advisory board; NSW Environment Protection Authority, Environmental values of rivers; Environment Australia, Wetland protection incentives; Queensland Department of State, Competitiveness of locations for mineral processing; Productivity Commission, occasional adviser; Australian Water Technologies, occasional adviser; South East Catchment Management Board, occasional adviser.

Gordon de BROUWER, member, American Economic Association; member, East Asian Economic Association; member, Economic Society of Australia.

Satish CHAND, member, American Economic Association; member, Economic Society of Australia.

Deborah COBB-CLARK, member, ACT Department of Education: Ministerial Advisory Committee on Government Schooling, member, American Economics Association; member, Economic Society of Australia; member, Society of Labor Economics.

Mark DODGSON, board member, Centre for Developing Cities; board member, Australian Business Research Advisory Board; board member, Canberra Sister City Committee — Agricultural Research; member, Editorial board, *Research Policy*; member, Editorial board, *Technology Analysis and Strategic Management*; member, editorial board, *Industry and Innovation*,

member, Editorial Board *Management Decision*, Editor in Chief, *R & D Enterprise — Asia Pacific*; member, editorial board, *International Journal of Innovation Management*.

Peter DRYSDALE, member, Economic Society of Australia and New Zealand; member, Royal Economic Society; member, Asian Studies Association of Australia; member, Australian Studies Association of Japan; member International Advisory Board, Asia Pacific Institute, Waseda University, member, Japan Economic Association, East Coast, USA; member, Japanese Studies Association of Australia; member, Korean Studies Association of Australia; member, United States Academy of Political Science; coordinator, Pacific Trade and Development Conference, International Standing Committee; member, panel of International Advisers, Korea Institute for International Economic Policy; Research Associate, Center on Japanese Economy and Business, Columbia University; Distinguished Associate, Asia Pacific Research Center, Stanford University; member, Harvard University Asia Vision 21 Project; fellow, Australian Academy of Social Science; member, International Advisory Board, Ritsumeikan University, Kyoto; member, International Advisory Board, China Center for Economic Research, Peking University; board member, Sydney Institute; member, editorial advisory board, *Economics Today*; member, editorial advisory board, *IDRC Journal*; member, editorial advisory board, *Japanese Studies*; member, editorial advisory board, *Journal of Economic Studies*; member, editorial board, *Journal of Asian-Pacific Economic Literature*; member, editorial advisory board, *Pacific Review*; member, editorial advisory board, *Routledge Economics/Asian Series*; member, editorial advisory board, *World Bank Book Series*; adviser: Blake Dawson Waldron and BHP Billiton, BHP Coal Appeal; Asia Pacific Advisory Committee, International Trade; Department of Foreign Affairs and Trade, Strengthening Australia-Japan relationship; Chinese Academy of Social Sciences and the Chinese Ministry of Foreign Affairs, APEC issues; Department of Treasury, Regional Financial Integration.

Ron DUNCAN, member, American Agricultural Economics Society; member Australian Department of Foreign Affairs and Trade, Aid Advisory Council; member, Australian Department of Foreign Affairs and Trade, UNESCO Social Sciences Network; member, Australian Department of Treasury Australian Competition Tribunal; president, Australian Agricultural and Resource Economic Society; member, Asian Development Bank Institute Advisory Panel; member, Economic Society of Australia; member, AusAID Program Strategies Committee; chair of Advisory Board, *Asian-Pacific Economic Literature*, academic editor, Cambridge University Press, *Trade and Development Series*, chair of board/editor, *Pacific Economic Bulletin*, member, editorial board, *The Australian Agriculture and Resource Economics Journal*; AusAID, member of Program Strategies Committee; ESCAP (International

agency), WTO market access for developing countries; AusAID, Poverty alleviation and AusAID's development cooperation program; (with Maree TAIT) AusAID Economics training of DPRK students; (with Maree TAIT and Debra GROGAN), AusAID, Outreach activities for PNG and the Pacific Region.

Terry DWYER, member, American Economic Association; member, Economic Society of Australia; member, Australian Business Economists; fellow, Taxation Institute of Australia; member, Financial Planning Association of Australia.

Christopher FINDLAY, member, Economic Society of Australia; chair, Pacific Economic Cooperation Conference Coordinating Group; member, Foreign Affairs Council; vice chair, Australian Pacific Economic Cooperation Committee; AusAID, PNG technical assistance; AusAID, Global Development Learning Network; Department of Foreign Affairs and Trade, PNG technical assistance.

Patrick de FONTENAY, Access Economics, New Caledonia.

Rana GANGULY, fellow, Australian Institute of Management.

Habiba GITAY, chair and coordinator, Australian Greenhouse Office, Environment Australia; member, British Ecological Society; member, Ecological Society for Australia; member, steering committee; member, Editorial Advisory Committee, *Millennium Ecosystem Assessment*; United Nations Environment Programme, Land degradation and climate change.

Debra GROGAN, member, Canberra Society of Editors; associate editor, *Pacific Economic Bulletin*.

Michael HESS, editor, *Labour and Management in Development*; Department of Premier and Cabinet, Victoria, New Public Policy Paradigms.

Helen JAMES, member, Environment Institute of Australia; member, International Human Dimensions Program — Australia.

Padma LAL, executive member, Australia and New Zealand Society of Ecological Economics; member, Australian Institute of Agriculture Science and Technology (IAAST); life member, International Society for Mangrove Ecosystems; AusAID, Evaluating CARD Project Proposals; Productivity Commission, evaluating their environmental research proposal; South Pacific Regional Environment Environmental Program, Economic considerations in community based development and conservation projects; ALTA Task Force, Fiji, Economics of alternative land tenure options.

Donald LAMBERTON, board member, *Economics of Innovation and New Technology*; board member, *Futures Research Quarterly*; board member, *Human Systems Development*; coordinating editor, *Information Economics*

and *Policy & book review editor*; general editor, *Prometheus*.

Suiwah LEUNG, AusAID, Ho Chi Minh National Political Academy teaching and research project on public policy; United Nations Development Program Implementation of the Vietnamese Government's ten-year socio-economic strategy; Department of Foreign Affairs and Trade, Corporate governance in Vietnam.

Richard MULGAN, member, editorial board, *Journal of Political Philosophy: Political Science and Theory*; Public Service and Merit Protection Commission, History of Australian public service in relation to accountability.

Benjamin REILLY, member, editorial board, *Representation*; AusAID, Preferential voting training in Fiji; International Institute for Democracy and Electoral Assistance, electoral assistance; Australian command and staff course program, Army Command and Staff College Security Challenges in the Southwest Pacific; United Nations Transitional Administration in East Timor, elections and conflict management.

Alexandra SIDORENKO, AusAID, Global Distance Learning Initiative (Virtual Colombo Plan); MOFTEC, China Economics and Foreign Trade Training Project, Insurance Policy Study.

Ligang SONG, International Finance Corporation (IFC) and State Economic and Trade Commission (SETC), Key findings from the survey of private enterprise in Chengdu, China; International Finance Corporation (IFC) and State Economic and Trade Commission (SETC), Building Enabling Environment for SMEs.

Bruce STENING, member, editorial board, *Accountability & Performance*; member, editorial board, *Asia Pacific Journal of Human Resources*; member, editorial board, *Asian Academy of Management Journal*; member, editorial board, *Journal of World Business*; member, editorial board, *Monash Mt Eliza Business Review*; member, editorial board, *Research Practice in Human*.

Maree TAIT, member, editorial board, *Asian-Pacific Economic Literature*, member, editorial board, *Pacific Economic Bulletin*, executive editor, Cambridge University Press, *Trade and Development Series*; (with Debra GROGAN), AusAID, Production of Volume 16 No 1 and No 2 of the Pacific Economic Bulletin and Online production.

Ray TREWIN, associate editor, *Australian Journal of Agricultural and Resource Economics*; Department of Foreign Affairs and Trade, Asian agri-food demand trends, 2001–2010; Department of Foreign Affairs and Trade, APEC tariff reductions from a perspective of low tariff trade; Australian Greenhouse Office, Benefit-cost analysis for Greenhouse Gas abatement Project proposals; Taipei Economic and Cultural Office, Agricultural domestic support and export subsidies; Rural Industry Research and Development Corporation, Implications

for Australian industry of Japanese related agri-food investment; RIRDC, The economic impact of changing Australian egg production systems; Hassells International, short-courses in China on trade in services and the WTO; Melbourne International, courses in Vietnam on integration of social development into economic planning; PECC, review of the survey of regional trade impediments..

Glenn WITHERS, member, editorial board, *Australian Social Monitor*; member, editorial board, *Defence and Peace Economics*; member, editorial board, *Journal of Cultural Economics*; Business Council of Australia, Future Policy challenges for Australia; Department of Health and Aged Care, Professional Regulation.

Elspeth YOUNG, member, editorial advisory board and International Representation, *Australian Geographical Studies*; member, Editorial board, *Aboriginal History*; member, Editorial board, *New Zealand Geographer*.

## Centre for Aboriginal Economic Policy Research

Jon ALTMAN, board member, ARC KCTWM, NTU; visitor, ARC KCTWM, NTU; collaborated with Peter Whitehead, director, ARC KCTWM, NTU, on the preparation of an information brief on a consultancy on feral animal management in Kakadu National Park; meeting with ARC Review Panel undertaking the three-year assessment of the ARC KCTWM board; member, Specialist Program Advisory Group (SPAG) in a review of the Tropical Savannas Management Cooperative Research Centre research plan; member, research advisory board, VKHRCDU, University of Melbourne; member, advisory group, Issues Deliberation Australia Deliberative Poll on Reconciliation; co-convenor with Associate Professor Ian Anderson of the 'Economics and Indigenous Australians' Health' Workshop, University of Melbourne; preparation with Dr Peter Whitehead, director, ARC KCTWM of a proposal for the Rural Industries Research and Development Corporation for a project from 2002 titled 'Harvesting plants from Aboriginal lands: Quantifying supply and demand'. The project will involve collaboration between CAEPR and the ARC KCTWM and the Centre for Indigenous and Natural Resource Management; member, Scientific Program Advisory Group, Tropical Savanna Management Co-operative Research Centre, Northern Territory University; member, Australian and New Zealand Network of the Sustainable Use Specialist Group of the International Union for the Conservation of Nature and Natural Resources; associate editor, *Journal of Tourism Studies*, referee for *Australian Aboriginal Studies* and Aboriginal Studies Press; review of articles for the ARC KCTWM; guest editor for the *Australian Journal of Labour Economics* special issue *Indigenous Social Policy and the Labour Market*; consultancy as expert witness in the NT Supreme Court appeal by the North-

ern Land Council in relation to payroll tax; met with a delegation from the Association of Northern, Kimberley and Arnhemland Aboriginal Artists (ANKAAA) to discuss Goods and Services Tax (GST) and arts funding issues; provided a brief for ANKAAA on underenumeration of Indigenous artists in the ABS Survey on Commercial Art Galleries Australia 1999–2000; meeting with members of the White Eagle Aboriginal Corporation to discuss development issues on Twin Hills Station in the eastern Wagait region; meeting with the Balkanu Aboriginal Development Corporation to discuss future research collaborations, Cairns; participated in panel on ‘Land Holder to Share Holder: Business, Communities and Partnerships’ at Tracking Kultja the Inaugural National Aboriginal and Torres Strait Islander Cultural Festival, Canberra; participant in the ‘Indigenous Australia: Understanding Concepts of Culture and Community’ Cranlana Program symposium, Melbourne; various radio interviews; assisted SBS Insight with a documentary on the Indigenous Land Corporation; convened a dinner for University of Auckland Alumni Association at University House, Canberra; represented CAEPR at a networking dinner for the ACT and Regions Indigenous Intergency Group; ongoing collaboration with Rio Tinto Ltd as an opinion leader on their partnership with Indigenous Australians programs and community relations programs; assisted International Business Leaders Forum (UK) with External Assurance Review of Rio Tinto’s Social and Environmental Reporting; member, Advisory Group, Australia Deliberates: Reconciliation — Where from Here?; valuation for the National Museum of Australia and the Berndt Museum of Anthropology under the Cultural Bequests Program; participated in an ATSIC Workshop to develop an Indigenous Employment Strategy, Aboriginal Dreamtime Cultural Centre, Rockhampton; ‘Australia Deliberates: Reconciliation — Where from here?’, press conference, Sydney Opera House; expert witness for Northern Land Council in the Northern Territory Supreme Court; adviser to Centrelink regarding proposed evaluation of Maningrida and Palm Island Centrelink branches; assisted Bill Bowen, Access Economics, in providing advice about the future economic potential of tourism in Kakadu National Park; met with Paul Ward and Jantine Gawler, Rio Tinto Foundation about Foundation sponsorship of Indigenous visiting fellowship at CAEPR from 2002; adviser to Geoff Richardson, ATSIC, on appropriate governance structure for the development of a remote community radio station; adviser to the Cultural Ministers Council Statistical Working Group, based in Department of Communications, IT and the Arts, on estimating the value of Indigenous cultural product.

Flour talk by Jon ALTMAN and Frances MORPHY to Australian Defence Force Academy students on exhibition ‘Outside In: Research Engagements with Arnhem Land Art’.

Jon ALTMAN, David MARTIN, Siobhan McDONNELL and Sally WARD, consultancy for the ACCC on consumer and competition issues affecting Indigenous people in remote and regional Australia.

Jon ALTMAN, Boyd HUNTER and John TAYLOR, members, Steering Committee for ACCC consultancy on Indigenous Australians and competition and consumer information issues.

Jon ALTMAN and Mark CHAMPION, meeting with Cultural Development Solutions, New Zealand law firm, Canberra.

Jon ALTMAN, Boyd HUNTER, Jerry SCHWAB and John TAYLOR assisted Reconciliation Australia with an assessment of the Allen Consulting Group’s report ‘Business — Indigenous Collaboration’.

Jon ALTMAN and John TAYLOR, comment to Dr Roger Jones, Quantitative Evaluation and Design (QED) on Kakadu consultancy social indicator analysis for purpose of Ranger Agreement re-negotiations prepared for the Department of Reconciliation and Aboriginal and Torres Strait Islander Affairs (DRATSIA).

Jon ALTMAN and Boyd HUNTER, collaboration with Australian Institute of Family Studies, Melbourne.

Jon ALTMAN and Jerry SCHWAB, briefing with Chris Gallus MP, Parliamentary Secretary to the Minister for Aboriginal and Torres Strait Islander Affairs.

Jon ALTMAN, Jerry SCHWAB, Diane SMITH and John TAYLOR, meetings with Bob McMullan, Opposition spokesman on Aboriginal and Torres Strait Islander Affairs to provide a diverse CAEPR perspective, including on the CDEP scheme.

Meeting for ATSIC National Policy Office (Ben Johnston) to discuss the development of an Indigenous Employment Strategy with Jon ALTMAN, Bill ARTHUR, Mark CHAMPION, Boyd HUNTER, David MARTIN, Jerry SCHWAB, Diane SMITH, Dale SUTHERLAND and John TAYLOR.

Meeting for ATSIC on welfare reform with Jon ALTMAN, Bill ARTHUR, Mark CHAMPION, David MARTIN, Will SANDERS, Jerry SCHWAB and Diane SMITH.

Advice to Indigenous Policy Unit, DFACS by Jon ALTMAN, Will SANDERS and Diane SMITH.

Discussion with delegation from DRATSIA on social indicator analysis for purpose of Ranger Agreement re-negotiations by Jon ALTMAN, John TAYLOR, Roger JONES and Robert LEVITUS.

Jon ALTMAN, Bill ARTHUR, Diane SMITH and John TAYLOR assisted Reconciliation Australia.

Maggie BRADY, consultancy undertaken for AUSAID provided input to the South African Capacity Building Program as technical support to the University of the

Western Cape, Cape Town. A short course was convened at the University Winter School; attended advisory group meeting of Community Development on Alcohol (Far West Area Health Service), Broken Hill; attended National Expert Advisory Committee on Alcohol meeting, Sydney; submission provided to the Department of Economic Affairs, Agriculture and Tourism, Western Cape (South Africa), on the draft liquor policy for the Western Cape Province.

Boyd HUNTER, advice and assistance to SPRC for report for FACS (destined for the Organisation for Economic Cooperation and Development (OECD)) on 'Family friendly work practices and Indigenous Australians'; advice and assistance to Matthew Gray, AIFS on issues relating to family friendly work practices; member, editorial board, *Australian Journal of Labour Economics*, referee for the *Australian Economic Review*, *Australian Economic History Review*, and *Australian Journal of Labour Economics*; consultant for the Department of Health and Aged Care, subcontracted by the Australian Institute of Health and Welfare, on the analysis of health expenditure on Indigenous Australians.

Seminar presentations to ABS Methodological Division, Senior Managers and the Statistician, and Household and Income Section by Boyd HUNTER with Steven Kennedy and Daniel Smith.

Siobhan McDONNELL, seminar titled 'Indigenous Public Policy over the last century' given as part of the 'Guest Teacher series' to year 12 students at Radford College.

David MARTIN, executive member, Australian Anthropological Society; workshop with staff of Central Queensland Land Council on design of prescribed bodies corporate.

Observing the Indigenous census enumeration strategy for the ABS: official status of four CAEPR researchers as census observers in Yirrkala homelands, Aurukun and Alice Springs town camps by David MARTIN, Frances MORPHY, Will SANDERS and John TAYLOR.

Tim ROWSE, book review: A. Markus, *Race: John Howard and the Remaking of Australia*, R. Tickner, *Taking a Stand: Land Rights to Reconciliation*, and M. Gordon, *Reconciliation: A Journey*, in *The Age*.

Will SANDERS, visiting fellow, Centre for Appropriate Technology in Alice Springs; referee for *Australian Journal of Public Administration*, *Australian Aboriginal Studies* and *Australian Journal of Political Science*.

Jerry SCHWAB, member, steering committee for the Department of Education, Science and Training (formally DETYA) commissioned project 'Analysis of outcomes of Indigenous ex-students who have withdrawn from university before completing their award course', Dr Richard James, Centre for the Study of Higher Education, University of Melbourne; meeting to discuss potential future collaboration with Aboriginal

Research Institute, University of South Australia; meeting to discuss potential future collaboration with Director and Deputy Director for Centre for Indigenous Natural and Cultural Resource Management, NTU; book review: C. McConaghy, *Rethinking Indigenous Education: Culturalism, Colonialism and the Politics of Knowing*, in *Australian Aboriginal Studies* 2001/2; ANU-designated member of the Board of Management for Community Radio 2XX; with the Indigenous Education Branch, DETYA, on preparation of the tender brief for a project on consultative models and processes in Indigenous education; meeting with Minister for Education, Senator Kemp, to discuss Indigenous education issues.

John TAYLOR, collaboration with colleagues at the University of Queensland, the University of Waikato, the University of Houston, the University of Calgary, Mahidol University, McMaster University and Stanford University in the production of a volume on Indigenous population mobility; ABS General Social Survey Reference Group; ABS Indigenous Social Survey Reference Group; referee for *Australian Aboriginal Studies*; interview with the *Sydney Morning Herald* on Indigenous social indicators; adviser to ATSIC and DEWRBSB regarding interpretation of Indigenous data from the ABS Labour Force Survey; Discussions with ABS Census Program regarding the conduct of the Indigenous count in the 2001 Census and subsequent analysis of results; discussions with ABS Household Surveys Program regarding Indigenous data from the ABS Labour Force Survey; presentation with Martin Bell on 'Options for adjusting Cape York Indigenous population estimates', to the Office of Economic and Statistical Research, Queensland Treasury, Brisbane; adviser, Queensland Treasury and Department of Transport and Regional Services regarding interpretation of Indigenous population estimates.

CAEPR, together with IDA and AIATSIS hosted the Canberra launch of the film 'Without Prejudice', a documentary about the meaning of reconciliation at the Manning Clark Centre, ANU organised by Siobhan McDONNELL. A panel consisting of Jon ALTMAN; Mick Dodson, AIATSIS; and Pamela Ryan, Managing Director, IDA, discussed implications of the film and results of research arising from the deliberate poll.

CAEPR staff, Jon ALTMAN and Siobhan McDONNELL, were involved in the administration of, and participation in, the Deliberative Poll on Reconciliation held at Old Parliament House.

CAEPR provided considerable material for special autumn edition of *ATSIC News* on 'CDEP: More than welfare', pp.7-29.

## Centre for Cross-Cultural Research

Dr Bain ATTWOOD, organiser, Frontier Conflict conference, with National Museum of Australia.



Prof. Tim BONYHADY, Burke and Wills: from Melbourne to myth, exhibition, with National Library of Australia; 'The colonial earth', public lecture, delivered at University of Western Sydney, Hawkesbury Campus; within the series Engaging Australia: Australian Art 1788-2000, Art Gallery of New South Wales; public lecture, Art Gallery of Western Australia, Perth; public lecture, Queensland Art Gallery, Brisbane, Qld.

Dr Penny EDWARDS, The heart of the Journey, slide and sound show, with the National Library of Australia.

Ms Alison FRENCH, Albert Namatjira: A new assessment with National Gallery of Australia and Gordon Darling Foundation.

Dr Louise HAMBLY, Art on a String, art exhibition with Object Gallery, Sydney. This exhibition will travel to Museum Victoria.

Dr Vivien JOHNSON, member, Papunya Tula expert examiner, Reference Group assisting the Cultural Heritage Commission, Commonwealth Department of Environment, Communications, Information Technology and the Arts; guest lecturer, Museum of Contemporary Art, Sydney; guest lecturer, Engaging Australia Lecture Series, Art Gallery of New South Wales.

Dr Sylvia KLEINERT, Inside Dreaming, a national touring exhibition, with Museum Victoria, Melbourne; member, Australian Institute of Aboriginal & Torres Strait Islander Studies.

Dr Ann McGRATH, Births of a Nation, exhibition, with the Powerhouse Museum.

Prof. Howard MORPHY and Ms Katie HAYNE, the Indigenous science curriculum project with NSW Department of Education and Training, the Australian National Maritime Museum and the Yirrkala Community Education Centre, NT; member, Expert Advisory Committee, Disciplinary Panel, Humanities and Creative Arts, Australian Research Council; consultant, Northern Land Council on native title issues; adjunct curator, Kluge-Ruhe Aboriginal Art Collection, University of Virginia, USA; expert witness for Dr Deane Fergie, University of Adelaide on Hindmarsh Island Bridge; Federation lecture at the Art Gallery of New South Wales, Sydney.

Prof. Howard MORPHY and Ms Pip Deveson, Yingapungapu: Purification and Renewal, exhibition with Baku-Larrnggay Mulka Art Centre, Yirrkala with the National Museum of Australia.

Dr Paul TURNBULL, South Seas project with National Library of Australia.

## **Centre for Educational Development and Academic Methods (CEDAM)**

Margot PEARSON, Inter-University Consortium — FIRST (for Improving Research Supervision and Training) — Steering Group, comprising members from

UTS, Sydney University, QUT and the ANU. The consortium includes over 20 institutions from Australia and New Zealand. FIRST is a web-based resource for supervisors and others with responsibility for research training.

Chris TREVITT, member steering group for national 2-year Committee for University Teaching and Staff Development (CUTSD) grant project being completed on behalf of National Council for Open and Distance Education — Flexible Learning Australasia (NCODE-FLA). Steering group comprises members from Griffith University, University of Wollongong and the ANU. The title of the project was: Staff Development for Flexible Learning and the Use of Resource Based Learning Materials: A National Initiative; member, external advisory group, EIP project on 'Peer Review of ICT-Based Teaching and Learning Resources' being undertaken at Griffith University.

## **Centre for Mental Health Research**

Beyondblue: The prevention of depression using internet technologies: Scoping study. Beyondblue: A national project for the prevention of depression in older Australians: Proposal for a scoping study.

Beyondblue: National evaluation of beyondblue's community education activities.

CSIRO: Mathematical and Information Sciences: BluePages

CSIRO: Department of Human Nutrition: PATH through LIFE Project

Commonwealth Department of Health and Aging: Priorities in Mental Health.

Commonwealth Department of Health and Aging: BluePages

ACT Department of Health, Aging and Community Care: Mental Health First Aid: Development and implementation of a Mental Health First Aid course.

ACT Department of Health, Aging and Community Care: MoodGYM

ACT Department of Health, Aging and Community Care: Whatworks

Southern Area Health Service, NSW Department of Health: Whatworks

## **Humanities Research Centre**

Ralph ELLIOTT, AM, lecturer under the auspices of the English Department at University College, Australian Defence Force Academy.

Bill GAMMAGE, co-commentator, Anzac Day march, ABC TV Adelaide; 'Anzac' commentary for NBC (US) Olympic Games coverage; interviews for the National Library of Australia's Oral History Unit: 'Drovers' Re-

union', Camooweal, QLD; launched the history issue of Rural Society, Wagga Wagga City Council Chambers.

Iain McCALMAN, council member, Australian Academy of the Humanities; vice president, Australian Academy of the Humanities; member, Research Infrastructure Committee, Academy of the Humanities; member, International Advisory Committee, Consortium of Humanities Centres and Institutes; president, Australian Consortium of Humanities Centres and Institutes; president, Australasian and Pacific Society of Eighteenth-Century Studies; member, National Library of Australia, Harold White Fellowship Committee (representing the Academy of Social Sciences in Australia); member, International Affiliates Board, Humanities Research Institute, University of California; member, Advisory Board, Research Institute in the Humanities and Social Sciences, Sydney; member, National Museum of Australia, Academic Advisory Group; interim academic planning coordinator, National Europe Centre Advisory Board; chair, advisory board, National Dictionary Centre; member, Board of Directors, Freilich Foundation; chair, Review of the School of Social Inquiry, Murdoch University; jointly convened *the Eleventh David Nichol Smith Conference: The Exotic during the Long Eighteenth Century (1660-1830)* with the National Library of Australia.

With the National Museum of Australia and its opening international exhibition, *Gold and Civilization*, the HRC contributed a conference and a major publication of the same name, *Gold: Forgotten Histories and Lost Objects of Australia* edited by Iain McCALMAN, Alexander Cook and Andrew Reeves (Cambridge University Press 2001 344pp).

The HRC played a leading role in facilitating the Humanities and Social Sciences Summit sponsored by (then) DETYA in mid-2001, and at which Prof. Iain McCALMAN also presented a paper.

Brian MASSUMI, architecture studio review, jury member, Yale University School of Architecture; member, editorial board, *Postmodern Culture*; member, editorial board, *Traces: A Multilingual Journal of Cultural Theory*; member, editorial board, *The UTS Review: Cultural Studies and New Writing*, founding editor, *Theory Out of Bounds*, book series.

Caroline TURNER, 'Tracking Kultja' committee for an Indigenous festival at the National Museum of Australia; adviser to the National Library of Australia for its exhibition, *Cook & Omai: the Cult of the South Seas*. The HRC coordinated scholarly input into these projects in collaboration with the NLA.

The HRC conducted a Colloquium on Australia's Cultural Relations with Japan for the Australia-Japan Foundation, Department of Foreign Affairs and Trade.

HRC staff delivered papers as invited presenters at symposia organised by the National Gallery of Australia, the

National Library of Australia, and the Art Gallery of New South Wales.

HRC staff also gave presentations in association with the opening of the National Museum of Australia including radio and press interviews.

## National Centre for Epidemiology and Population Health

Cathy BANWELL and Andrea WHITTAKER, building community capacity program with NSW Southern Area Health Service.

Cathy BANWELL, Jane DIXON, Lyndall STRAZDINS, Dorothy BROOM and Bryan RODGERS, Centre for Mental Health Research, ANU, longitudinal Study of Australian Children with the National Research Partnership for Development, Health and Wellbeing, made up of the Australian Institute of Family Studies, The Australian Council for Educational Research, Institute of Child Health Research, The TVW Telethon Institute for Child Health Research, The Macquarie University/Charles Sturt University Research Group (The MU/CSU research group represents the Department of Psychology and the Institute of Early Childhood at Macquarie University, and the Faculty of Education at Charles Sturt University (Bathurst)), Murdoch Childrens Research Institute (The three MCRI centres participating in this consortium are: The Centre for Community Child Health, The Centre for Adolescent Health, and The Clinical Epidemiology and Biostatistics Unit), Queensland University of Technology (Three QUT research centres are participating in this consortium are The Centre for Public Health Research, The Centre for Applied Studies in Early Childhood and The Centre for Cognitive Processing in Learning), Social Policy Research Centre, University of NSW, Sydney.

Niels BECKER, Jim BUTLER and Mahomed PATEL, controlling measles in the Western Pacific Region with WHO (Western Pacific Region Office)

Mary BEERS, developing a national Haemovigilance system for Australia with the Australian Red Cross Blood Service: Haemovigilance working Party.

Keith DEAR, a phase 2 study of idarubicin-based combined modality therapy in primary central nervous system lymphoma with Trans-Tasman Radiation Oncology Group (TROG) and Australasian Leukemia and Lymphoma Group (ALLG); a prospective non-randomised study of chemotherapy and radiotherapy for osteolymphoma with TROG, Australasian Radiation Oncology Lymphoma Group (AROLG), International Extranodal Lymphoma Group (IELSG) and ALLG.

OZFood Net Research by Jane DIXON, Cathy BANWELL and Gillian HALL with Martyr Kirk, OZFoodNet epidemiologist, Commonwealth Depart-

ment of Health and Ageing, and State and Territory Health Departments.

David McDONALD, preparation of part of a book on treatment services for opioid dependence for World Health Organization, Geneva; development of evaluation protocol for the NSW Medically Supervised Injecting Centre with NSW Health, Sydney; development of Australian Drug Information Network with Australian Drug Foundation, Melbourne; National Alcohol Research Agenda Project Reference Group with Commonwealth Dept of Health and Aged Care, Adelaide; chair, Advisory Committee, Resource Centre for the Alcohol & Other Drugs Sector with Alcohol & Other Drugs Council of Australia, Canberra; ACT Prisons Project with ACT Corrective Services, Canberra.

## School of Mathematical Sciences

### Centre for Mathematics and its Applications

R.J. BAXTER, member, editorial boards: *Journal of Geometric and Functional Analysis*, *Annals of Combinatorics*, *Theoretical Physics and Related Mathematics (International Press)*; member, advisory board: *Physica A*; chair, board: *Australian National University Centre for Complex Systems*, Senior Fellow, *Asia-Pacific Centre for Theoretical Physics*, Seoul, Korea.

H.S. BOOTH, assistant editor, *ANZIAM Journal*.

D.J. DALEY, adviser/consultant to ACT Board of Secondary International Statistical Institute Studies; Trustee and associate editor, *Applied Probability Trust and Journals*.

J.M. GANI, chief trustee: *Applied Probability Trust*; publisher/editor, *Journal of Applied Probability*, *Advanced Applied Probability Journal*, *Mathematical Scientist*, and *Mathematical Spectrum*; associate editor, *Stochastic Analysis and its Applications*, *Journal of Applied Statistics*, *IMA Journal of Mathematics Applied in Medicine and Biology*, and *Environmetrics*; adviser, Springer series on *Probability and its Applications*.

P.G. HALL, president-elect (to August) and president, *Bernoulli Society for Mathematical Statistics and Probability*; member, *Sectional Committee 1, Australian Academy of Sciences*; *Sectional Committee 1, Royal Society*; member, editorial boards, *Annals of Statistics*, *Australian and New Zealand Journal of Statistics*, *Econometric Theory*, *Journal of Statistical Planning and Inference*, *Korean Journal of Statistics*, *Probability Theory and Related Fields*, *Statistica Sinica*.

C.C. HEYDE, board member, *Australian Mathematics Trust*; member, *International Statistical Institute Publications Committee*, *Bernoulli Society Publications Committee*; member, Executive Committee: *Graduate School of Arts and Sciences, Columbia University*, Director: *Center for Applied Probability*, Columbia University; trustee, *Applied Probability Trust*; editor-in-

chief, *Journal of Applied Probability*, *Advances in Applied Probability*; (joint) editor, *Australian Mathematical Society Lecture Series*, *Springer Series in Probability and its Applications*; associate editor, *The Mathematical Scientist*; advisory editor, *Journal of Applied Mathematics and Stochastic Analysis*.

T.M. HEGLAND, member, editorial boards, *SIAM Journal Scientific Computing* and *Computational Statistics and Data Analysis*; member, *ANZIAM Executive Committee*; chair, *ANZIAM Computational Mathematics Interest Group* and Council of the Australian Mathematical Society.

A.V. ISAEV, associate editor, *Journal of Mathematical Analysis and Applications*.

L.G. KOVÁCS, member, editorial boards, *Journal of Group Theory*, *Periodica Mathematica Hungarica* and *Publicationes Mathematicae Debrecen*.

S. LIU, contributing editor, *Current Index to Statistics*.

A.G.R. McINTOSH, director, *45<sup>th</sup> Annual Meeting of the Australian Mathematical Society*, ANU; editorial board, *Bulletin of the Australian Mathematical Society*; chair, Scientific Advisory Committee, *Clifford Analysis Satellite Conference*, Macau.

B.H. NEUMANN, honorary editor, *BULLETIN of the Australian Mathematical Society*, *The Australasian Journal of Combinatorics*, *Algebra Colloquium* (Beijing); member, editorial board, *Houston Journal of Mathematics*; editorial consultant, *Southeast Asian BULLETIN of Mathematics*, *Mathematical Spectrum*.

M.F. NEWMAN, editorial adviser, *Journal of Symbolic Computation*; member, editorial board, *International Journal of Algebra and Computation*, *Australian Mathematical Olympiad Committee*, *problems committee*; *Mathematics Challenge for Young Australians*; member, GAP (Groups, algorithms and programming) Council. Organised book display for *45<sup>th</sup> Annual Meeting of the Australian Mathematical Society*.

M.R. OSBORNE, chair (until July), *ANZIAM Computational Mathematics Group*.

D.W. ROBINSON, member, *Journal of Evolution Equations and Reviews in Mathematical Physics*.

A. SIKORA, editor, *Proceedings of the CMA National Research Symposium on Geometric Analysis and Applications*.

N.S. TRUDINGER, member, editorial boards, *Proceedings of the Royal Society of Edinburgh, Series A Analysis*, *Journal of Potential Analysis*, *Bulletin of Australian Mathematical Society*, *Advances In Mathematical Sciences and Applications*, *Journal of Mathematical Analysis and Applications*, *Calculus of Variations and Partial Differential Equations*, *Nonlinear Analysis Forum*, *Taiwanese Journal of Mathematics*, *Nonlinear Differential Equations and Applications* and *Methods and Applications of Analysis*; principal organiser, Programme on

Nonlinear Partial Differential Equations at Isaac Newton Institute-Principal; chair, Scientific Committee (08/01/01–07/07/01), Selection Committee for Presidential Award: *Taiwan National Science Council*.

X.-J. WANG, editor, *Journal of Partial Differential Equations*

S.R. WILSON, associate editor, *Annals of Human Genetics*; Associate editor, *Computational Statistics & Data Analysis*; member, editorial board, *Statistical Methods in Medical Research*; representative, Statistical Society of Australia, Australian Foundation for Science; member, Conference Advisory Committee, *IBS*; editor, Biometrics Section, *Encyclopedia of Life Support Systems*; member, Institute of Mathematical Statistics (IMS) Committee on Memorials; member, IMS Nominations Committee; member, editorial committee, 6th edition of the ISI's *Dictionary of Statistical Terms*; Anti-Cancer Council of Victoria; member, ASC16: 16<sup>th</sup> Australian Statistical Conference, Committees.

## Department of Mathematics

M.T. BATCHELOR, advisory board, *Journal of Physics: Mathematical and General*

R.A. BRYCE, special editor (jointly with J Cossey), October number of *J. Austral. Math. Soc.*; problems committee, Mathematical Challenge for Young Australians; problems committee, Australian Mathematics Competition; Australian Mathematical Olympiad Committee; advisory committee, Australian Mathematics Trust; ANU representative on ACT Board of Senior Secondary Studies; chair, Assessment and Accreditation Committee of BSSS.

P.J. COSSEY, associate editor, *Bulletin Aust MS*; public officer, Aust MS and AMPAI; council member, Aust MS; member, Education subcommittee, Aust MS.

A.A. HOWE, treasurer, Australian Mathematical Society and AMPAI.

N.F. SMYTHE, Apple University Development Fund Awards Committee; editor, *e-Explore 2001: a face-to-face odyssey*, AUC Conference, James Cook Uni.

M.A. WARD, ANU representative, ACT BSSS Mathematics Panel.

D.T. WICKRAMASINGHE, editor, *Magnetic Fields Across the Hertzprung Diagram*, ASP Conf. Series, Vol 248.

# Joint research projects undertaken with universities, CSIRO and other institutions

## Institute of Advanced Studies

### Research School of Astronomy and Astrophysics

Ma.cho project by Dr T. AXELROD, Prof. K. FREEMAN, Dr B. PETERSON with Dr R. Allsman (ANUSF), Dr K. Cook, Dr A. Drake, Dr M. Geha, Dr S. Marshall, Dr D. Minniti, Dr P. Popowski, Dr C. Nelson, (Lawrence Livermore National Lab), Dr P. Quinn, (ESO), Dr C. Stubbs, Dr A. Becker (University of Washington), Dr W. Sutherland (Oxford), Dr D. Welch (McMaster), Dr D. Alves (STSci), Dr D. Bennett (Notre Dame), Dr K. Griest, Dr T. Vandehei (UCSD), Dr C. Alcock, and Dr M. Lehner (U. Penn).

TAOS project by Dr T. AXELROD with Dr C. Alcock, Dr M. Lehner (U. Penn), Dr K. Cook, Dr S. Marshall (Lawrence Livermore National Lab), Dr T. Lee, Dr C.-Y. Wen, Dr S.K. King (Academia Sinica, Taiwan), Dr W.P. Chen, Dr A. Wang (National Central University, Taiwan), Dr I. de Pater (UC. Berkeley) and Dr J. Lissauer (NASA Ames).

Southern trans-Neptunian object survey by Dr T. AXELROD, Dr B. SCHMIDT, Dr C. JACKSON, Ms R. MOODY with Dr C. Alcock, Dr K. Cook, Dr S. Marshall (Lawrence Livermore National Lab), Dr I. de Pater (UC Berkeley), and Dr J. Lissauer (NASA Ames).

REACT by Dr T. AXELROD, Prof. J. MOULD, Dr B. SCHMIDT, Mr P. PRICE with Dr S. Kulkarni, Dr F. Harrison, and Dr T. Galama (CalTech).

Search for young stellar groups in the solar neighborhood by Prof. M.S. BESSELL with Prof. B. Zuckerman (UCLA) and Dr I. Song (UCLA).

CM diagrams and initial mass functions of intermediate age clusters by Prof. M.S. BESSELL with Dr H. Sung (Seoul National University) and Dr M.-Y. Chun (SNU).

Survey for extremely metal-deficient stars by Prof. M.S. BESSELL with Dr N. Christlieb (University of Hamburg).

Spectroscopic study of the nature of Be 'Bumpers' in the Magellanic clouds by Prof. M.S. BESSELL with Dr S. Keller and Dr K. Cook (Lawrence Livermore Laboratory).

Magnetised accretion discs by Dr G. BICKNELL with Dr Z. Kuncic (University of Sydney).

High energy emission from blazars and the interpretation of morphological and spectral features of radio galaxy hot spots by Dr G. BICKNELL with Prof. S.J. Wagner (Landessternwarte, Heidelberg).

Interpretation of variable radio emission from the quasar PG 1407+265 by Dr G. BICKNELL with Dr K. Blundell (Oxford) and Dr A. Beasley (NRAO).

Various projects involving the interpretation of high energy gamma-ray observations from CANGAROO II and III by Dr G. BICKNELL with the Gamma-Ray Group of the Institute for Cosmic Ray Research, University of Tokyo and the High Energy Astrophysics Group, University of Adelaide.

The 2dF galaxy redshift survey by Dr M.M. COLLESS, Dr B.A. PETERSON and Dr C.A. JACKSON with Dr J. Bland-Hawthorn, Dr I.R. Lewis, Dr T.J. Bridges and Dr R.D. Cannon (AAO), Dr W.J. Couch and Dr R. De Propris (UNSW) and UK and US collaborators.

OzPoz: design and construction of a fibre positioner unit for the FLAMES spectrograph on the European southern observatory's very large telescope by Dr M.M. COLLESS with Dr K. Taylor (Caltech), A. Prof. W.J. Couch (UNSW).

The 6dF galaxy survey: a survey of the mass and motions in the local universe using a new fibre spectrograph on the AAO Schmidt telescope by Dr M.M. COLLESS with Dr Q.A. Parker, Dr W. Saunders, Dr F.G. Watson (AAO) and other collaborators in Australia, USA, UK, France and Japan.

The dwarf spheroidal companions to M31 by Dr G. Da COSTA with Dr T. Armandroff, NOAO, and Dr N. Caldwell, CfA.

The variable stars of the dwarf spheroidal companions to M31 by Dr G. Da COSTA with Dr T. Armandroff, NOAO, Dr G. Jacoby, WIYN, and Dr B. Pritzl, NOAO.

The chemical histories of the Fornax and Carina dwarf spheroidal galaxies by Dr G. Da COSTA with Dr T. Smecker-Hane, UC Irvine, Dr J. Hesser and Dr P. Stetson, DAO, and Dr D. Hatzidimitriou, Univ of Crete.

The origin of globular cluster abundance anomalies - clues from the main sequence by Dr G. Da COSTA with Prof. J. Norris, Ms L. Stanford, Dr R. Cannon, AAO, and Dr B. CROKE, ANU.

The globular clusters of the dwarf ellipticals NGC 185 and NGC 205 by Dr G. Da COSTA with Dr T. Armandroff, NOAO, Mr S.C. Kim, Seoul Nat Univ, Dr M.G. Lee, Seoul Nat Univ, Dr D. Geisler, Concepcion, and Dr A. Sarajedini, Univ of Florida.

Spectral properties of radio-selected broad absorption line QSOs by Dr M. de KOOL with Prof. R.H. Becker, Lawrence Livermore National Laboratories.

Analysis and interpretation of HST-STIS broad absorption line QSO spectra by Dr M. de KOOL with Dr N. Arav, University of California Davis and Dr K.T. Korista, University of Western Michigan.

The physical process behind the spectral turnover in the GPS source PKS 1718-649 by Dr M. de KOOL with Dr S. Tingay, ATNF.

The COLA project: compact objects in low-powered AGN by Prof. M. DOPITA and Ms L.S. KEWLEY with Dr P.N. Appleton (Iowa State U.), Dr A.P. Marston (Caltech), Andreas, Dr R. Norris (ATNF) & Dr A. Zezas (CFA).

Astronomical site testing at Dome C in the Antarctic by Prof. J.R. MOULD, Prof. M.A. DOPITA, and Dr R.S. SUTHERLAND with Prof. J. Storey, Dr M. Ashley and Dr M. Burton (University of New South Wales), Prof. J. Vernin, Dr C. Coulman and Dr M. Azouit, (Université de Nice) Prof. P. Maffei and Dr L. Valenziano (Universa di Perugia), and Prof. R. Viotti (Istituto di Astrofisica Spaziale, Frascati).

The helical jet/ISM interaction in NGC 4258 by Dr G.N. Cecil (Univ. of N. Carolina, USA) with Prof. M.A. DOPITA (RSAA), Dr L.J. Greenhill (CFA, USA) Dr J.M. Moran (CFA, USA) and Dr C.G. De Pree, (NRAO, USA).

FUSE observations of NGC1068 by Dr G.N. Cecil (Univ. of N. Carolina, USA) & Dr W. Zheng (JHU, USA) with Prof. M.A. DOPITA, Dr G.V. BICKNELL and Mr B. GROVES (RSAA), Dr Z. Tsvetanov (JHU, USA), Dr M.G. Allen (U. Strasbourg, France) & Dr L. Binette (UNAM, Mexico).

What excites LINERS: the brilliant case of NGC 3998 by Dr L. Dressel (STScI, USA) with Prof. M.A. DOPITA (RSAA).

Are narrow line regions in active galaxies dusty and radiation pressure dominated? by Prof. M.A. DOPITA, Mr B. GROVES & Dr R.S. SUTHERLAND (RSAA) with Dr L. Binette (UNAM, Mexico) and Dr G.N. Cecil (U. of N. Carolina, USA).

Red quasars from the two micron all sky survey by Dr P.J. FRANCIS with Dr R. Cutri and Dr B. Nelson (IPAC).

Gas in high redshift galaxy clusters by Dr P.J. FRANCIS with Dr B.E. Woodgate (NASA GSFC), Dr G. Williger (Johns Hopkins) and Dr P. Palunas (UT Austin).

IR excess searches for QSOs by Dr P.J. FRANCIS with Dr M.J. Drinkwater and A/Prof. R.L. Webster (U of Melbourne).

Studies of neutral hydrogen in dwarf elliptical galaxies of the Centaurus A group by Prof. K. FREEMAN and Dr H. JERJEN with Dr S. Beaulieu, University of Cambridge, and Prof. C. Carignan, University of Montreal.

HST studies of the post-starburst galaxy NGC 5102 by Prof. K. FREEMAN with Dr S. Beaulieu, Cambridge University, Prof. C. Norman, Johns Hopkins University, Prof. N. Scoville, Caltech and Dr P. Quinn, ESO.

Kinematics of planetary nebulae in nearby galaxies and in the intracluster medium of the Virgo cluster by Prof. K. FREEMAN with Dr M. Arnaboldi and Prof. M. Cappacioli, Osservatorio di Capodimonte, Naples; Prof. O. Gerhard, University of Basel; Prof. R. Kudritzki and Dr R. Mendez, University of Muenchen and University of Hawaii; Prof. H. Ford, Johns Hopkins University; Prof. R. Ciardullo, Penn. State University; Dr J. Feldmeier, Case Western Reserve University, and Dr G. Jacoby, NOAO.

New studies of the planetary nebulae population in the Virgo cluster by Prof. K. FREEMAN with Prof. S. Okamura, University of Tokyo and the Suprime-Cam team, Dr M. Arnaboldi, Osservatorio di Capodimonte, and Prof. O. Gerhard, University of Basel.

The planetary nebulae spectrograph project by Prof. K. FREEMAN with a team from Osservatorio di Capodimonte, University of Groningen, University of Nottingham, ESO and Caltech.

HST studies of the inner regions of barred galaxies by Prof. K. FREEMAN with Dr M. Carollo, Columbia University, and Prof. T. de Zeeuw, Leiden University.

The MACHO project by Dr T. AXELROD, Dr B. PETERSON and Prof. K. FREEMAN with the MACHO Team (University of Pennsylvania, Lawrence Livermore National Laboratory, University of California, University of Washington, McMaster University).

HST studies of Lyman-alpha absorption of QSOs by the outer regions of spiral galaxies by Prof. K. FREEMAN with Dr S. Cote, HIA, and Prof. C. Carignan, University of Montreal.

Studies of unmixed debris in the galactic halo (the Spaghetti Project) by Prof. K. FREEMAN with Prof. J. Norris; Dr H. Morrison and Dr P. Harding, Case Western Reserve University; Dr M. Mateo and Dr R. Dohm-Palmer, University of Michigan, and Dr E. Olzewski, Steward Observatory.

Radial velocities in the globular cluster Omega Centauri by Prof. K. FREEMAN with Ms R. Reijns and Prof. T. de Zeeuw, University of Leiden, and Dr P. Seitzer, University of Michigan.

Scaling laws for dark matter by Prof. K. FREEMAN with Prof. J. Kormendy, University of Texas.

Studies of disk galaxies by Prof. K. FREEMAN with Prof. P. van der Kruit and Drs M. Kregel, University of Groningen.

The formation of the Milky Way with Dr J. Bland-Hawthorn, AAO.

The Parkes multibeam all-sky HI survey (HIPASS) by Prof. K. FREEMAN with the Multibeam Team (about 30 astronomers, from Australian, US and UK institutions).

Structure of the galactic Bulge from the MACHO Red Clump stars by Dr R. FUX, Dr T. AXELROD, with Dr P. Popowski (MPI Garching, Germany).

Evolution and unified schemes of radio-loud AGN by Dr C. JACKSON with Prof. J.V. Wall, University of Oxford.

The evolution of the local radio source populations by Dr C. JACKSON with Dr E.M. Sadler and the 2dFGRS team (Colless et al).

The space density of flat spectrum radio quasars by Dr C. JACKSON with Prof. J.V. Wall, University of Oxford, Dr P.A. Shaver, European Southern Observatory (Garching) and Dr I.M. Hook, Gemini.

Optically-faint, radio-bright radio galaxies at high redshift by Dr C. JACKSON with Prof. R. Norris et al. (CSIRO/ATNF).

Analysis of the SKA science drivers to potential telescope designs, future directions and the science case for the Australian SKA demonstrators by Dr C. JACKSON with the Australian and International SKA Science Working Groups.

Deep radio imaging of the Hubble deep field south by Dr C. JACKSON with Prof. R. Norris et al. (CSIRO/ATNF).

Deep radio imaging of the Chandra deep field south by Dr C. JACKSON with Prof. R. Norris et al (CSIRO/ATNF) and Dr A. Koekemoer et al (STScI).

Distance and depth of the Fornax cluster from surface brightness fluctuation distances of dwarf elliptical galaxies by Dr H. JERJEN (PI) with PD Dr B. Binggeli, Astronomical Institute of the University of Basel, Switzerland, Mr F. Barazza, Astronomical Institute of the University of Basel, Switzerland, Dr S. de Rijcke, Astronomical Institute of the University of Basel, Switzerland.

Search for cosmological fingerprints in the supergalactic plane by Dr H. JERJEN (PI) with Prof. M. Valtonen, Tuorla Observatory, Finland, Mr R. Rekola, Tuorla Observatory, Finland, and Dr L. Takalo, Tuorla Observatory, Finland.

The all-sky 21cm survey at the Parkes radio telescope by Dr H. JERJEN with Prof. R. Webster (PI, University of Melbourne) with Dr G. Banks (University of Wales), Dr D.G. Barnes (ATNF), Prof. R. Bhathal (UWS), Prof. M.J. Disney (University of Wales), Prof. R.D. Ekers (ATNF), Prof. K.C. Freeman (RSAA), Dr B. Gibson (University of Colorado), Dr P. Henning (New Mexico), Mrs V. Kilborn (University of Melbourne), Dr B. Koribalski (ATNF), Dr P. Knezek (STScI), Dr D. Malin (AAO), Prof. J. Mould (RSAA), Dr T. Oster-

loo (ATNF), Dr R.M. Price (ATNF), Dr S.D. Ryder (AAO), Prof. E.M. Sadler (University of Sydney), Dr L. Staveley-Smith (ATNF), Dr A.E. Wright (ATNF).

Dynamics of the shearing sheet by Dr A.J. KALNAJS with Prof. A. Toomre, MIT.

Gemini near-infrared integral field spectrograph project by Dr P. MCGREGOR and team with Dr K. Hodapp and team, Uni. of Hawaii.

Gemini south adaptive optics imager conceptual design study by Dr P. MCGREGOR and team with Dr R. Haynes and team, AAO.

Water maser emission in the edge-on galaxy IRAS F01063-8034 by Dr P. MCGREGOR with Dr L. Greenhill (Harvard), Dr S. Ellingsen (University of Tasmania), and Dr R. Norris (ATNF).

The multiband photometric imager for SIRTf by Prof. J. MOULD with Drs E. Arens (UC Berkeley), C. Beichman (Caltech), T. Gautier (JPL), E. Haller (LBL), C. Lada (Harvard Smithsonian), G. Rieke & F. Low (U. Arizona), G. Neugebauer (Caltech), P. Richards (UC Berkeley), M. Rieke & P. Strittmatter (U. Arizona), and M. Werner (JPL).

Identification of the galaxy's missing mass by Prof. J. MOULD with Dr T. Axelrod, Dr K. Cook & Dr C. Alcock (Lawrence Livermore National Lab), Prof. K. Freeman and Dr G. Da Costa.

The most metal deficient stars by Prof. J.E. NORRIS with Prof. T.C. Beers, Michigan State University, and Dr S.G. Ryan, Open University, United Kingdom.

Lithium abundances of halo stars by Prof. J.E. NORRIS with Prof. T.C. Beers, Michigan State University, Dr S.G. Ryan, Open University.

Carbon-rich metal-poor stars by Prof. J.E. NORRIS and Prof. M.S. BESSELL with Drs H. Ando and W. Aoki, National Astronomical Observatory, Japan; Prof. T.C. Beers, Michigan State University and Dr S.G. Ryan, Open University.

The origin of globular cluster abundance anomalies: clues from the main sequence by Dr G.S. Da COSTA and Prof. J.E. NORRIS with Dr R.D. Cannon, Anglo-Australian Observatory, and Dr B.F. Croke, University of Crete.

The origin of globular cluster abundance anomalies: magnesium isotope ratios in Omega Centauri and other clusters by Prof. J.E. NORRIS and Dr G.S. Da COSTA, with Dr J. Lattanzio, Monash University and Ms I. Ivens, University of Texas at Austin.

In situ studies of the old populations of the galaxy by Prof. J.E. NORRIS and Prof. K.C. FREEMAN with Prof. G. Gilmore, Cambridge University, and Prof. R.F.G. Wyse, Johns Hopkins University.

Studies of structure in the galactic halo by Prof. J.E. NORRIS and Prof. K.C. FREEMAN with Dr H.L.

Morrison, Case Western Reserve University, Prof. M. Mateo, University of Michigan, Dr E. Olszewski and Mr P Harding, University of Arizona.

Blue horizontal branch stars and the mass of the galaxy by Prof. J.E. NORRIS with Dr P. Hewett, University of Cambridge and Dr S J Warren, Imperial College London.

Construction and operation of a 2m telescope at 3000m on the summit of Haleakala, Maui, for the purpose of multicolour active galactic NUClei monitoring (MAGNUM) by Dr B. PETERSON with Prof. Y. Yoshii (Institute of Astronomy, University of Tokyo) and Prof. Y. Kobayashi (National Astronomical Observatory of Japan). The MAGNUM telescope has been constructed by Electro Optic Systems, and installed on Haleakala. The purpose of the project is to derive redshift independent distances to QSOs and AGN, and to use these distance measurements along with the redshift to determine the geometry of the Universe.

A survey of the southern sky by Dr B. PETERSON with Prof. K. Kawara (Institute of Astronomy, University of Tokyo) with the Tokyo Institute of Astronomy Schmidt Telescope Camera (TIOASTC). The TIOASTC contains two 2k x 4k thinned CCDs, and covers 1.1 x 1.1 degrees.

The High-Z SN search by Dr B.P. SCHMIDT with Drs N. Suntzeff, C. Smith, R. Schommer; A. Clocchiatti, U. Catalica; R. Kirshner, P. Challis, P. Garnavich, Harvard; B. Leibundgut, J. Spyromilio, P. Woudt, ESO; M. Phillips, Carnegie; M. Hamuy, Arizona, C. Stubbs, C. Hogan, D. Reiss, A. Diercks, UW; A. Filippenko, A. Riess, Berkeley; J. Tonry, Hawaii; R. Gilliland, STScI.

Supernova intensive study with HST by Dr B.P. SCHMIDT with Drs R. Kirshner, Harvard; D Branch, Oklahoma; R Chevalier, Virginia; A Filippenko, Berkeley; C Fransson, Stockholm; B. Leibundgut, ESO; N. Panagia, STScI; M. Phillips and N. Suntzeff, CTIO; C. Wheeler, Texas.

The trans Neptunian search by Dr B.P. SCHMIDT with Dr T. Axelrod, RSAA; Dr C. Alcock, U. Penn; and Dr K. Cook, LLNL.

The REACT gamma ray burst study by Dr B.P. SCHMIDT with Dr T. AXELROD, ANU RSAA; Mr P. PRICE, ANU RSAA; Dr S. Kulkarni, CalTech; Dr F. Harrison, CalTech; and Dr D. Frail, NRAO.

Southern all sky supernova survey by Dr B.P. SCHMIDT with Ms M. SALVO, ANU RSAA, and Dr M. Ashely, UNSW.

Astronomical site testing at Dome C in the Antarctic by Prof. J.R. MOULD, Prof. M.A. DOPITA and Dr R.S. SUTHERLAND with Prof. J. Storey, Dr M. Ashley and Dr M. Burton (University of New South Wales), Prof. J. Vernin, Dr C. Coulman, and Dr M. Azouit, (Université de Nice), Prof. P. Maffei and Dr L. Valen-

ziano (Universa di Perugia), and Prof. R. Viotti (Istituto di Astrofisica Spaziale, Frascati).

Are narrow line regions in active galaxies dusty and radiation pressure dominated? by Prof. M.A. DOPITA, Mr B. GROVES and Dr R.S. SUTHERLAND (RSAA) with Dr L. Binette (UNAM, Mexico) and Dr G.N. Cecil (U. of N. Carolina, USA).

Stellar evolution and nucleosynthesis on the AGB by Dr P.R. WOOD with Dr J. Lattanzio, Monash University.

Theoretical models of Mira variables by Dr P.R. WOOD with Prof. M. Scholz, University of Heidelberg.

Observational studies and theoretical models of Mira variables by Dr P.R. WOOD with H. Richter, Technical University of Berlin.

Optical/ear-IR spectra of ABG stars by Dr P.R. WOOD with Dr A. Lancon, University of Strasbourg.

Infrared and SiO observations of stars near the galactic center by Dr P.R. WOOD with Dr S. Deguhi, Nobeyama Radio Observatory.

Infrared observations of ISO sources in the Magellanic clouds by Dr P.R. WOOD with Dr T. Tanabe and Dr Y. Nakada, University of Tokyo.

Studies of MSX sources in the Magellanic clouds by Dr P.R. WOOD with Dr M. Cohen, Berkeley.

Studies of the variability of AGB stars in the Magellanic clouds and near the galactic centre by Dr P.R. WOOD with Prof. H. Habing and M. Cioni, Leiden and Dr A Omont, IAP Paris.

Orbital velocities of symbiotic stars by Dr P R WOOD with Dr K Hinkle, NOAO, Dr R Joyce, NOAO, and Dr F Fekel, Tennessee State University.

Pulsation velocities and mass loss in red variables in 47 Tuc by Dr P.R. WOOD with Dr T. Lebzelter, Vienna.

## **Research School of Biological Sciences**

### **Comparative Genomics Group**

Genetics of the tammar wallaby by GRAVES, J., WAKEFIELD, M., DELBRIDGE, M., DEAKIN, J., GAETH, A., GRUETZNER, F., GAL'LINO, E. and CARVALHO, D. with Prof. W. Cooper, Macquarie University.

Genomic imprinting in marsupials by GRAVES, J. and DEAKIN, J. with Dr K. Mate, Macquarie University.

Mapping globin genes in marsupials and monotremes by GRAVES, J. with Dr R.M. Hope, University of Adelaide.

Sex determination in the tammar wallaby by GRAVES, J. and SANKOVIC, N. with Prof. M.B. Renfree, Dr A. Pask, Dr D. Park University of Melbourne



Construction of a comparative Y chromosome DNA chip by GRAVES, J. and SANCOVIC, N. with GENESCAN Australia, Melbourne.

Construction of a BAC library for the tammar wallaby by GRAVES, J. with Dr K. Nicholas, University of Melbourne.

Sex determination in birds by GRAVES, J. with Dr A.H. Sinclair, Royal Children's Hospital, Melbourne.

Characterisation of ATRY in marsupials by GRAVES, J. with Dr V. Harley, Prince Henry's Institute of Medical Research, Melbourne.

The Evolution of sex chromosomes in Scincid lizards by GRAVES, J. and GAETH, A. with Prof. R Shine, University of Sydney.

The evolution of sex chromosomes in the Agamid lizards by GRAVES, J. and GAETH, A. with Assoc. Prof. A. George, Dr S. Sarre, University of Canberra.

The evolution of sex determination in birds and reptiles by GRAVES, J. and GAETH, A. with Assoc. Prof. S. Edwards, University of Washington, Seattle, USA.

Characterisation of human RBMX, a candidate for X-linked mental retardation by GRAVES, J. and DELBRIDGE, M. with Dr Jozel Gecz, University of Adelaide and Dr Seong-Seng Tan, Howard Florey Institute.

Marsupial intersex animals by GRAVES, J. with Dr P. Woolley La Trobe University.

Marsupial phylogeny by GRAVES, J. with Dr M. Westerman, La Trobe University.

Characterisation of human RBMX, a candidate for X-linked mental retardation by GRAVES, J. and DELBRIDGE, M. with Dr C. Shwartz, JC Self Research Institute, South Carolina, USA.

Characterisation of X homologues of Y-located spermatogenesis genes by GRAVES, J. and DELBRIDGE, M. with Dr Micheal Mitchell, INSERM, Marseille, France.

Characterisation of genes for cognitive abilities on the human X chromosome in tammar wallaby by GRAVES, J. and DELBRIDGE, M. with Dr Horst Hammeister and Dr Hildegard Kehrer-Sawatzki, University of Ulm, Germany.

Marsupial X chromosome inactivation by GRAVES, J. and WAKEFIELD, M. with C.M. Distech, Department of Pathology, University of Washington, Seattle, USA.

### **Developmental Neurobiology and Endocrinology Group**

Development functional connections in visual and touch systems in the wallaby by MARK, R.F., FLETT, D.L. and MAROTTE, L.R. with Prof. P. Waite, University of NSW.

Development of hearing in the wallaby using electrophysiological techniques by MARK, R.F. with Dr Guang-Bin Liu, University of Queensland.

Chemical atlas of the wallaby brain by MAROTTE, L.R. with Assoc. Prof. K.W.S. Ashwell and Prof. G. Paxinos, University of NSW.

Anatomy of the hypothalamus of the developing and adult wallaby by MAROTTE, L.R. with Cheng Gang and Assoc. Prof. K.W.S. Ashwell, University of NSW.

Expression of developmental markers in the brain of the wallaby pouch young by MAROTTE, L.R. with Assoc. Prof. K.W.S. Ashwell, University of NSW.

Development of thalamocortical synapses in the somatosensory cortex of the wallaby by MAROTTE, L.R. and D.L. FLETT with Dr C.A. Leamey, Massachusetts Institute of Technology, USA.

Expression of developmental markers in the brain of the wallaby pouch young by MAROTTE, L.R. with Dr J. Mai, University of Dusseldorf, Germany.

Expression of brain derived Neurotrophic Factor and TrkB in the developing retinocollicular system of the wallaby by MAROTTE, L.R. and M. VIDOVIC with Dr S. Jhaveri, Massachusetts Institute of Technology, USA.

The expression of mRNA and functional alpha1-adrenoceptors that suppress the GIRK conductance in adult rat locus coeruleus neurones by VIDOVIC, M. with Dr P. Osborne, Prince of Wales Medical Research Institute.

### **Ecosystem Dynamics Group**

Interactive effects of salinity and nutrients: linking physiological processes with patterns in mangrove forest structure by BALL, M.C. with Drs C. Lovelock and I. Feller, Smithsonian Institution, USA.

Effects of elevated [CO<sub>2</sub>] on hydraulic architecture of eucalypt seedlings by BALL, M.C. with Dr B. Atwell, Macquarie University.

Strategies of water use in dry rainforest tree species: linking hydraulic architecture and function by BALL, M.C. with B. Choat and Dr J.A.M. Holtum, James Cook University.

Biomechanics of freezing injury in evergreen tree seedlings by BALL, M.C. and CANNY, M.J. with Dr J. Wolfe, University of New South Wales.

Responses of evergreen tree seedlings to seasonal variation in temperature stress under future atmospheric [CO<sub>2</sub>] by BARKER, D. and BALL, M.C., with Dr O.K. Atkin, York University, UK.

Modelling the responses of forests to climate change by DAVIES, I. and NOBLE, I.R. with Prof. H. Shugart, Univ Virginia, Va, USA.

Time-resolved spectral analyses of winter acclimated evergreen species and reef corals by GILMORE, A.M. with Prof. S. Itoh, University of Nagoya, Japan.

Analysis of the physiology and function of fluorescent proteins in Okinawa coral species by GILMORE, A.M. with Prof. H. Yamasaki and Assoc. Prof. R. vanWoesik, University of the Ryukyus, Japan.

Mechanistic role of the PsbS protein in the process of excess light energy dissipation in higher plants by GILMORE, A.M. with Assoc. Prof. K.K. Niyogi and Dr X. Li, University of California at Berkeley, USA.

Time-resolved spectral analyses of fluorescent proteins and photosynthetic pigments in Okinawan and Australian coral species and their algal symbionts, respectively by GILMORE, A.M. with Prof. A.W.D. Larkum, University of Sydney.

Long-term population dynamics of rainforests by NOBLE, I.R., DAVIES, I. with Prof. J.H. Connell, University of Santa Barbara, California, USA.

Modelling the dynamics of landscapes by NOBLE, I.R., DAVIES, I. with Dr S. Lavorel, Centre d'Ecologie Fonctionnelle et Evolutive, CNRS, Montpellier, France, Dr J. Gignoux Ecol Normale Supérieure CNRS, Paris, France, and Dr R.H. Gardner, Univ Maryland, USA.

Rangeland monitoring using satellite imagery by RODERICK, M. with Dr A. Holm of University of WA and Dr S. Cridland of Environmental Resource Information Network, ACT.

Estimating pasture productivity using satellite imagery by RODERICK, M. and HUME, I. with Dr T. McViccar, CSIRO Land and Water.

Competition and coexistence in an Australian understorey forest community by ROXBURGH, S.H. with Dr P. Chesson, Section of Evolution and Ecology, University of California, Davis, USA.

The role of disturbance in maintaining biological diversity by ROXBURGH, S.H. with Dr K. Shea, Department of Biology, the Pennsylvania State University, PA, USA.

### **Environmental Biology Group**

Studies of the fractionation of carbon-isotopes by microorganisms during soil carbon degradation by BIRD, M. with Dr Santruckova, University of Southern Bohemia, Czech Republic.

A study of soil carbon in the Siberian boreal forests and Botswana by BIRD, M. with Prof. J. Lloyd, Max Planck Institute for Biogeochemistry.

A study of carbon inventories in Botswanan soils by BIRD, M. with Dr E. Veenendaal, Okavango Research Centre, Botswana.

Radiocarbon dating of Australian archaeological sites by BIRD, M. with Dr C.S.M. Turney, Royal Holloway, University of London.

Radiocarbon dating study of the Border Cave archaeological site by BIRD, M.I. with Dr P. Bowman, McGregor Museum, South Africa.

Radiocarbon dating the Niah Cave sedimentary record by BIRD, M.I. with Prof. G. Barker, University of Leicester, UK and fifteen members of the Niah Archaeology Project, Sarawak, Borneo, Indonesia.

A palaeoenvironmental study of Loagan Bunut Lake, northern Sarawak by BIRD, M.I. with Dr C. Hunt, University of Huddersfield, UK.

Palaeoenvironmental and radiocarbon dating of mangrove swamps and archaeological remains in central Singapore by BIRD, M.I. with Prof. J. Milsic, National University of Singapore.

Linking light capture with CO<sub>2</sub> fixation by EVANS, J. with Prof. T. Vogelmann, University of Wyoming, USA.

Root-Shoot interdependence in plant response to atmospheric warming and elevated CO<sub>2</sub> concentration by EVANS, J.R., EDWARDS, E. and SCHORTEMEYER, M. with Dr R.M. Gifford and Dr A. Volder, CSIRO Plant Industry Canberra.

Leaf physiology by FARQUHAR, G.D. and MILLER, J.M. with Dr R.J. Williams, CRC for Tropical Savanas, Northern Territory.

Stomatal models by FARQUHAR, G.D. with Dr T. Buckley, Prof. K. Mott, Utah State University, USA.

The role of thylakoid architecture on chloroplast electron transport by FARQUHAR, G.D. and TREMMEL, I. with Prof. E. Weis, Wilhelms University of Muenster Schlossgarten, Germany.

Carbon and oxygen isotope discrimination in tropical mangrove communities by FARQUHAR, G.D. and WONG, S.C. with Prof. J.E. Ong and Prof. W.K. Gong, Centre for Marine and Coastal Studies, University Sains Malaysia.

Isotope discrimination and wheat performance by FARQUHAR, G.D., WONG, S.C. and GAN, K. with Dr R. Richards, Dr A. Condon, Dr G. Rebetzke, CSIRO Plant Industry.

Isotope discrimination in tree rings by FARQUHAR, G.D. with Dr M.M. Barbour and Dr A. Walcroft, Landcare Research, New Zealand.

Oxygen isotope fractionation by FARQUHAR, G.D. with Dr J. Lloyd, Max-Planck-Institut für Biogeochemie, Jena, Germany.

Models of photosynthesis by FARQUHAR, G.D. and von CAEMMERER, S. with Berry, J.A., Carnegie Institution of Washington, Stanford, California.

Metal transport across the peribacteroid membrane of soybean symbiosomes by KAISER, B.N. with Prof. D.A. Day, University of Western Australia.

Carbon isotope discrimination in tree rings by FARQUHAR, G.D. with Dr W.G. Alloway, Assoc. Prof. M. Barbetti, University of Sydney, and Mr D. Pepper, University of NSW.

Studies of isotope dynamics in lupins and eucalypts by FARQUHAR, G.D. and CERNUSAK, L. with Prof. J.S. Pate, University of Western Australia.

The effect of exogenous abscisic acid on stomatal development, stomatal mechanics, and leaf gas exchange in *Tradescantia virginina* by FARQUHAR, G.D. with Dr P.J. Franks, James Cook University.

Canopy carbon and oxygen isotope composition of 9-year-old hoop pine families in relation to seedling carbon isotope composition, growth, field growth performance, and canopy nitrogen concentration by FARQUHAR, G.D. with Dr N.V. Prasolova, Griffith University, Dr Z. Xu, Queensland Forestry Research Institute and Cooperative Research Centre, Dr P.G. Saffigna, Cooperative Research Centre for Sustainable Production Forestry and the University of Queensland, Dr M.J. Dieters, Queensland Forestry Research Institute and Cooperative Research Centre.

Functional analysis of the AMT multigene family *Arabidopsis* by KAISER, B.N. with Prof. A.D.M. Glass, University of British Columbia, Canada.

Water relations and gas exchange of the root hemiparasite *Santalum acuminatum* (quandong) by LOVEYS, B.R. with Assoc. Prof. S.D. Tyerman, Flinders University and Dr B.R. Loveys, CSIRO Plant Industry Adelaide.

Transfer of photosynthate and naturally occurring insecticidal compounds from host plants to the root hemiparasite *Santalum acuminatum* (Santalaceae) by LOVEYS, B.R. with Assoc. Prof. S.D. Tyerman, Flinders University, and Dr B.R. Loveys, CSIRO Plant Industry Adelaide.

The molecular physiology of ammonium transport in rice by MASLE, J. with Dr Upadhyaya, Dr P. Ryan, CSIRO and Dr M. Udvardi, Max Planck Institute for Molecular Plant Physiology, Germany.

Carbon isotope discrimination by a sequence of *Eucalyptus* species along a subcontinental rainfall gradient in Australia by MILLER, J.M. and FARQUHAR, G.D. with Dr R.J. Williams, CSIRO Division of Wildlife and Ecology and Co-operative Research Centre for Tropical Savannas, Northern Territory.

Waterlogging tolerance of dryland cereal crops by SCHORTEMAYER, M. with Mr A.I. Malik, Dr T.D. Colmer and Prof. H. Lambers, University of Western Australia, and Dr T. Setter, Department of Agriculture, Western Australia.

Modelling salt uptake and salinity tolerance of wheat by SCHORTEMAYER, M. with Prof. H. Lambers, University of Western Australia.

Effects of elevated CO<sub>2</sub> on the growth and water-use efficiency of *Acacia auriculiformis* by WONG, S.C. and FARQUHAR, G.D. with Dr K.C. Woo, Northern Territory University.

Euro Siberian carbon flux project in Siberia by STYLES, J.M. and FARQUHAR, G.D. with Dr J. Lloyd and Dr D. Schulze, Max Planck Institute for Biochemistry, Jena, Germany, Dr M. Raupach, CSIRO, Dr N. Tchebackova and Dr O. Shibistova, V.N. Sukachev Institute of Forests, Siberian Branch, Russian Academy of Sciences, Krasnoyarsk.

On the physiology of orchids by WONG, S.C. with Prof. C.S. Hew, School of Biological Sciences, National University of Singapore.

On ecophysiology of tropical rainforests by WONG, S.C. and FARQUHAR, G.D. with Dr I.M. Turner, Singapore Botanic Gardens and Dr J.W.H. Yong, Nanyang Technical University.

Control of axillary bud initiation and shoot architecture in *Arabidopsis* through the SUPERSHOOT gene by YONG, J.W.H., Letham, D.S. and Masle, J. with Dr V. Sundaresan, Dr T. Tantikanjana, Dr M. Hussain and Dr M. Griffith, The National University of Singapore, Dr Ljung K. and Dr G. Sandberg, Swedish University of Agricultural Science.

## Genomic Interactions Group

Analysis of *Sinorhizobium meliloti* grown under acid stress conditions by DJORDJEVIC, M.A. and ROLFE, B.G. with Dr W. Reeves, Murdoch University.

Proteomic analysis of cell surface proteins in *Mycoplasma* by DJORDJEVIC, M.A. with Dr S. Djordjevic, Elizabeth McArthur Agricultural Institute and Dr S. Cordwell, Australian Proteome Analysis Facility, Macquarie University.

Nutrient deprivation responses in peat grown cells of *Sinorhizobium meliloti* by DJORDJEVIC, M.A. with Prof. L. Copeland and Ms L. Feng, Sydney University.

Global analysis of protein levels in *Sinorhizobium meliloti* by ROLFE, B.G., WEINMAN, J.J. and DJORDJEVIC, M.A. with the Australian Proteome Analysis Facility, Macquarie University.

Analysis of nitrogen regulatory proteins in *Sinorhizobium meliloti* and bacteroid protein expression patterns by DJORDJEVIC, M.A. with Dr Kahn, National Centre for Scientific Research (CNRS), Toulouse, France.

Analysis of regulatory effects of *tspO* mutation upon protein expression in stationary phase in *Sinorhizobium meliloti* by DJORDJEVIC, M.A. and ROLFE, B.G. with Prof. de Bruijn, National Centre for Scientific Research (CNRS), Toulouse.

Proteomic analysis of *Medicago truncatula* root development by MATHESIUS, U and ROLFE, B.G. with Prof. Cook UC Davis and Julia Frugoli, Clemson University, South Carolina, USA.

Regulation of apoptosis by nbl expression in patients with chronic lymphocytic leukaemia and in normal controls. Possible implications for chemotherapy sensitivity by NAORA, H. with D. I.W. Prossor, Ms M. McNiven and Ms M. Brun, The Canberra Hospital.

Studies on nbl expression in surgically removed cancer tissues by NAORA, H. with Prof. K. Sorimachi, Dokkyo University, Medical School, Japan.

Quorum sensing mechanisms in *Sinorhizobium meliloti* by ROLFE, B.G. and CHEN, H.-C. with Prof Bauer, Horticulture and Crop Science, Ohio, USA.

Proteome analysis of developing nodule tissue in *Medicago* by ROLFE, B.G. and DJORDJEVIC, M.A. with Dr E. Kondorosi and Prof. A. Kondorosi, ISV — CNRS, Gif-sur-Yvette, France.

Proteome analysis of the global regulation controlled by the nolR regulator gene by ROLFE, B.G., WEINMAN, J.J. with Dr E. Kondorosi and Prof. A. Kondorosi ISV — CNRS, Gif-sur-Yvette, France.

Molecular genetic analysis of rice-associating *Rhizobium* strains by ROLFE, B.G., WEINMAN, J.J. and DJORDJEVIC, M.A. with F.B. Dazzo, MSU, Michigan, USA.

Development of rice *Rhizobium* inoculant by ROLFE, B.G. and WEINMAN, J.J. with Bio-Care Technology Pty Ltd, NSW.

Proteome analysis of membrane proteins by ROLFE, B.G. with Professor A. Puhler, Department of Genetics, Faculty of Biology, University of Bielefeld, Bielefeld, Germany.

DNA sequence alignment respecting recombination events by WEILLER, G.F. with Prof. R. Giegerich and Dr S. Kurtz, Faculty of Technology, University of Bielefeld, Germany.

Distance methods for the reconstruction of recombinant phylogenies by WEILLER, G.F. with Prof. R. Giegerich, Faculty of Technology, University of Bielefeld, Germany.

Compiling a data base of *Sinorhizobium meliloti* proteins for the international scientific community by WEILLER, G.F. and DJORDJEVIC, M.A. with Dr Kahn, National Centre for Scientific Research (CNRS), Toulouse France.

Role of nodR gene in LCO production and level of acyl group saturation by WEINMAN, J.J. and Djordjevic M.A. with Prof. Spaink, Leiden University, Netherlands.

Investigations of molecular mechanisms causing cold sterility in rice by WEINMAN, J.J. and ROLFE B.G. with Mr R.L. Williams, Yanco Agricultural Institute, NSW.

A molecular genetic investigation of microspore development in rice anthers by WEINMAN, J.J. and ROLFE, B.G. with Mr R.L. Williams, Yanco Agricultural Institute, NSW.

## **Molecular Genetics and Evolution Group**

Molecular control of coral development by BALL, E.E. and HAYWARD, D.C. with Dr D.J. Miller and associates, James Cook University, and Prof. R.B. Saint and associates, University of Adelaide.

Molecular control of grasshopper development by BALL, E.E. and HAYWARD, D.C. with Dr N.H. Patel, University of Chicago.

Comparative development of glial cells in grasshopper and *Drosophila* by BALL, E.E. with Prof. G.M. Technau, Johannes Gutenberg University.

Full-length cDNAs for human and mouse genes by CAMPBELL, H.D. with Dr Y. Suzuki, Dr M. Hida and Dr S. Sugano, Department of Virology, Institute of Medical Science, The University of Tokyo.

Chromosome mapping of human genes in relation to genetic disorders by CAMPBELL, H.D. with Dr H. Eyre and Dr D.F. Callen, Centre for Medical Genetics, Women's and Children's Hospital, Adelaide and Dr L. Ades, Departments of Clinical Genetics and of Paediatrics and Child Health, The Children's Hospital at Westmead, Sydney.

Transgenic mice carrying the FLII gene by CAMPBELL, H.D. with Dr K.-S. Chen and Prof. J.R. Lupski, Baylor College of Medicine, Houston. The human and mouse homologues of the *Drosophila* flightless-I gene. Deletion of the FLII gene in the Smith-Magenis syndrome.

Role of FLII in centrioles by CAMPBELL, H.D. with Dr M.F. Crouch, GroPep Ltd, Adelaide and Dr J.D. Bray, University of Pennsylvania Medical Center, Philadelphia.

Cell biology of mammalian tweety-related genes by CAMPBELL, H.D. with Dr M.F. Crouch, GroPep, Ltd, Adelaide.

Regulatory interactions of PIN1 by CAMPBELL, H.D. with Dr I. Sanchez, Department of Molecular and Cellular Biology, Harvard University, Boston.

Studies on the role of FLII in mammalian cells by CAMPBELL, H.D. with Y.-H. Lee and Dr M. Stallcup, Department of Pathology, University of Southern California.

Studies on FLII in relation to microtubules by CAMPBELL, H.D. with Professor S Hamm-Alvarez, John

Stauffer Pharmaceutical Sciences Center, University of Southern California.

Chromosome mapping of novel mouse and human genes involved in brain, muscle and developmental processes by CAMPBELL, H.D. with Dr G.C. Webb, Department of Animal Science and Department of Obstetrics and Gynaecology, University of Adelaide.

Dictyostelium discoideum genes by CAMPBELL, H.D. with Dr P.R. Fisher, La Trobe University, Melbourne.

Biology of the SOLH protein in the olfactory system by CAMPBELL, H.D. with Assoc. Prof. A. Mackay-Sim, Griffith University, Brisbane.

Mitochondrial genome deletion mutants of Debaryomyces occidentalis lacking cytochrome b can still respire using alternative oxidase and NADH dehydrogenase by CLARK-WALKER, G.D. with Dr C. Fernet and Prof M. Claisse, Centre Genetique Moleculaire, CNRS, Gif-sur-Yvette, France.

The ptp rho<sup>0</sup>-lethality suppressor alleles of Schizosaccharomyces pombe occur in the alpha and beta subunit genes of F1-ATPase by CLARK-WALKER, G.D. and CHEN, X.J. with Dr N. Bonnefoy, Centre Genetique Moleculaire, CNRS, Gif-sur-Yvette, France and Dr D. O'Connor, Royal Liverpool University Hospital, UK.

Evolution of RXR/USPs in insects by HAYWARD D.C., TRUEMAN J.W., MALESZKA, R. and BALL, E.E. with Dr M.J. Bastiani, University of Utah and Dr M. Whiting, Brigham Young University, Utah, USA.

Structure, function and developmental expression of the Locusta ecdysone receptor by HAYWARD, D.C. and BALL, E.E. with Dr T.S. Dhadialla, Dow Chemical, USA, Dr G.R. Wyatt, Queens University, Canada and Dr VK Walker, Queens University.

### **Molecular Plant Physiology Group**

Crystallographic structural studies of Rubisco activase by ANDREWS, T.J., KANE, H.J., WHITNEY, S.M. with Dr I Andersson, Swedish Agricultural University, Uppsala.

Study of stress caused by unfolded proteins in plastids of transplastomic tobacco by ANDREWS, T.J., WHITNEY, S.M. with Dr C.S. Pike, Dept Biology, Franklin and Marshall College, USA.

Investigations of CO<sub>2</sub> acquisition mechanism in dinoflagellates by BADGER, M.R., ANDREWS, T.J., PRICE, G.D., WHITNEY, S.M. with Dr D.C. Yellowlees and Mr W. Leggat, Department of Biochemistry and Molecular Biology, James Cook University.

Effects of high temperatures on coral photosynthesis and bleaching by BADGER, M.R., FRANKLIN, L. with Prof. T. Larkum, University of Sydney, and Dr O Hoegh-Guldberg, University of Queensland.

Secretion of b-glucuronidase in plants, yeast and bacteria by BADGER, M.R., PRICE, G.D. with Dr R. Jefferson, Dr A. Killian and Mr T. Ngyuen, CAMBIA.

Molecular analysis of the CO<sub>2</sub> concentrating mechanism in cyanobacteria by BADGER, M.R., PRICE, G.D. with Dr D. Sültemeyer, University of Kaiserslautern, Germany.

Analysis of the CO<sub>2</sub>-Concentrating mechanism in cyanobacteria by PRICE, G.D., BADGER, M.R. with Dr T. Omata, University of Nagoya, Japan.

Role of heat shock proteins in protecting photosynthetic processes in cyanobacteria by PRICE, G.D., BADGER, M.R. with Dr C.S. Pike, Department of Biology, Franklin and Marshall College, USA and Lin C.-Y. Department of Botany, National Taiwan University.

Molecular and immunological analysis of carboxysomes by PRICE, G.D. with Dr M. Ludwig, Department of Biological Sciences, Macquarie University.

Mechanisms influencing the growth and distribution of C4 grasses under rising CO<sub>2</sub> concentrations by von CAEMMERER, S. with Dr O. Ghannoum and Prof J.P. Conroy, University of Western Sydney, Hawkesbury.

Construction of transgenic Flaveria bidentis (a C4 dicot) with reduced amounts of mesophyll carbonic anhydrase by von CAEMMERER, S. with Dr M. Ludwig, Maquarie University, Dr R.T. Furbank, CSIRO Plant Industry, Canberra.

The activation and catalytic mechanism of the plant carbon-fixing enzyme, Rubisco by ANDREWS, T.J., KANE, H.J., WHITNEY, S.M. with Assoc. Prof. R. Lilley, University of Wollongong, Dr P. Curmi, University of NSW and Dr A. Portis, University of Illinois.

Analysis of metabolites in transgenic Flaveria bidentis (a C4 dicot) with reduced amounts of Rubisco by von CAEMMERER, S. with Dr R.T. Furbank, Plant Industry, CSIRO.

Field gas exchange studies on C3 and C4 grasses grown at elevated CO<sub>2</sub> by von CAEMMERER, S. with Dr O. Ghannoum, University of Western Sydney and Dr Paul Newton, Grasslands Research Centre Palmerston North, NZ.

### **Photobioenergetics Group**

Electron paramagnetic resonance studies of the S0 state in photosystem II by AHRING, K. with Prof. S. Styring, Biochemistry Department, Lund University, Sweden.

Investigations on light stress in photosynthesis by ANDERSON, J. and CHOW, W.S. with Prof. G. Öquist, Department of Plant Physiology, Umeå University, Sweden.

Chilling effects in rice and cucumber by CHOW, W.S. with Prof. Y.-I. Park, Department of Biology, Chungnam National University, South Korea.

Structural studies of the interleukin-4 protein by RAZEGHIFARD, M. with Dr V. Hilser, Department of Human Biological Chemistry and Genetics, University of Texas Medical Branch.

Biodiversity of Antarctic mosses and subantarctic plants and viruses from Macquarie Island by SKOTNICKI, M. with Dr P. Selkirk, Macquarie University.

Analysis of the substrate water exchange reactions in photosystem II by WYDRZYNSKI, T. with Dr W. Hillier, Department of Chemistry, Michigan State University.

Analysis of photosystem II in cyanobacterial mutants by WYDRZYNSKI, T. with Dr J. Eaton-Rye, Department of Biochemistry, University of Otago.

Determination of the cofactor role for bicarbonate in the photosynthetic water oxidizing reaction by WYDRZYNSKI, T. with Prof. G.C. Dismukes, Department of Chemistry, Princeton University, and Prof V.V. Klimov, Institute for Basic Biological Problems, Russian Academy of Science.

### **Plant Cell Biology Group**

Functional analysis of TKRP125 by CLEARY, A.L. with T. Asada, Osaka University, Osaka, Japan.

Isolation of avirulence and pathogenicity genes from *Phytophthora* by HARDHAM, A.R., SKALAMERA, D. with Dr D. Maclean, Dr A. Drenth and Dr S. Basnayake, University of Queensland.

Cell cycle control in the initiation of lateral root primordia by JOHN, P.C.L. with Prof. J. Hamill, Monash University.

Complementation of yeast cell cycle control proteins with potential plant homologues by JOHN, P.C.L. with Dr J. Hayles and Prof. Paul Nurse, Imperial Cancer Research Fund laboratories, London, UK.

Effects of plant cyclin dependent kinase inhibitor proteins on mitosis in live plant cells by JOHN, P.C.L., CLEARY, A.L. with Prof. L.C. Fowke, University of Saskatchewan, Saskatoon, Canada.

Location and activity of plant cyclin dependent kinases by JOHN, P.C.L., ZHANG, K. with Prof. D. Inzé, University of Gent, Belgium.

Isolation of the tomato I-3 gene for resistance to the wilt pathogen *Fusarium oxysporum* f.sp. *lycopersici* by JONES, D.A., HEMMING, M. with Mr D. McGrath, Dr S. Garland, Bowen Horticultural Research Station, Queensland Department of Primary Industry.

Localisation and function of the Cf-9 disease resistance protein by JONES, D.A. with Prof. JDG Jones, Sainsbury Laboratory, John Innes Centre, Norwich, UK.

Testing the interaction between the tomato Cf-9 resistance gene and the *Cladosporium fulvum* Avr9 avirulence gene in wheat by JONES, D.A., WILSON, R. with Dr A. Pellegrineschi, CIMMYT, Mexico.

Structure of plant extracytosolic leucine-rich repeat proteins by JONES, D.A. with Dr B. Kobe, University of Queensland.

Isolation of the tomato I-3 gene for resistance to the wilt pathogen *Fusarium oxysporum* f.sp. *lycopersici* by JONES, D.A., HEMMING, M. with Dr B. Carroll and Ms S. Basuki, University of Queensland.

Testing the interaction between the tomato Cf-9 resistance gene and the *Cladosporium fulvum* Avr9 avirulence gene in wheat by JONES, D.A., WILSON, R. with Dr P. Langridge and Mr R. Whitford, University of Adelaide.

Wall ingrowths in transfer cells by WASTENEYS, G.O. with Mr M. Talbot, Assoc. Prof. Tina Offler and Dr David McCurdy, University of Newcastle.

The role of MOR1, SPR1, SPR2 in direction of plant growth by WASTENEYS G.O., WHITTINGTON, A.T. with Prof. T. Hashimoto, Nara Institute of Biotechnology Japan.

Wall apposition formation in characean algae by WASTENEYS, G.O. with Prof. I. Foissner, University of Salzburg.

Ultrastructural analysis of the cytoplasmic body and nuclear cage mutants by WASTENEYS, G.O. with Prof. I. Foissner, University of Salzburg.

Root hair development by WASTENEYS, G.O. with Dr M.E. Galway, St Francis Xavier University and John Schiefelbein, University of Michigan.

Interactions between katanin p60 and MOR1 proteins by WASTENEYS, G.O., RASHBROOKE, M.C. with Dr H. Höfte, INRA Versailles.

Immunolocalisation of MOR1 in plant cells by WASTENEYS, G.O. with Prof. P. Hussey, University of Durham.

Ethylene and hypocotyl development by WASTENEYS, G.O. with Prof. H. Kazama, International Christian University, Tokyo and Prof. H. Imaseki, University of Nagoya, Japan.

Endosperm development by WASTENEYS, G.O. with Dr F. Berger, CNRS, France.

MOR1 and microspore asymmetry by WASTENEYS, G.O. with Prof. D. Twell, U. Leicester, UK.

Characterisation of radial swelling mutants by WILIAMSON, R.E., HOCART, C.H. with Dr T.I. Baskin, University of Missouri, USA.

## Visual Sciences Group

Biomimetic mechanisms for flight stabilisation and navigation, modeled on insect sensory systems. Controlled Biological Systems Program, US Defence Advanced Research Projects Agency by CHAHL, J.S., STANGE, G., SRINIVASAN, M.V. and HOFFMAN, M.

Candidate plasticity genes in insect brain (fruit fly and honeybee) by MALESZKA, R. with Dr M. Ramaswami, Arizona University, Tucson and Dr T. Tully, Cold Spring Harbor, New York.

Neuro-transmitters (especially acetylcholine) in the honeybee brain by MALESZKA, R. with Prof. L. Belzunces, INRA, Avignon, France. This work is supported by the Bayer Corporation and INRA.

Signal transduction by MALESZKA, R. with Prof. S.D. Hanes, Wadsworth Institute, New York.

The genetics of the social regulation of reproduction in honeybees by MALESZKA, R. with Dr B. Oldroyd, University of Sydney.

Timing perception in bees by SRINIVASAN, M.V. and ZHANG, S.W. with Dr K. Cheng, MacQuarie University, Sydney.

Honeybee navigation by SRINIVASAN, M.V. and ZHANG, S.W. with Prof. J. Tautz, University of Wuerzburg, Germany.

Honeybee navigation by SRINIVASAN, M.V. and ZHANG, S.W. with Dr M. Collett, Michigan State University.

Honeybee cognition by ZHANG, S.W. and SRINIVASAN, M.V. with Dr F Bartlett, Michigan State University.

ZHANG, S.W. with Prof. Juergen Tautz, Biozentrum, Universitaet Wuerzburg, Germany.

## Research School of Chemistry

### Biochemical Reactions and Molecular Recognition

Applications of carbon nanotubes in organic chemistry by Prof. C.J. EASTON and Dr A.G. MEYER with Drs L. Dai and G.W. Simpson, CSIRO Molecular Science, Melbourne.

Chemistry of scymnol by Prof. C.J. EASTON and Ms M. GEBARA-COGLAN with Mr J. Broadbent, McFarlane Laboratories Pty Ltd, Melbourne; and Dr G.W. Simpson, CSIRO Molecular Science, Melbourne.

Chlorine chemistry by Prof. C.J. EASTON, Dr P.A. COGLAN and Mr P. G. DUMANSKI with Mr R. Faulkner, Australian Vinyls Pty Ltd, Melbourne; Dr G.W. Simpson, CSIRO Molecular Science, Mel-

bourne; and the Plastics and Chemicals Industries Association (PACIA), Melbourne.

Cycloaddition reactions of nitrile oxides by Prof. C.J. EASTON, Ms C.K.Y. LEE and Mr G.J. VUCKOVIC with Drs G.P. Savage and G.W. Simpson, Dunlena Pty Ltd and CSIRO Molecular Science, Melbourne.

Free radical reactions of peptides and proteins by Prof. C.J. EASTON, Ms R. BARBIELLINI, Mr B.J.W. BARRATT, Ms L.Y.F. CHOW, Mr S.B. McNABB, Mr A.J. MORTIMER and Dr J.S. SIMPSON with Dr M.J. Davies, Heart Research Institute, Sydney; Dr R. O'Hair, University of Melbourne; Prof. I. Ryu, Osaka Prefecture University, Japan; Dr D. Grice, Griffith University; and Prof. A. Rauk, University of Calgary, Canada.

Improving beer stability and quality by Prof. C.J. EASTON, Mr J.B. KELLY and Dr K. LEE with Dr T. Oliver and Prof. P. Rogers, Carlton United Breweries, Melbourne.

Lipid chemistry by Prof. C.J. EASTON and Mr J.B. KELLY with Professors A. Ferrante and A. Poulos, Adelaide Medical Centre for Women and Children.

Supramolecular chemistry of cyclodextrins by Prof. C.J. EASTON, Ms L. BARR, Ms S.J. HEAD, Drs K. LEE and A.G. MEYER and Mr H. ONAGI with Prof. S.F. Lincoln, Ms J.S. Lock and Mr B.L. May, University of Adelaide; and Dr H. Yamamura, Nagoya Institute of Technology, Japan.

The development of new generation anti-infective agents by Professors M.G. BANWELL and C.J. EASTON, Drs N.L. HUNGERFORD, T. MASSIL, M.R. NAIRN, M.J. PIGGOTT, J.K. ROBINSON and G.J. TARRANT with Dr P.J. O'Hanlon, GlaxoSmithKline, Harlow, UK.

Towards improved melamine-urea-formaldehyde resins by Prof. C.J. EASTON and Ms A. PHILBROOK with Mr G. Ryan and Dr N. Dunlop, Orica Adhesives and Resins, Melbourne, through the UniChe program.

### Biomolecular Simulation and Calculation

Automatic protein structure prediction force field construction by Dr A.E. TORDA and Dr Zs. DOSZTÁNYI with Dr T. Huber, University of Queensland, Brisbane.

### Computational Quantum Chemistry

Carbene chemistry by Prof. L. RADOM and Dr A.P. SCOTT with Prof. M.S. Platz, Ohio State University, USA.

Multireference G2 and G3 theories by Prof. L. RADOM with Prof. M.S. Gordon and Mr M.A. Freitag, Iowa State University, USA; Dr D.M. Smith, Institut für Organische Chemie, Munich, Germany; and Dr T.I. Sølling, California Institute of Technology, USA.

Nucleophilic substitution reactions by Prof. L. RADOM with Prof. A. Pross, Ben Gurion University, Israel; and Dr T.I. Sølling, California Institute of Technology, USA.

Radical addition reactions by Prof. L. RADOM with Prof. H. Fischer, University of Zurich, Switzerland.

Reactions catalysed by vitamin B<sub>12</sub> by Prof. L. RADOM with Prof. B.T. Golding, University of Newcastle upon Tyne, UK; Dr D.M. Smith, Institut für Organische Chemie, Munich, Germany; and Dr S.D. Wetmore, Mount Allison University, Canada.

Thermochemistry of free radicals by Prof. L. RADOM and Dr D.J. HENRY and Mr C.J. PARKINSON with Prof. P.M. Mayer, University of Ottawa, Canada.

### **Coordination Chemistry and Spectro-electrochemistry**

Spectro-electrochemical investigation of conjugated bis-porphyrin radical cations and anions by Drs D.P. ARNOLD, G.A. HEATH and R.D. WEBSTER.

Corrosion analysis and conservation treatments by Drs G.A. HEATH and R.D. WEBSTER with Prof. D.C. Creagh and Dr V. Otieno-Alego, University of Canberra.

Detailed identification of unwarranted combustion deposits in aeroplane engines by Drs G.A. HEATH and L. NORÉN with Dr M. Sterns, Department of Chemistry, ANU; Mr G. Bailey, Australian War Memorial; Dr V. Otieno-Alego, University of Canberra; and Mr A. Romeyn, Australian Transport Safety Bureau, Canberra.

Electrochemical and spectroscopic investigations of tris(dithiocarbamate)cobalt(IV) complexes by Drs G.A. HEATH and R.D. WEBSTER with Prof. A.M. Bond, Monash University.

Studies directed to redox-activation of the biological nitrogen-fixing 'FeMoco' cluster by Dr G.A. HEATH with Dr S.P. Best, University of Melbourne; Dr L.L. Martin, Flinders University; and Prof. C.J. PICKETT, John Innes Centre, Norwich, UK (ARC Large Grant).

Weathering and photostability of benzoylated wood by Prof. P.D. Evans, University of British Columbia, Canada; Prof. N.L. Owen, Brigham Young University, USA with Drs S. SCHMID and R.D. WEBSTER.

### **Coordination Chemistry, Kinetics and Mechanism**

Investigations on the reductive cleavage of S-adenosyl-methionine by Dr N.E. BRASCH and Mr A.G. CREGAN with Prof. R.G. Finke and Dr B.R. Bender, Colorado State University, USA.

### **Disordered Materials**

Diffuse scattering in non-stoichiometric apatites by Dr A.G. CHRISTY with Mr P. Alberius-Hennig and Prof. S.A. Lidin, University of Stockholm, Sweden.

Diffuse scattering from benzil, C<sub>14</sub>H<sub>10</sub>O<sub>2</sub> by Prof. T.R. WELBERRY, Drs D.J. GOOSENS and A.J. EDWARDS with Prof. W.I.F. David, ISIS, Rutherford Appleton Laboratory, Oxfordshire, UK.

Disorder in 1:1 adducts of hexamethylenetetramine with azelaic acid by Prof. T.R. WELBERRY and Dr D.J. GOOSENS with Drs M. Gardon and K.J. Schenk, Institut de Cristallographie, Université de Lausanne, Switzerland.

Diffuse scattering in zeolites by Prof. T.R. WELBERRY with Dr B. Campbell, Argonne National Laboratory, Argonne Illinois, USA.

### **Inorganic Stereochemistry and Asymmetric Synthesis**

Microbial phosphonate uptake and metabolism: enlisting microorganisms to deliver antimicrobials effectively by Dr S.B. WILD with Dr G.L. Mendz, School of Biochemistry and Molecular Genetics, University of New South Wales, Sydney (ARC Discovery grant).

### **Laser and Optical Spectroscopy**

Measurement of quantum efficiency of chemiluminescence of rubisco by Drs E.R. KRAUSZ and X. WANG with Dr R. Lilley, University of Wollongong; and Prof. J. Andrews, RSBS, ANU.

Spectroscopy and function of photosystem II by Dr E.R. KRAUSZ with Dr R. Pace, Department of Chemistry, ANU; Prof. S. Styring, University of Lund; Dr M. Seibert, Basic Science Center, Golden Colorado; and Dr R. Jankowiak, Iowa State University.

Up-conversion in rare earth systems by Dr E. R. KRAUSZ with Dr M. Riley, University of Queensland; and Dr S. Lüthi, Gemfire, Stanford.

### **Liquid State Chemical Physics**

Derivation of potential models for phase equilibria by Dr J.P. DELHOMMELLE with Dr P. Millie, Laboratoire Francis Perrin, France.

Applications of general temperature expressions by Prof. D.J. EVANS and Mr O.G. JEPPS with Dr G.S.D. Ayton, University of Utah, USA; and Dr L. Lue, University of Manchester Institute of Science and Technology, UK.

Chaos and nonequilibrium statistical mechanics by Prof. D.J. EVANS with Prof. L. Rondoni, Politecnico Di Torino, Italy.

Configurational temperature by Prof. D.J. EVANS, Dr J. DELHOMMELLE and Mr O.G. JEPPS with Dr G.S.D.



Ayton, University of Utah, USA; Dr J. Ennis, CSIRO Petroleum, Melbourne; and Dr L. Lue, University of Manchester Institute of Science and Technology, UK.

Fluctuation theorem by Prof. D.J. EVANS, Mr E. MITTAG, Drs E.M. SEVICK and G.M. WANG with Dr D.J. Searles, Griffith University, Brisbane.

Implications of chaos for thermophysical properties by Prof. D.J. EVANS with Dr F. Bonetto, Rutgers University, USA; Dr I. Borzsák, Hungarian Academy of Sciences, Budapest; Prof. E.G.D. Cohen, Rockefeller University, USA; Prof. P.T. Cummings, University of Tennessee, USA; Prof. D.J. Isbister, Drs J.S. den Toom Hansen and F. Zhang, University of New South Wales at ADFA, Canberra; and Dr D.J. Searles, Griffith University, Brisbane.

Shear viscosity of a simple fluid over a wide range of strain rates by Prof. D.J. EVANS with Dr I. Borzsák, Hungarian Academy of Sciences, Budapest; and Prof. P.T. Cummings, University of Tennessee, USA.

Transport and entropy by Prof. D.J. EVANS and Dr J. PETRAVIC with Prof. D.J. Isbister, University of New South Wales at ADFA, Canberra.

Transport coefficients of polar liquids and electrolytes by Prof. D.J. EVANS and Dr J. PETRAVIC with Dr B. Rousseau, Université Paris-Sud, France.

## **Nuclear Magnetic Resonance**

Multidimensional NMR studies of chaperone proteins by Dr M.A. KENIRY with Assoc. Prof. J.A. Carver, University of Wollongong, NSW.

## **Organic Synthesis**

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER with Dr M. Talon, Department of Citriculture, IVIA, E-46113, Moncada, Valencia, Spain; and Dr J. Zeevaart, MSU-DOE Plant Research Laboratory, Michigan State University, USA.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER with Dr P. Hedden and Prof. J. MacMillan, Long Ashton Research Station, Bristol, UK.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER and Mr B. TWITCHIN with Dr V.M. Sponsel, Division of Life Sciences, University of Texas, San Antonio, Texas, USA.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER and Mr B. TWITCHIN with Prof. O. Junttila, Department of Plant Physiology and Microbiology, University of Tromsø, Norway.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER and Mr B. TWITCHIN with Prof. R.P. Pharis, Department of Biology, University of Calgary, Canada.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER and Mr B. TWITCHIN with Drs M. Koshioka and M. Nakayama, Department of Genetics and Physiology, National Institute of Floricultural Science, Tsukuba, Japan.

Biosynthetic, structural and metabolic studies on gibberellins by Prof. L.N. MANDER and Mr B. TWITCHIN with Dr T. Lange, Pflanzenphysiologisches Institut und Botanischer Garten, Universität Göttingen, Germany.

Influence of gibberellins on light stimulation of germination in Western Australian species by Prof. L.N. MANDER and Mr B. TWITCHIN with Dr J. Plummer, Department of Horticultural Science, University of Western Australia, Perth.

Structural and biosynthetic studies on antheridiogens from fern gametophytes by Prof. L.N. MANDER with Dr H. Yamane, Biotechnology Research Center, University of Tokyo.

Structural and biosynthetic studies on antheridiogens from fern gametophytes by Prof. L.N. MANDER with Dr J. Banks, Department of Botany and Plant Pathology, University of Purdue, USA.

Structural and biosynthetic studies on antheridiogens from fern gametophytes by Prof. L.N. MANDER with Dr J. Nester, Department of Biological Sciences, Sam Houston State University, Texas, USA.

Structural studies on biologically active extractives from olives by Prof. L.N. MANDER and Mr A.J. HERLT with Drs P. Antolovitch, P. Prenzler, K. Robards and D. Ryan, Charles Sturt University, Wagga Wagga.

## **Protein Crystallography and Engineering**

Structural studies of the P<sub>II</sub> and GlnK proteins by Drs D.L. OLLIS and P.D. CARR with Dr S.G. Vasudevan, James Cook University, Queensland.

Structure function studies with esterases by Drs D.L. OLLIS with Dr J. Oakshot, CSIRO Division of Entomology, Canberra.

## **Protein Synthesis and Evolution**

Cleavage of DNA by chromium(V) complexes by Dr N.E. DIXON with Prof. P.A. Lay, School of Chemistry, University of Sydney.

Crystallisation of the DnaB helicase and DnaB•DnaC complex by Drs N.E. DIXON, N.K. WILLIAMS and Ms K.V. LOSCHA with Drs A. Oakley and M.C.J. Wilce, University of Western Australia.

Expression and isolation of the *Bacillus subtilis* DnaC helicase and DnaI proteins by Dr N.E. DIXON and Ms K.V. LOSCHA with Prof. R.G. Wake and Dr J.M. Guss, Department of Biochemistry, University of Sydney.

Geminivirus DNA replication mechanisms by Dr N.E. DIXON with Dr A. Rezaian, CSIRO Division of Plant Industry, Glen Osmond, South Australia.

Intein-mediated protein circularisation by Drs N.E. DIXON, N.K. WILLIAMS, P. PROSELKOV and Mr M. MULCAIR with Prof. G. Otting and Dr E. Liepinsh, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm; Dr A. Sharipo, Medical Research and Study Section, University of Latvia, Riga; Drs P.M.G. Curmi and D.R. Littler, School of Physics, University of New South Wales.

In vitro protein synthesis by Dr N.E. DIXON with Prof. G. Otting, Drs S. Pursglove, L. Guignard and K. Ozawa, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm; and Prof. M. Ehrenberg, University of Uppsala, Sweden.

Radiolabelled antibodies for cancer diagnosis and treatment by Dr N.E. DIXON, Ms N.M. DI BARTOLO and Prof. A.M. SARGESON with Dr S. Smith, Australian Nuclear Science and Technology Organisation, Sydney.

Structure and mechanism of action of Escherichia coli proline aminopeptidase by Dr N.E. DIXON and Ms P.E. LILLEY with Prof. H.C. Freeman and Dr J.M. Guss, Department of Biochemistry, University of Sydney.

Structure of the Escherichia coli DnaB helicase protein and the DnaB•DnaC complex by Dr N.E. DIXON, Dr S.E. BROWN and Ms K.V. LOSCHA with Prof. J.M. Carazo, Drs L.E. Donate and M. Barcéna, Centro Nacional de Biotecnología, Universidad Autónoma, Madrid.

Structures and functions of Escherichia coli replisomal proteins, by Drs N.E. DIXON, S.E. BROWN and Mr S. HAMDAN with Prof. G. Otting, Department of Medical Biochemistry and Biophysics, Karolinska Institute, Stockholm; Drs C.M. Elvin, K. Kongsuwan, P.A. Jennings and G. Wijffels, CSIRO Division of Livestock Industries, Brisbane; Drs A. Oakley and M.C. J. Wilce, University of Western Australia.

### **Solid State Inorganic Chemistry**

Theoretical and experimental studies of FeF<sub>2</sub> by Drs L. NORÉN, R.L. WITHERS and F. BRINK with Dr T. Larsson, Outokumpo Copper R&D, Sweden.

Neutron diffraction studies of Pb<sub>3</sub>O<sub>2</sub>X<sub>2</sub> (X = Cl, Br) by Drs L. NORÉN and R.L. WITHERS with Dr H. Rundlöf, Studsvik Neutron Research Laboratory, Sweden.

Constrained refinement techniques for problem crystal structure refinements involving pseudo symmetry, disorder and twinning by Prof. A.D. RAE with Drs K.J. Haller and W. Somphon, Suranaree University of Technology, Nakhon Ratchisima, Thailand.

A modulated structure approach to the refinement of commensurate superstructures by Prof. A.D. RAE with Dr S.W. Ng, University of Malaya, Kuala Lumpur, Malaysia.

A TEM and rigid unit mode study of the inherent dispersive flexibility of the fresnoite framework structure type by Drs R.L. WITHERS and Y. LIU with Dr T. Höche, Humboldt-Universität zu Berlin, Berlin, Germany.

The symmetry characterisation of phases in the Ca<sub>1-x</sub>Sr<sub>x</sub>TiO<sub>3</sub> system by Dr R.L. WITHERS with Dr C.J. Howard, Australian Nuclear Science and Technology Organisation, Menai, NSW; and Dr B.J. Kennedy, University of Sydney.

Modulated structures in the Ni<sub>6±x</sub>Se<sub>5</sub> and the Ni<sub>6±x</sub>S<sub>5</sub> systems by Drs R.L. WITHERS and L. NOREN with Prof. G. van Tendeloo, University of Antwerp, Belgium.

TEM studies of ferroelasticity in Sb<sub>2</sub>Mo<sub>0.75</sub>W<sub>0.25</sub>O<sub>6</sub> by Dr R.L. WITHERS with Prof. J. Galy, CEMES/CNRS, Toulouse, France; and Dr A. Castro, CSIC, Madrid, Spain.

### **Solid State Molecular Science**

Ion and solvent kinetics at the nickel hydroxide–liquid interface by Dr M.J. HENDERSON with Prof. A.R. Hillman and Ms H. French, University of Leicester, UK.

Bonding in transition metal complexes by Dr P.A. REYNOLDS with Prof. B.N. Figgis and Dr A.N. Sobolev, University of Western Australia.

The interface between complex fluids and solids by Dr P.A. REYNOLDS, Prof. J.W. WHITE and Dr M.J. HENDERSON with Dr S.A. Holt, Rutherford Appleton Laboratory, Oxford, UK; and Dr D. Tunaley, Orica Ltd, Australia.

Conformation of proteins at interfaces by Prof. J.W. WHITE and Dr M.J. HENDERSON with Dr S.A. Holt, Rutherford Appleton Laboratory, Oxford, UK.

Early stages of zeolite crystallisation by Prof. J.W. WHITE with Prof. C.R.A. Catlow, Royal Institution, London, UK.

Kinetics of template action in silicalite synthesis by Prof. J.W. WHITE with Dr L. Iton, Argonne National Laboratory, Chicago, USA.

Millisecond X-ray reflectometer for ChemMatCARS by Prof. J.W. WHITE and Dr M.J. HENDERSON with Dr R. Garrett, ANSTO, Sydney; and Dr J. Viccaro, University of Chicago, USA.

Nanostructure of milk membrane and proteins by Prof. J.W. WHITE with Dr S.A. Holt, Rutherford Appleton Laboratory, UK; and Dr B. Cox, Dairy Research Corporation, Melbourne.

Structure of high internal phase emulsions by Prof. J.W. WHITE and Dr P.A. REYNOLDS with Drs R. Goodridge and C. Such, Orica Ltd, Australia.

Studies of nanostructure of polyacrylamide X-ray dosimeter preparations by Prof. J.W. WHITE with Dr C. Baldock, Queensland University of Technology, Brisbane.

Structure of polymer latex solutions by Prof. J.W. WHITE with Prof. R. Gilbert and Dr H. de Bruyn, University of Sydney.

Structure of polymer surfactant films by Prof. J.W. WHITE with Dr J. Penfold, Rutherford Appleton Laboratory, Oxford, UK.

Structure of porous glasses by Prof. J.W. WHITE with Dr C. Buckley, Curtin University, Western Australia.

Structure of templated silicate films by Prof. J.W. WHITE with Dr M. Trau, University of Queensland, Brisbane.

Surface activity of poly(*t*-butylacrylate) polymer films by Prof. J.W. WHITE, Dr M.J. HENDERSON and Mr A. PERRIMAN with Dr S.A. Holt, Rutherford Appleton Laboratory, Oxford, UK; and Dr G. Dennis, University of Western Sydney.

X-Ray reflectometry studies of contact lens coatings for extended wear by Prof. J.W. WHITE with Dr S.A. Holt, Rutherford Appleton Laboratory, Oxford, UK; and Ms C. Fong, CSIRO Molecular Science, Melbourne.

X-Ray small angle scattering from whole blood and haemoglobin by Prof. J.W. WHITE with Dr C. Garvey, Department of Biochemistry, University of Sydney.

The following collaborators visited the group during 2001 to conduct X-ray reflectometry experiments:

Dr W. Fullagar (University of Queensland); Dr V. James (Hon. Visiting Fellow, RSC); Dr C. Garvey (University of Sydney); Dr K. Latham (RMIT University, Melbourne); Drs V. Luca and M. James, (ANSTO, Sydney); Mr R. Webster (University of New South Wales)

### **Synthesis and Mechanism**

Biotransformations by Prof. M.G. BANWELL with Dr G.M. Whited, Genencor International Inc, Palo Alto, California, USA.

Combinatorial synthesis of potential anti-mitotic drugs by Prof. M.G. BANWELL and Mr D.J. WONG with Dr A.M. Bray, Chiron Technologies Pty Ltd, Clayton, Victoria.

The development of new generation anti-infective agents by Professors M.G. BANWELL and C.J. EASTON, Drs N.L. HUNGERFORD, T. MASSIL, M.R. NAIRN, M.J. PIGGOTT, J.K. ROBINSON and G.J.

TARRANT with Dr P.J. O'Hanlon, GlaxoSmithKline, Harlow, UK.

The development of novel carbohydrate-like drugs by Prof. M.G. BANWELL, Drs D.J. ARMITT and L. LIU with Prof. C.R. Parish and Dr C.C. Freeman, JCSMR, ANU; and Dr R.H. Don, Progen Industries Ltd, Brisbane.

The synthesis of sialic acid analogues by Prof. M.G. BANWELL and Mr X.H. MA with Dr K. Watson, Biota Chemistry Laboratories, Department of Chemistry, Monash University.

The total synthesis of biologically active natural products by Prof. M.G. BANWELL and Mr S. CHAND with Dr G.P. Savage, CSIRO Molecular Science, Melbourne.

### **Theoretical Chemical Physics**

Classical simulation of the photo dissociation of sym-triazine by Dr M.A. COLLINS with Prof. K. Song, Korea National University of Education.

Collisional energy transfer by Dr M.A. COLLINS with Dr K. Lim, Deakin University, Geelong.

First-principles chemical reaction dynamics by Dr M.A. COLLINS with Assoc. Prof. D.H. Zhang, National University of Singapore; Dr M. Brouard, Oxford University, UK; and Dr J.F. Castillo, Universidad Complutense de Madrid, Spain.

Hydrogen abstraction in  $H + CH_4$  by Dr M.A. COLLINS with Prof. J. Valentini, Columbia University, USA.

Nonadiabatic dynamics and coupled potential energy surfaces by Dr M.A. COLLINS with Prof. D. Yarkony, Johns Hopkins University, USA.

Quantum scattering of methane on a nickel surface by Dr M.A. COLLINS with Dr C. Crespos and Prof. G.-J. Kroes, University of Leiden, Netherlands.

### **Queen Elizabeth II Fellow — Dr E. Wenger**

DFT investigations of the insertion reactions of alkynes into M-C bonds by Dr E. WENGER with Dr S.A. Macgregor, Heriot-Watt University, Edinburgh, UK.

Insertion reactions of unsymmetrical alkynes with palladacycles by Dr E. WENGER with Prof. J.H. Nelson, University of Nevada, Reno, USA.

Towards rational syntheses of the elusive metallocarbohedrenes: density functional prescriptions for electronic and geometric structures by Dr E. WENGER with Prof. I. Dance, University of New South Wales, Sydney.

## Research School of Earth Sciences

A U-Pb geochronological study of selected rocks from Macquarie Island by Dr R. ARMSTRONG with Dr B. Goscomb, University of Adelaide.

A collaborative project on provenance of sediments from central Australia by Dr R. ARMSTRONG with Dr A. Camacho and Prof. B. Hensen, University of New South Wales.

International research projects on a collaborative basis with scientists from Africa, Asia, Europe and South America by Dr R. ARMSTRONG, with: Prof. U. Reimold, Dr R. Gibson, Dr M. Poujol, University of the Witwatersrand, RSA; Prof. S. McCourt, University of Durban-Westville, RSA; Prof. A. Wilson, University of Natal, RSA; Prof. M. de Wit, W. Board, Prof. D. Reid, R. Baillie, University of Cape Town, RSA; Prof. S. de Waal and Dr I. Graham, University of Pretoria, RSA; Prof. A.B. Kampunzu and Dr R. Mapeo, University of Botswana; B.K. Paya, Geological Survey of Botswana; K. Hoffmann, Geological Survey of Namibia; D. Jamal, Eduardo Mondlane University, Mozambique; H. van Niekerk and H. Dorland, Rand Afrikaans University, RSA; Profs R. Scheepers and A. Rozendaal Stellenbosch University, RSA; Prof. C. Koeberl, University of Vienna; Dr J. Konzett, University of Innsbruck, Austria; Dr R. Key, British Geological Survey, UK; Dr Deung-Lyong Cho, Korea Institute of Geology, Mining and Materials; Dr M. Pimentel, D. Fischel, M.H. de Holanda, University of Brasilia, Brazil; Dr L. da Silva, Geological Survey of Brazil; Dr B. Thomas, Dr B. Eglington, Dr R.H. Harmer, Dr G. Grantham, Council for Geoscience, RSA; Dr B. Seth, University of Bern, Switzerland; Dr M. Worthing, Sultan Qaboos University, Oman; Dr J. Leven, Mauritius Oceanographic Institute; K. Macowiak, Geological Institute, Poland; Dr T. Seifert, Freiberg Institute of Mining and Technology, Germany and M. Werner, University of Würzburg, Germany.

Geochemical and geochronologic studies of igneous rocks in and around the super giant Chuquicamata porphyry copper deposit in northern Chile by Mr J. BALLARD (PhD student), Dr I.H. CAMPBELL and Dr J.M. PALIN with CODELCO.

Geochemical studies of Hawaii plume lavas by Dr V. BENNETT with Prof. M. Garcia, University of Hawaii, USA.

A study on the siderophile element characteristics of lunar samples by Dr V. BENNETT with Dr G. Ryder, Lunar and Planetary Science Institute, Houston, USA.

A study on the geochemistry of early Archean terranes of Greenland by Dr V. BENNETT with Dr C. Friend, Oxford-Brookes University, UK.

A project on tracing the Sr isotopic evolution of the Archean and Proterozoic mantle by Dr V. BENNETT

with Prof. D. DePaolo, University of California, Berkeley, USA.

A study of fluid inclusions by optical absorption spectroscopy by Dr A.J. BERRY with Dr E.R. Krausz, Research School of Chemistry, Australian National University.

A collaboration on <sup>17</sup>O nuclear magnetic resonance studies of silicate minerals by Dr A.J. BERRY with Drs S. Wimperis and S.E. Ashbrook, University of Exeter, UK.

A study of U-Pb geochronology and geochemistry of zircons in volcanics associated with the giant Bajo de la Alumbrera porphyry copper-gold deposit of Argentina by Dr I.H. CAMPBELL, Dr J.M. PALIN, Dr C.M. ALLEN and Mr A. Harris, University of Queensland.

Zircon U-Pb geochronology of high grade metamorphic rocks in Sulawesi by Dr I.H. CAMPBELL, Dr J.M. PALIN and Dr C.M. ALLEN with Rio Tinto Exploration, Indonesia.

The analysis of oxygen isotopes in zircons of different ages by Dr I.H. Campbell with Prof. Nakamura of the Institute for Study of the Earth's Interior, Okayama University, Japan.

A study to date detrital zircons from the Indus River by Dr I.H. CAMPBELL and Dr J.M. PALIN with Dr Clift, Woods Hole Institute of Oceanography, USA.

A study to date detrital zircons from the Amazon, Geological Survey of Brazil.

A study to date detrital zircons from USA rivers and Palaeozoic sandstones from the eastern USA by Drs I.H. CAMPBELL, J.M. PALIN and C.M. ALLEN with Prof. Eriksson, Virginia Institute of Technology, USA

The development and application of percolation theory approaches to modelling fluid flow in hydrothermal systems; the development of x-ray tomography facilities to characterise fracture and pore geometries in deformed rocks by Prof. S.F. COX with Dr M. Knackstedt, RSPHysSE, ANU.

Research on evolution of fluid flow patterns in the Mont Blanc and Aar Massifs in the European Alps by Prof. S.F. COX with Drs Boullier, Universite Joseph Fourier, Grenoble, N. Mancktelow, ETH, Zurich and G. Pennachioni, University of Padova, Italy.

An experimental investigation of crack sealing at elevated temperatures by Prof. S.F. COX and Dr E. TENTHOREY with Dr C. Hilgers RWTH-Aachen, Germany.

Magmatic expressions of orogens formed at retreating subduction boundaries: the cause of widespread silicic magmatism in some fold belts by Dr S. EGGINS with Assoc. Prof. W. Collins, University of Newcastle.

A study on the Anakie Inlier of Queensland, by Mr C.M. FANNING with Assoc. Prof. C. Fergusson, University of Wollongong.

The timing of Ordovician igneous activity in New South Wales by C.M. FANNING with Dr A. Crawford and a number of PhD students, University of Tasmania.

The timing of Carboniferous-Permian volcanic rocks in the Tamworth belt NSW, by C.M. FANNING with Prof. J. Roberts, University of NSW.

Ongoing international collaboration by Mr C.M. FANNING with: Prof. F. Hervé, University of Chile, Santiago, Chile; Dr R.J. Pankhurst and Dr I. Millar, British Antarctic Survey, UK; Dr C.W. Rapela, Universidad de la Plata, Argentina; Dr A. Cocherie, BRGM, Orleans, France; Dr R. Mundil, B, US Geological Survey, Denver USA; Dr C. Smith-Siddoway, Colorado College, Colorado Springs, USA; Dr K. Shiraishi, Dr K. Misawa and Dr T Hokada, National Institute for Polar Research, Tokyo, Japan; Dr J. Goodge, Southern Methodist University, USA; Dr J.J. Peucat, Geosciences, Rennes, France; Prof. P. K. Link, Idaho State University, USA; Dr J. Jacobs, University of Bremen, Germany; Prof. D. Gebauer and Dr A. Liati, ETH Zürich, Switzerland and Dr A. Morton, British Geological Survey and HM Associates, UK.

The dynamics of air-sea interaction by Prof. R.W. GRIFFITHS with Dr J. Bye, University of Melbourne.

Laboratory modeling of the surface solidification of long basaltic lava flows by Prof. R.W. GRIFFITHS and Dr R.C. KERR with Prof. K.V. Cashman, Department of Geological Sciences, University of Oregon, USA.

Modelling of the role of internal gravity waves in ocean outflows from gulfs and marginal seas, by Prof. R.W. GRIFFITHS with Dr A.A. Bidokhti, University of Tehran, Iran.

Late Quaternary sea levels: the south Australian Gulfs region in a global context by Prof. R. GRÜN, Prof. M. MCCULLOCH and Dr N. SPOONER with Dr Murray-Wallace, University of Wollongong.

A study of the thermal stability of paramagnetic centres from cores of the Otway basin by Prof. R. GRÜN with Prof. A. Gleadow, Department of Geology, University of Melbourne

Dating of the site of Cuddie Springs, by Prof. R. GRÜN with Dr P. White, Department of Anthropology and Dr J. Field, Department of Archaeology, University of Sydney, NSW.

Dating of a series of South Australian sites with faunal remains, including Naracoorte Cave by Prof. R. GRÜN with Dr R. Wells, Flinders University.

The onset of dune formation in the Strzelecki Desert by Prof. R. GRÜN and Dr N. SPOONER collaborate with Prof. R. Twidale, University of Adelaide, SA.

International collaboration by Prof. R. GRÜN on the timing of modern human evolution including collection of hominid samples from the anthropological sites:

Cave of Hearths, Hutjiespunt and Swartkrans, South Africa with Prof. V.A. Tobias, Dr L. Berger, Department of Anatomy, Medical School, University of the Witwatersrand, RSA; Prof. J. Parkington, Department of Archaeology, Cape Town University, RSA; Dr F. Thakeray, Transvaal Museum, Pretoria. Skhul, Israel with Dr J. Pilbeam, Peabody Museum and Prof. O. Bar-Yosef, Department of Anthropology, Harvard University. Atapuerca, Spain with Dr J.L. Arsuaga, Department of Palaeontology, Universidad Complutense, Madrid, Spain and Dr J. Bermudes de Castro, Museo de Ciencias Naturales, Madrid.

Dating of a range of sites in South Africa, including the newly discovered human site of Cornelia by Prof. R. GRÜN with Dr J. Brink, Bloemfontein, RSA.

Collaboration on uranium uptake of bones by Prof. R. GRÜN with Dr A. Pike, Research Laboratory for Archaeology and the History of Art, University of Oxford, UK.

Calibration of amino acid racemisation in bones and cave bear evolution by Prof. GRÜN with Prof. T. de Torres, Escuela Tecnica Superior de Ingenieros de Minas de Madrid, Spain.

A study on the onset of dune formation in the Strzelecki Desert by Prof. R. GRÜN with Prof. H. Wopfner and Dr A. Hilgers, Universität zu Köln, Germany.

The exhumation of lower crust and upper mantle during rifting by Dr J. HERMANN with Dr O. Müntener, University of Neuchatel, Switzerland.

A study on features of UHP-metamorphism in the Dora-Maira Massif by Dr J. HERMANN with Prof. R. Compagnoni, University of Torino, Italy.

A study on age and exhumation rate of diamondiferous rocks from the Kokchetav Massif, Khazakhstan by Dr J. HERMANN with Prof. V. Shatsky and A. Korsakov, Geophysics and Mineralogy, Novosibirsk, Russia.

A study on constraints on subduction zone fluids derived from the high pressure break down of serpentinites by Dr J. HERMANN with Dr M. Scambelluri, University of Genova, Italy.

Studies on magmatic and metamorphic evolution of mafic cumulates of the Tauern window, Alps by Dr J. HERMANN with Dr B. Cesare, University of Padova, Italy.

A study on modelling very stable diffusive interfaces by Dr G.O. HUGHES with Dr M.G. Worster, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, UK.

Noble gas studies of diamonds by Dr M. HONDA with Dr J. Harris, University of Glasgow, UK.

Geochronology and petrogenesis of metamorphic rocks from Fiordland, New Zealand by Dr T.R. IRELAND

with Dr G. Clarke, Dr J. Hollis and Dr N. Daczko, University of Sydney, NSW.

Collaborative studies in cosmochemistry by Dr T.R. IRELAND with Prof. E. Zinner, Physics Department, Washington University in St Louis, USA, Prof. K. McKeegan, Department of Earth and Space Science, University of California, Los Angeles, USA and Prof. B. Fegley, Department of Earth and Planetary Science, Washington University in St Louis, USA.

Geochronological studies of rocks from New Zealand and Western Antarctica by Dr T.R. IRELAND with Dr S. Weaver, Canterbury University, NZ, and Dr M. Rattenbury, IGNS, New Zealand.

Ultrasonic measurements of the temperature dependence of elastic wave speeds by Dr I. JACKSON with Drs Liebermann, Li and Kung at SUNY, Stony Brook, USA.

The fabrication and mechanical testing of polycrystalline magnesium oxide by Dr I. JACKSON with Dr Itatani, Sophia University, Tokyo, Japan.

Development and application of numerical models of the submarine flow of komatiite lavas by Dr R.C. KERR with Dr C.M. Leshner, Mineral Exploration Research Centre, Laurentian University, Canada, and Dr D.A. Williams, Department of Geology, Arizona State University, USA.

A study on inclined turbulent fountains by Dr R.C. KERR with Dr L. Bloomfield, Institute for Theoretical Geophysics, University of Cambridge, UK.

Prof. K LAMBECK was the Tage Erlander Guest Prof. of the Swedish Research Council carrying out research into the glacial history, sea-level change and crustal rebound in Sweden. Collaborative projects have been established with the Universities of Lund and Stockholm, the Geological Survey of Denmark and the Norwegian Geological Survey, Norsk-Hydro in Oslo and the Finnish Nuclear Waste Management Industry, Posiva.

Marine electromagnetic studies, including OCELOT2000, by Dr F.E.M. LILLEY with Dr A. White, Flinders University and Dr G. Heinson, University of Adelaide.

Methods for the analysis of magnetotelluric data by Dr F.E.M. Lilley with Prof. J.T. Weaver and Dr A.K. Agarwal, University of Victoria, Canada.

The interpretation of magnetotelluric data from western Queensland by Dr F.E.M. LILLEY with Assoc. Prof. I.J. Ferguson, University of Manitoba, Canada.

Research on the last interglacial sea levels and carbonate formation along the Western Australian coastline by Prof. M.T. MCCULLOCH with Dr P. Hearty, James Cook University.

Fish otoliths as environmental proxies in the Great Barrier Reef by Prof. M.T. MCCULLOCH with Prof. M. Kingsford, James Cook University.

Fish otoliths as indicators of the role of estuarine environments in the life cycle of tropical fish by Prof. M.T. MCCULLOCH with Mr James Amend, PhD student, James Cook University.

Study of sea level changes by Prof. M.T. MCCULLOCH with Prof. Halliday and Dr Stirling, ETH Zürich, Switzerland, and Dr Gray, University of San Diego, California, USA.

Numerical time scale studies of stratigraphic sequences in the Turkana Basin, northern Kenya, in relation to the time framework of hominid evolution by Prof. I. MCDOUGALL with Prof. F.H. Brown, University of Utah, USA, and Dr M.G. Leakey of the National Museums of Kenya.

Operation and analysis of a superconducting gravimeter at Mt Stromlo to monitor dynamic processes in the Earth by Dr H. MCQUEEN and Prof. K. LAMBECK with Prof. T. Sato, National Astronomical Observatory of Japan.

Analysis of high precision absolute and relative gravity observations by Dr H. McQUEEN with Dr M. Amalvict, Université Louis Pasteur, Strasbourg, France.

An investigation of the sources of nutrient-rich sediments to the reservoirs in the Orange water supply catchment by Dr C.E. MARTIN with Dr Dhia Al Bakri of the University of Sydney.

Studies of Os isotopes and platinum group element and Re distributions in oceanic sediments and estuarine waters by Dr C.E. MARTIN with Drs B. Peucker-Ehrenbrink and G. Ravizza, Woods Hole Oceanographic Institution, USA.

Tracing the movement of sediments and phosphorus in catchments by Dr C. MARTIN with Dr C. Wilson, Los Alamos National Laboratory, USA.

A study on improved Sr thermal ionisation strategies by Dr W. MÜLLER with Dr R. Maas, La Trobe University, Melbourne.

Study of Iceman stable isotopes by Dr W. MÜLLER with H. Fricke, Colorado College, USA and A. Halliday, ETH Zurich, Switzerland and P. Tropper, University of Innsbruck, Austria.

Various aspects of Iceman work by MÜLLER with E. Egarter-Vigl, Bolzano, Italy.

U-series dating of cave bear teeth by Dr W. MÜLLER with G. Rabeder, University of Vienna, Austria.

U-series dating of cyclic seismogenic fault cements to establish earthquake recurrence intervals by Dr W. MÜLLER with P. Eichhubl, Stanford University, USA.

A study of Laser ablation ICP-MS of trace elements in sulphides by Dr M. NORMAN with Prof. R. Large and Drs G. Davidson, P. McGoldrick and A. Rae, CODES, University of Tasmania.

Work on method development for laser ablation ICP-MS analysis of trace elements in silicate rocks and ores by Dr M. NORMAN with Drs P. Robinson and Z. Yu, CODES, University of Tasmania.

Studies of sulphide saturation in lunar basalts from olivine-hosted melt inclusions by Dr M. NORMAN with Drs V. Kamenetsky and L. Danyushevsky and Mr D. Bombardieri.

A study relating to the climatic significance of seasonal trace element and stable isotope variations in modern freshwater tufa by Dr M. NORMAN with Dr R. Maas and Mr C. Ihlenfeld, La Trobe University.

A study of the origin of Hawaiian plume basalts by Dr M. NORMAN with Prof. M. Garcia, University of Hawaii, USA and Prof. M. Rhodes, University of Massachusetts, USA.

Study on the age and origin of the lunar crust by Dr M. NORMAN with Dr L. Nyquist, NASA Johnson Space Center, USA, Dr L. Borg, University of New Mexico, USA and Prof. I. McCallum, University of Washington, USA.

A project titled "Targeting the Impactors: Siderophile element compositions of impact melts from the Moon and asteroids" is being undertaken by Dr NORMAN in conjunction with Dr G. Ry, Lunar and Planetary Institute, Houston, USA and Drs D. Mittlefehldt and A. Brandon, NASA Johnson Space Center, USA.

U-Pb geochronology and geochemistry of zircons in igneous rocks from the Park City mining district of Utah by Drs J.M. PALIN, I.H. CAMPBELL, and C.M. ALLEN with Dr S.E. Kesler and Mr D.P. Core of the University of Michigan, USA.

The mapping and dating of the uplifted coral terraces at Barbados by Ms E-K POTTER, Dr T. ESAT and Prof. M. McCulloch with Prof. U. Radtke, University of Cologne, Germany and Prof. G. Schellmann, University of Bamberg, Germany.

The duration of metamorphism in the Mt Isa Block by Dr D. RUBATTO with Dr M. Hand, Adelaide University.

A study of the mafic rocks of the Tauern Window (Eastern Alps) by Dr D. RUBATTO with Dr B. Cesare, University of Padova, Italy.

A collaboration on the chemical and isotopic behaviour of metamorphic titanite by Dr D. RUBATTO with Dr D. Castelli, Torino University, Italy.

A project concerning teleseismic earthquake location by pattern recognition by Dr M. SAMBRIDGE and PhD student Mr T. NICHOLSON with Dr O. Gudmundsson, Danish Lithospheric Centre, Denmark.

Application of single-quartz grain optical dating in an investigation of the evolution of the economically-significant terra rossa soils of the Coonawarra wine region,

South Australia by Dr N. SPOONER with Dr E. Bestland, Flinders University, SA.

Use of single grain quartz OSL to investigate soil formation and erosion processes, and the development of novel luminescence means to identify saprolite-derived grains; investigation of soil formation and erosion processes, and development of novel luminescence means to identify saprolite-derived grains by Dr N. SPOONER with Prof. J. Chappell, RSES, ANU and Dr A. Heimath, Dartmouth College USA.

The timing and spatial distribution of megafaunal extinction at various sites in the Lake Eyre basin and Menindee Lakes regions by Dr N. SPOONER with Dr J.W. Magee, Department of Geology, ANU, Prof. R. Grün and M. McCulloch, RSES, ANU and Prof. G. Miller, University of Colorado, USA.

A study on the timing of dune formation in the Waikerie region, SA by Dr N. SPOONER with Prof. R. Twidale, University of Adelaide.

The chronology, stratigraphy and archaeology of beach ridges at Lake George by Dr N. SPOONER with Dr P. Hughes, HEH Pty Ltd, Prof. J. Chappell, ANU, Dr W. Shawcross and Dr P. Cook, CSIRO.

The chronology and stratigraphy of the Lake Mungo lunette, NSW by Dr N. SPOONER with Prof. J. Bowler, University of Melbourne.

Chronological and stable isotope study of environmental change using sedimentary cores from the Wolfe Creek Meteor Crater and Lake Gregory region, northern WA by Dr N. SPOONER with Prof. G. Miller, University of Colorado, USA.

A study using sediment and eggshell collected from the Menindee Lakes region, NSW and Lake Eyre basin, SA, on the extinction of the giant bird *Genyornis newtoni* by Dr N. Spooner with Prof. G. Miller, University of Colorado, USA and Prof. M. Fogel, Carnegie Institution of Washington, Washington DC, USA.

A study of the kinetics of the stable high-temperature blue and red thermoluminescence of quartz by Dr N. SPOONER with Prof. A. Franklin, University of Maryland, USA.

The timing of megafaunal extinction in the Lake Eyre basin, South Australia by Dr N. SPOONER with Dr R. Tedford, American Museum of Natural History, New York, USA.

The development and testing of the GAMIT GPS software by Dr P. TREGONING with Drs R. King, T. Herring and S. McClusky, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, USA.

The ongoing measuring of tectonic motion in Papua New Guinea by Dr P. TREGONING with Mr R. Curley, Papua New Guinea University of Technology,

PNG and Mr S. Saunders, Rabaul Volcano Observatory, PNG.

An investigation of the motion and rigidity of the Pacific Plate by Dr P. TREGONING with Dr J. Beavan, Geological and Nuclear Sciences, NZ.

The study of the evolution of the Lachlan Fold Belt as recorded in zircon preserved in igneous and sedimentary rocks by Dr I.S. WILLIAMS with Prof. B.W. Chappell, Macquarie University, and Prof. A.J.R. White, formerly Victorian Institute of Earth and Planetary Sciences.

The study of metamorphism in central Australia and South Africa by Dr I.S. WILLIAMS with Dr I. Buick, La Trobe University, and Dr M. Hand, Adelaide University.

The use of Hf isotopes in zircon to study magma genesis in south-eastern Australia by Dr I.S. WILLIAMS with Prof. J. Hergt, Dr J. Woodhead and Mr R. Kemp, Melbourne University.

Studies on the provenance of late Proterozoic and early Palaeozoic Gondwanan sediments of Antarctica and India by Dr I.S. Williams with Dr J. Goodge, Southern Methodist University, Dallas, USA and Prof. P. Myrow, The Colorado College, Colorado Springs, USA.

A study on oxygen isotopes in zircon by Dr I.S. WILLIAMS with Dr S. Claesson and Dr M. Whitehouse, Naturhistoriska Riksmuseet, Stockholm, Sweden.

A collaborative study of Chinese ultra-high pressure rocks by Dr I.S. WILLIAMS with Dr J. Ping, Chinese Ministry of Land and Resources, Beijing, China.

A melt inclusion study of the petrogenesis of flood basalts by Dr G. YAXLEY with Dr V. Kamenetsky, University of Tasmania.

A study of the phase relations of carbonate in eclogite under upper mantle conditions by Dr G. YAXLEY with Prof. Dr G. Brey of the Institut für Mineralogie, Universität Frankfurt, Germany.

A study of the distribution of the trace element Li between upper mantle phases and its potential use as a tracer of different metasomatic styles by Dr G. YAXLEY with Dr Hans-Michael Seitz, Institut für Mineralogie, Universität Frankfurt, Germany.

## **Research School of Information Sciences and Engineering**

### **Computer Sciences Laboratory**

Reinforcement learning by Mr Douglas ABERDEEN, Mr Evan GREENSMITH, Mr Ed HARRINGTON with Prof. Peter Bartlett (Biowulf Technologies, Berkeley, USA), Dr Jonathan Baxter (WhizBang, Pittsburgh, USA), Mr Lex Weaver (FEIT, ANU, Canberra, Australia) 1999–2001.

Structurally free logics by Dr Kata BIMBÓ with Prof. J Michael Dunn (Indiana University, Bloomington, USA) 1997–2001.

Relevance logic and typed systems by Dr Kata BIMBÓ, Emeritus Prof. Bob MEYER, Dr John SLANEY with Prof. Mariangiola Dezani (University of Torino, Torino, Italy) 2000–2001.

Logical foundations of hybrid control systems by Dr Jen DAVOREN with Prof. George Pappas (University of Pennsylvania, Philadelphia, USA), Prof. Gerardo Lafferriere (Portland State University, Portland, USA) 2000–2003.

Logical foundations of hybrid control systems by Dr Jen DAVOREN with Prof. Anil Nerode (Cornell University, Ithaca, USA) 1998–2002.

Logical foundations of hybrid dynamical systems by Dr Jen DAVOREN, Dr Thomas MOOR (SE), Dr Raj GORÉ with Dr George Pappas (University of Pennsylvania, Philadelphia, USA), Prof. Gerardo Lafferriere (Portland State University, Portland, USA), Prof. Anil Nerode (Cornell University, Ithaca, USA) 2000–2001.

Modular and hierarchical control of hybrid systems by Dr Jen DAVOREN, Dr Thomas MOOR (SE) with Dr Jörg Raisch (Max-Planck-Institute, Magdeburg, Germany), Mr Alexander Itigin (University of Stuttgart, Stuttgart, Germany) 2000–2001.

Audio-video speech processing by Mr Roland GÖCKE, Dr Bruce MILLAR, Prof. Alex ZELINSKY (SE) with Dr Jordi Robert-Ribes (Cable and Wireless Optus, Sydney, Australia), Prof. Cheol-Woo Jo (Changwon National University, Changwon, Korea), Dr Gerard Bailly (Institut de la Communication Parlee, Grenoble, France) 1998–2001.

Proof theoretical investigations of computer science logics by Dr Raj GORÉ with Prof. Gerhard Jaeger (University of Bern, Bern, Switzerland), Prof. Hiroakira Ono (JAIST, Kyoto, Japan) 1997–2001.

Knowledge representation for machine learning by Prof. John LLOYD, Ms Jemma WU, Mr Cheng Soon ONG, Mr Andrew SLATER with Dr Christophe Giraud-Carrier (ELCA Informatique SA, Lausanne, Switzerland), Dr Antony Bowers (STMicroelectronics Ltd, Bristol, UK), Mr Kee Siong Ng (FEIT, ANU, Canberra, Australia) 1999–2001.

Convex geometry and statistical learning theory by Dr Shahar MENDELSON with Prof. Vladimir Koltchinskii (University of New Mexico, Albuquerque, USA), Mr Assaf Naor (Hebrew University, Jerusalem, Israel), Mr Shie Mannor (Technion IIT, Haifa, Israel), Prof. Ron Meir (Technion IIT, Haifa, Israel), Prof. Gideon Schechtman (Weizmann Institute of Science, Rehovot, Israel), Dr Roman Vershynin (University of Alberta, Edmonton, Canada), Prof. Peter Bartlett (Biowulf Technologies, Berkeley, USA) 2001–2001.



Kernel methods by Dr Alex SMOLA with Prof. John Shawe-Taylor (Royal Holloway College, London, UK), Prof. Klaus-Robert Mueller (Fraunhofer Institute, Berlin, Germany), Dr Bernhard Schoelkopf (Biowulf Technologies, New York, USA), Prof. Peter Bartlett (Biowulf Technologies, Berkeley, USA), Dr Adam Kowalczyk (Telstra Research, Melbourne, Australia), Dr Chris Burges (Microsoft Research, Redmond, Australia), Dr Ralf Herbrich (Microsoft Research, Cambridge, UK) 2001–2001.

Decision problems and optimisation by Dr Sylvie THIÉBAUX with Dr Toby Walsh (University of York, York, UK) 2001–2001.

Planning under uncertainty via model-checking by Dr Sylvie THIÉBAUX, Dr John SLANEY with Prof. Froduald Kabanza (University of Windsor, Windsor, Canada) 2001.

Model-based diagnosis and reconfiguration by Dr Sylvie THIÉBAUX, Dr John SLANEY with Dr Piergiorgio Bertoli (IRST/ITC, Trento, Italy), Dr Alessandro Cimatti (IRST/ITC, Trento, Italy), Dr Paolo Traverso (IRST/ITC, Trento, Italy), Prof. Marie-Odile Cordier (University of Rennes, Rennes, France) 2001–2001.

### **Department of Systems Engineering**

Safe (cautious) multiple model adaptive control by Prof. Brian ANDERSON, Dr Thomas BRINSMEAD with Dr Joao Hespanha (University of Southern California, Los Angeles, USA), Dr Daniel Liberzon (University of Illinois, Champaign, USA), Prof. A Morse (Yale University, New Haven, USA) 1999–2001.

Identification for control by Prof. Brian ANDERSON with Prof. Michel Gevers (Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Dr Xavier Bombois (Delft University of Technology, Delft, The Netherlands), Dr G Scorletti (Institute of Material and Nuclear Science, Caen, France), Dr Benoît Codrons (Université Catholique de Louvain, Louvain-la-Neuve, Belgium) 1999–2001.

Model and controller reduction by Prof. Brian ANDERSON with Dr Tony Van Gestel (Katholieke Universiteit Leuven, Leuven, Belgium), Prof. Bart De Moor (Katholieke Universiteit Leuven, Leuven, Belgium), Dr Peter Van Overschee (Katholieke Universiteit Leuven, Leuven, Belgium) 2000–2001.

Model and controller reduction by Prof. Brian ANDERSON with Dr Andras Varga (German Aerospace Center, Wessling, Germany) 2000–2001.

Iterative control design by Prof. Brian ANDERSON with Prof. Michel Gevers (Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Dr Andrea Lecchini (Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Prof. Robert Bitmead (University of California, San Diego, USA) 1998–2001.

Non-linear system identification in closed loop by Prof. Brian ANDERSON with Prof. Ioan Landau (Institute National Polytechnique, Grenoble, France), Dr Franky DeBruyne (Siemens, Brussels, Belgium) 1999–2000.

H control design by Prof. Brian ANDERSON with Dr Xavier Bombois (Delft University of Technology, Delft, The Netherlands) 2001–2001.

Positive systems by Prof. Brian ANDERSON with Prof. Lorenzo Farina (Università degli Studi di Roma, Rome, Italy), Dr Luca Benvenuti (Università degli Studi di Roma, Rome, Italy) 1998–2001.

Mobile robotics and computer vision by Dr David AUSTIN with Prof. Henrik Christensen (Royal Institute of Technology, Stockholm, Sweden) 2001–2005.

Markov chain Monte Carlo system identification by Dr Thomas BRINSMEAD with Dr Brett Ninness (University of Newcastle, Newcastle, Australia) 2001–2001.

Modular and hierarchical control of hybrid systems by Dr Thomas MOOR, Dr Jen DAVOREN (CSL) with Dr Jörg Raisch (Max Planck Institute, Magdeburg, Germany), Mr Alexander Itigin (University of Stuttgart, Stuttgart, Germany) 2000–2001.

Critical sets for scene reconstruction by Prof. Richard HARTLEY with Dr Fredrik Kahl (Lund Institute of Technology, Lund, Sweden), Dr Kalle Astrom (Lund Institute of Technology, Lund, Sweden) 2001–2001.

Scene reconstruction from N views by Prof. Richard HARTLEY with Dr Robert Kaucic (GE Research Center, Schenectady, USA) 2000–2001.

Optimisation methods for the design and analysis of digital systems by Prof. John MOORE with Dr Wei-yon Yan (Curtin University, Perth, Australia) 2001–2003.

Robot manipulators by Prof. John MOORE with Prof. Uwe Helmke (University of Wurtzburg, Wurtzburg, Germany) 2001–2001.

Interior point methods by Prof. John MOORE with Prof. Leonid Faybusovich (University of Notre Dame, Notre Dame, USA) 2001–2001.

CDMA and smart antennas by Prof. John MOORE with Dr Tat Ming Lok (The Chinese University of Hong Kong, Hong Kong) 2000–2001.

Nonlinear CDMA upgrade by Prof. John MOORE with Dr Alfred Tan (Go-CDMA Ltd, Hong Kong) 2000–2001.

Field robotics by Prof. Alex ZELINSKY with Prof. Ray Jarvis (Monash University, Melbourne, Australia) 2001–2002; Prof. Hugh Durrant-Whyte (University of Sydney, Sydney, Australia) 1998–2002).

Mobile robot navigation by Prof. Alex ZELINSKY with Dr Toshihiro Matsui (Electrotechnical Laboratory and Real World Computing Program, Japan).

## Department of Telecommunications Engineering

Sound field recoding and reproduction systems by Dr Thushara ABHAYAPALA with Dr Darren Ward (Imperial College of Science, London, UK) 2001.

Using multipath to distinguish between mobile signals by Prof. Rod KENNEDY with Dr Predrag Rapajic (University of New South Wales, Sydney, Australia), Dr Brian Hart (CISCO, Sydney, Australia), (NEC, Melbourne, Australia) 1998–2001.

Iterative equalisation by Prof. Rod KENNEDY with Prof. Zhi Ding (University of California, California, USA) 2001.

Collaborative research, development and commercialisation agreement (Phase 6) by Prof. Rod KENNEDY, Dr Thushara ABHAYAPALA with (Fox Television Stations Inc, California, USA), (Philips Laboratories, New York, USA) 2001.

Collaborative research, development and commercialisation agreement (Phase 5) by Prof. Rod KENNEDY, Dr Thushara ABHAYAPALA, Prof. Bob WILLIAMSON with Fox Television Stations Inc (California, USA), Philips Laboratories (New York, USA) 2001.

Acoustic source tracking in reverberant environments using particle filtering methods by Prof. Bob WILLIAMSON with Dr Darren Ward (Imperial College of Science, London, UK) 2001.

Algorithmic luckiness by Prof. Bob WILLIAMSON with Dr Ralf Herbrich (Microsoft Research, Cambridge, UK) 2001.

Online kernel methods by Prof. Bob WILLIAMSON with Dr Ralf Herbrich (Microsoft Research, Cambridge, UK), Dr Ingo Steinwart (Fakultät für Mathematik und Informatik, Friedrich-Schiller-Universität, Jena, Germany) 2001.

Kernel methods by Prof. Bob WILLIAMSON with Dr Bernhard Schoelkopf (Biowulf Technologies, New York, USA), Prof. John Shawe-Taylor (Royal Holloway College, London, UK), Prof. Peter Bartlett (Biowulf Technologies, USA), Prof. Klaus-Robert Mueller (Berlin, Fraunhofer, Germany), Dr Adam Kowalczyk (Telstra, Melbourne), Dr Chris Burges (Microsoft Research, Redmond, UK), Dr Ralf Herbrich (Microsoft Research, Cambridge, UK) 2001.

Bayesian analysis of online algorithms by Prof. Bob WILLIAMSON with Dr Robert Mahony (FEIT, ANU), Prof. William Sethares (University of Wisconsin, Wisconsin, USA), Mr Rick Martin (Cornell University, Ithaca, USA) 2001.

## The John Curtin School of Medical Research

Structural studies into the mechanism of dihydrofolate reductase by Dr M.G. CASAROTTO with Prof. G. Roberts, Centre for Mechanisms of Human Toxicity, University of Leicester, UK and Dr J. Basran, Department of Biochemistry, University of Leicester, UK.

Chitinase and Chitin Binding Proteins by Dr M.G. CASAROTTO with Dr C. Vorgias, Biology Department, Athens University, Greece and Prof. H. Schrempf, Universitat Osnabruk, FB Biologie/Chemie, Osnabruk Germany.

Peptide activators of the ryanodine receptor by Dr M.G. CASAROTTO with Prof. I. Toth, Pharmacy Department, University of Queensland.

Effects of drugs that block Vpu ion channels studied with NMR techniques by Dr M.G. CASAROTTO with Prof. T. Watts, Biomembrane Structure Unit, University of Oxford.

Hyperthermia pig muscle by Prof. A.F. DULHUNTY with Prof. R. Fink, University of Heidelberg, Heidelberg Germany.

Structure of DHPR binding domain on ryanodine receptor calcium release channel by Prof. A.F. DULHUNTY with Prof. D. McClennan, Banting & Best Research Institute, Toronto Canada.

Structure of DHPR binding domain on ryanodine receptor calcium release channel by Prof. A.F. DULHUNTY with Prof. Y. Ogawa, Juntendo University School of Medicine, Tokyo, Japan.

Activation of malignant hyperthermic pig muscle by Prof. A.F. DULHUNTY with Prof E Gallant, University of Minnesota, USA.

Bioavailability of peptides that activate ryanodine receptors by Prof. A.F. DULHUNTY with Prof. I. Toth and Dr P. Mollinar, University of Queensland.

Structure of ryanodine receptors by Prof. A.F. DULHUNTY with Dr M Parker, St Vincents Institute of Medical Research, Melbourne.

Actions of peptides on skinned muscle fibres by Prof. A.F. DULHUNTY with Dr G. Lamb, La Trobe University.

The characterisation of the role of eotain in the mechanism of pulmonary eosinophilic inflammation by Dr P. FOSTER with Dr M Rothenberg, Childrens Hospital Medical Centre, University of Cincinnati, USA.

The role of IL-13 in asthma by Dr P. FOSTER with Dr A Mackenzie, Cambridge University.

Models of chronic asthma by Dr P. FOSTER with Dr Kumar, University of NSW.

Effects of conotoxins on sodium currents by Prof. P.W. GAGE with Prof. D. Adams, Department of Physiology and Pharmacology, University of Queensland.

Structure of the GABAA receptor by Prof. P.W. GAGE with Dr M. Parker, St Vincents Institute of Medical Research, Melbourne.

Effects of drugs that block Vpu ion channels on HIV-1 replication by Prof. P.W. GAGE with Prof. T. Cunningham and Dr H. Naif, Westmead Hospital NSW.

Structure of Vpu ion channels studied with NMR techniques by Prof. P.W. GAGE with Prof. T. Watts, Oxford, UK.

Use of NMR to study liver dysfunction in cirrhosis by Dr J. GREADY with Prof. A.J. McLean, Dr P.J. Harvey, Dr L. Lenton and Mr M. Taylor, Canberra Clinical School, University of Sydney; Prof. P.W. Kuchel, Dr S. Ramadan and Dr W. Bubb, Dept of Biochemistry, University of Sydney; Prof. D. Le Couteur, Centre for Education and Research on Ageing, Concord Hospital NSW.

Development and application of sensitive protein sequence analysis methods by Dr J. GREADY with Dr H. Booth, Centre for Bioinformation Science, School of Mathematics.

Development and application of improved force fields for protein simulations by Dr J. GREADY with Assoc. Prof. K. Sagarik, Suranaree University of Technology, Thailand; Ms P. Sisot, Ramkhamhaeng University, Thailand.

Development, evaluation and application of the linear-scaling QM method MOZYME for biomolecular calculations by Dr J.E. GREADY, Dr P.L. Cummins and Mr S.J. Titmuss with Dr A. Bliznyuk, ANU Supercomputer Facility; Dr A. Rendell, Department of Computer Science, FEIT; Dr R. Nobes, Fujitsu European Centre for Information Technology, London, UK; and Dr J Stewart, Stewart Computational Chemistry, Colorado Springs, USA.

FTIR studies of prion protein repeats by Dr J.E. GREADY, Ms M. Gustiananda and Dr P. Milburn with Dr P. Haris, De Montfort University, Leicester UK.

Structural and functional evolution of extracellular proteins by Dr J. GREADY and Mr A. Zelensky with Dr Y. Matsuo and Dr F. Pichiari, RIKEN Genomic Sciences Center, Yokohama, Japan.

The cell-specific delivery of DNA or photosensitizer molecules to the nucleus of target cells by Prof. D.A. JANS with Prof. A.S. Sobolev, Russian Institute for Agricultural Biotechnology, Moscow.

The mechanism of nuclear transport and role in infection of the NS5 polymerase protein of Dengue virus by Prof. D.A. JANS with Dr S Vasudevan, Dept of Biochem & Mol Biol, James Cook University of North Queensland.

Nuclear targeting of the serine protease granzyme B in cytolytic granule mediated apoptosis by Prof. D.A. JANS with Drs J.A. Trapani and V. Sutton, Peter MacCallum Cancer Research Institute, Melbourne.

Nuclear transport and function of the granzyme B inhibitor, the serpin PI-9 by Prof. D.A. JANS with Dr P.I. Bird, Dept of Medicine, Monash University.

Calmodulin regulated NLSs in proteins important in testis development by Prof. D.A. JANS with Dr K. Loveland, Institute for Reproduction and Development, Melbourne; Dr V. Harley, Prince Henry's Hospital, Melbourne.

Nuclear import and actions of insulin-like growth factor binding protein-3 (IGFBP-3) and IGFBP-5 by Prof. D.A. JANS with Dr L. Schedlich and Prof. R. Baxter, Kolling Research Institute, Sydney.

Nuclear signalling pathway of Ern1p in the unfolded protein response in yeast by Prof. D.A. JANS with Prof. M.-G. Gething, Dept Biochem. and Biophysics, University of Melbourne.

Development of chimeric proteins for targeted gene delivery by Prof. D.A. JANS with Dr R. Nordon, Biomed-Engineering, University of NSW.

Anti-AIDS virus Strategies by Prof. D.A. JANS with Prof. A. Loyter, Alexander Silberman Institute of Life Sciences, Jerusalem.

The control of inflammatory disease in vivo by Dr K.I. MATTHAEI with Dr S. Breit, Centre for Immunology, St Vincents Hospital, Darlinghurst, Sydney, NSW.

The role of mast cells in vivo by Dr K.I. MATTHAEI with Prof. S. Krilis, Department of Immunology, Allergy & Infectious Diseases, The St George Hospital, Kogarah NSW 2217.

Murine filariasis infections in cytokine deficient mice by Dr K.I. MATTHAEI with Prof. A. Hoerauf, Department of Helminthology, Bernhard Nocht Institute of Tropical Medicine, Hamburg, Germany.

Role of chromatin architectural proteins in cytokine gene transcription by Dr M.F. SHANNON with Dr R. Reeves, Washington State University, USA.

The role of chromatin remodeling in the development of effector and memory T cells in an immune response by Dr M.F. SHANNON with Dr G Stockinger, National Institute of Medical Research, London.

The role of c-Rel in CD28 signaling in T cells by Dr M.F. SHANNON with Dr S. Gerondakis, WEHI, Melbourne.

T Cell populations in 2Mavs2Mb transgenic NOD mice by Dr R.M. SLATTERY with Dr Dale Godfrey, Monash University, Melbourne.

Function of histone H2AZ in mammalian development by Dr D.J. TREMETHICK with Dr I. Lyons, Department of Biochemistry, University of Adelaide, SA.

Solving the crystal structure of a H2AZ containing nucleosome by Dr D.J. TREMETHICK with Dr K. Luger, Department of Biochemistry and Molecular Biology, Colorado State University, USA.

To examine a possible link between the mode of action of Phenobarbital and chromatin structure by Dr D.J. TREMETHICK with Dr B. May, Department of Biochemistry, University of Adelaide, SA.

Gaining an understanding of the role of chromatin in the regulation of hepatitis B virus (HBV) gene expression and pathogenesis by Dr D.J. TREMETHICK with Dr J. Fyfe, Victorian Infectious Disease Resource Laboratory, VIC.

Determining whether H2AZ alters higher order chromatin folding by Dr D.J. TREMETHICK with Dr J. Hansen, Department of Biochemistry, The University of Texas Health Sciences Center, San Antonio.

The role of IL-5 in smooth muscle hyperreactivity of the gut by Prof. I.G. YOUNG and Dr K. MATTHAEI with Prof S Collins, Division of Gastroenterology, McMaster University, Department of Medicine, Hamilton, Ontario, Canada.

The role of IL-5 and eosinophils in allergy by Prof. I.G. YOUNG and Dr K. MATTHAEI with Dr M. Rothenberg, Division of Pulmonary Medicine, Allergy & Immunology, Childrens Hospital Medical Centre, Cincinnati, Ohio USA.

The role of IL-5 in eosinophil precursor differentiation by Prof. I.G. YOUNG and Dr K. MATTHAEI with Prof. J. Denburg, Department of Medicine, McMaster University, Hamilton, Ontario, Canada.

Determination of genetic factors responsible for multi-drug resistance in small cell lung carcinoma by Dr J. BANYER with Dr R. Davey, Clinical Oncology, Royal North Shore Hospital, Sydney, NSW.

Ross River Virus persistent infection of macrophages: A model of viral relapse by Dr J. BANYER with Dr B. Lidbury, University of Canberra, Canberra, ACT.

Effects of Hepatitis C infection on the immunoregulatory properties of monocyte derived dendritic cells by Dr J. BANYER with Dr R. French, Westfield Reserch Laboratories, Sydney Childrens Hospital, Sydney, NSW.

Effects of Hepatitis C on the immunoregulating properties of human OC subsets by Dr J. BANYER with Dr E. Maraskovsky, Ludwig Institute, Melbourne, Vic.

The role of NO in regulation of EAE by Dr B. CHARLTON with Dr D. Willenborg, The Canberra Hospital, Canberra, ACT.

The effect of Fas-Fas ligand interaction on diabetes in NOD mice by Dr B. CHARLTON with Dr N. Petrovsky, The Canberra Hospital, Canberra, ACT.

Adjuvant activity of gamma inulin by Dr P. COOPER with Dr P. Fuentes, Universitat Autònoma de Barcelo-

na, Barcelona, Spain; Dr G. Guillen, Centre for Genetic Engineering & Biotechnology, Havana, Cuba; Dr D.O. Willenborg, Neurosciences Research Unit, The Canberra Hospital, Canberra, ACT; Prof. G. Tannock, Royal Melbourne Institute of Technology, Melbourne, Vic.; Prof. A. Erdei, Dept of Immunology, Eotvos Lorand University, Göd, Hungary; Dr E. Riviere, Intervet Pharma R&D, Beaucouzè, France; Dr N. Petrovsky, National Health Sciences Centre, The Canberra Hospital.

The role of nitric oxide in infectious and autoimmune disease by Dr W.B. COWDEN with Dr K Rockett, Institute of Molecular Medicine, Oxford, UK.

The role of free radicals in vascular disease by Dr W.B. COWDEN with Dr R. Stocker, The Heart Research Institute, Sydney, NSW.

The activity and mechanism of action of novel glycoprotein processing inhibitor anti-rejection agents by Dr W.B. COWDEN with Prof. A. Hibberd, Hunter Valley Hospital Transplant Unit, Newcastle, NSW.

Cleavage of heparan sulphate by mammalian heparanase by Dr C. FREEMAN with Dr J. Turnbull, Molecular Cell Biology Laboratory, School of Biosciences, University of Birmingham, Edgbaston, UK.

Sequencing the heparanase cleavage site of heparan sulphate by Dr C. FREEMAN with Drs D. Coombe and W. Kett, Molecular Immunology Laboratory, School of Biomedical Sciences, Curtin University of Technology, Perth, WA.

Heparanase activity in post-operative vascular surgery patients by Dr C. FREEMAN with Dr J. Bingley, Princess Alexandra Hospital, Brisbane, Qld.

Heparanase activity in bone marrow extracts following hematopoietic progenitor cell mobilisation by Dr C. FREEMAN with Dr J.-P. Levesque, Stem Cell Biology Laboratory, Peter MacCallum Cancer Institute, Melbourne, Vic.

Heparanase activity in mucopolysaccharidosis patients by Dr C. FREEMAN with Prof. J. Hopwood, Adelaide Women's and Children's Hospital, Adelaide, SA.

Heparanase activity in myeloma cells by Dr C. FREEMAN with Dr O. Hjertner, Institute of Cancer Research and Molecular Biology, Medisinsk Teknisk Senter, Trondheim, Norway.

Molecular mechanisms of cell invasion and angiogenesis by Dr M. HULETT with Prof. C.N. Chesterman, Prof. B.H. Chong, Assoc. Prof. P.J. Hogg, Dr L.M. Khachigan, University of New South Wales, Sydney, NSW; Dr R.K. Andrews and Prof. M.C. Berndt, The Baker Medical Research Institute, Melbourne, Vic.

Cloning and characterisation of a novel family of tetraspan molecules by Dr M. HULETT with Dr L. Baker and Prof. G. Sutherland, The Womens and Childrens Hospital, Adelaide, SA; Prof. P.M. Hogarth, The Aus-

tin Research Institute, Melbourne, Vic.; and L. Maxwell, The Canberra Hospital, Canberra, ACT.

Protective immune responses in mice against Japanese encephalitis virus and infection-enhancing serocomplex flaviviruses by Dr M. LOBIGS with Dr R.A. Hall and Prof. J. Mackenzie, Department of Microbiology, University of Queensland, Brisbane, Qld.

Modulation of the MHC class I antigen processing and presentation pathway by flaviviral infection by Dr M. LOBIGS with Dr F Momburg, German Cancer Research Center, Heidelberg, Germany

Oral induced T cell tolerance by Dr A. MÜLLBACHER with Dr J. Chin, Elizabeth MacArthur AG Institute, NSW Department of Agriculture, Camden, NSW.

The role of granzyme A in fungal infection by Dr A. MÜLLBACHER with Dr R. Ashman, Oral Biology and Pathology, University of Queensland, Brisbane, Qld.

The role of granzymes in herpes virus infection by Dr A. MÜLLBACHER with Drs R. Pereira and A. Simmons, Herpes Research, Infectious Diseases Laboratories, Institute of Medical & Veterinary Science, Adelaide, SA.

The role of granzymes in viral infection by Dr A. MÜLLBACHER with Dr M. Smyth, Peter MacCallum Cancer Centre, Melbourne, Vic.

The granzymes in early defence against viral infection by Dr A. MÜLLBACHER with Dr J. Trapani, Peter MacCallum Cancer Centre, Melbourne, Vic.

The role of granzymes in the induction of apoptosis by Dr A. MÜLLBACHER with Dr M. Simon, Max Planck Institute für Immunbiologie, Freiburg, Germany.

The role of poxvirus encoded serpins in cytotoxic T cell induced apoptosis by Dr A. MÜLLBACHER with Dr R. Wallich, Department of Immunology, University of Heidelberg, Heidelberg, Germany.

The role of T cell serine proteases in cell cytotoxicity and viral pathogenesis by Drs A. MÜLLBACHER and M. LOBIGS with Dr M Simon, Max Planck Institute für Immunbiologie, Freiburg, Germany.

Allorecognition by Drs A. MÜLLBACHER and M. LOBIGS with Dr R. Langman, Conceptual Immunology, The Salk Institute, La Jolla, CA, USA.

Hep C and liver damage by Drs A. MÜLLBACHER and M. LOBIGS with Assoc. Prof. M.L. Bassett, Gastroenterology Unit, The Canberra Hospital, Canberra, ACT.

Role of histidine-rich glycoprotein in angiostatin formation and action by Prof. C. PARISH with Dr P. Hogg and Prof. C. Chesterman, School of Pathology, University of New South Wales, Sydney, NSW; Dr J. Altin, Biochemistry and Molecular Biology Division, The Faculties, ANU

Role of platelets in tumour metastasis by Prof. C. PARISH with Dr M. Berndt, Baker Research Institute, Melbourne, Vic.

Novel complement activation pathways by Prof. C. PARISH with Prof M. Walport and Dr M. Botto, Imperial College School of Medicine, London, UK.

Analysis of cell adhesion molecules on human lymphocytes by Prof. C. PARISH with Dr H. Warren, The Canberra Hospital, Canberra, ACT.

Eosinophil-induced tumour regression by Prof. C. PARISH with Dr M. Rothenberg, University of Cincinnati, Cincinnati, USA.

Sulfated oligosaccharides as anti-viral agents by Prof. C. PARISH with Dr A. Cunningham, Westmead Hospital, Sydney, NSW.

3D structure of mammalian heparanase by Prof. C. PARISH, Dr C. FREEMAN and M. HULETT with Dr M. Parker, St Vincents Hospital, Melbourne, VIC.

Heparanase as an anti-tumour target by Prof. C. PARISH, Dr C. FREEMAN and M. HULETT with Dr R. Anderson, Peter MacCallum Cancer Institute, Melbourne, VIC. and Drs H. Wheeler and N. Pavlakis, Royal North Shore Hospital, Sydney, NSW.

Heparanase as an anti-tumour target by Prof. C. PARISH, Dr C. FREEMAN and M. HULETT with Drs J. Joyce and D. Hanahan, Hormone Research Unit, University of California at San Francisco, California, USA.

HIV Clinical trials by Dr S.A. THOMSON with Australian HIV Vaccine Consortium (Head Dr D Cooper), NatCentre for Epidemiology and Clinical Research, University of New South Wales, Sydney, NSW.

HIV SAVINE by Dr S.A. THOMSON with D Fuller, PowderJect (USA), Madison, Wisconsin, USA; Dr S. Kent, Department of Microbiology, University of Melbourne, Melbourne, VIC; Dr R.A. Ffrench, Pediatric Research Labs, Sydney Children's Hospital, Westmead, NSW.

Hepatitis C SAVINE by Dr S.A. THOMSON with Dr R.A. Ffrench, Pediatric Research Labs, Sydney Children's Hospital, Westmead, NSW; Assoc. Prof. B. Rawlinson, Prince of Wales Hospital, Randwick, NSW; Prof. A. Lloyd, Department of Infectious Diseases, Prince of Wales Hospital, Randwick, NSW.

Tuberculosis SAVINE by Dr S.A. THOMSON with Prof. W. Britton and Dr C. Demangel, Centenary Institute, Camperdown, NSW.

Papilloma virus and cervical cancer polyepitope vaccine by Dr S.A. THOMSON with Assoc. Prof. B. Tindle, Sir Albert Sakzewski Virus Research Centre, Brisbane Qld.

Nasopharyngeal carcinoma polyepitope by Dr S.A. THOMSON with Dr R. Khanna, Queensland Institute of Medical Research, Brisbane Qld.

Ubiquitin-specific proteases in cancer by Dr R. BAKER with Assoc. Prof. D.A. Gray, Ottawa Regional Cancer Centre, University of Ottawa, Ottawa, Ontario, Canada.

Phylogenetic and structural studies of the ubiquitin-specific protease family by Dr R. BAKER with Dr L.S. Jermiin, School of Biological Sciences, University of Sydney, Sydney NSW.

Chromosomal mapping of human genes by Dr R. BAKER with Dr G. Sutherland and Mrs E. Woolatt, Dept of Cytogenetics and Molecular Genetics, Women's and Children's Hospital, Adelaide SA.

Structural analysis of glutathione S-transferases by Prof. P. BOARD with Dr M. Parker, St Vincents Medical Research Institute, Melbourne, Vic.

Regulation of mouse Theta class GST genes by Prof. P. BOARD with Dr W. Pearson, Department of Biochemistry, School of Medicine, University of Virginia Health Sciences Center, Charlottesville, Virginia, USA.

Structural analysis of the Omega class GSTs by Prof. P. BOARD with Dr C. Gabel, Dr K. Geoghegan and Dr J. Pandit, Central Research Division, Pfizer Inc, Groton CT, USA.

Phylogenetic and evolutionary studies of the glutathione S-transferase family by Prof. P. BOARD with Dr L.S. Jermiin, School of Biological Sciences, University of Sydney.

Parkinson's Disease, Pesticides and glutathione transferase polymorphisms by Prof. P. BOARD with Dr D. LeCouteur, Department of Pharmacology, University of Sydney and Canberra Clinical School, The Canberra Hospital.

Function of the Zeta class GSTs by Prof. P. BOARD with Dr M.W. Anders, Dept of Pharmacology and Physiology, University of Rochester Medical School.

Functional analysis of glutathione transferases by Prof. P. BOARD with Drs M. Lo Bello, A. Caccuri and G. Ricci, University of Rome.

Metabolism of arsenic by glutathione transferases by Prof. P. BOARD with Dr H.V. Aposhian by Prof. P. BOARD with Dept of Molecular and Cellular Biology, University of Arizona, USA.

Glutathione transferases and drug toxicity by Prof. P. BOARD with Dr L. Rivory, Sydney Cancer Centre.

The genetic basis of common mental disorders associated with anxiety and depression by Prof. S. EASTEAL with Prof A. Jorm, Social Psychiatry Research Unit, ANU; Prof. Margot Prior, Psychology Department, Melbourne University.

Evolution of DNA repair genes, and population genetics of tumour suppressor genes by Dr G. HUTTLEY with Prof. L. Nunney, Dept. Biology; Prof. M. Ragan,

Institute for Molecular Bioscience, University of Queensland.

Exploring the roots to the tree of life by Dr G. HUTTLEY with Dr A. Isaev, Moscow State University.

The genetics of melanocortin receptor-1 gene by Dr G. HUTTLEY with Dr R. Sturm.

Gene expression profiles of memory B cells and diabetic islets by Prof. C. GOODNOW with Dr M. Cooke, Genome Institute of The Novartis Foundation, San Diego CA.

Genetic modifiers of squamous carcinogenesis by Prof. C. GOODNOW with Dr D. Hanahan, University of California, San Francisco; Dr S. Foote, WEHI, Melbourne.

Identification of ENU-induced mutations causing hematopoietic abnormalities by Prof. C. GOODNOW with Drs D. Hilton and W. Alexander, WEHI, Melbourne.

Identification of ENU-induced mutations causing bone density defects by Prof. C. GOODNOW with Dr E. Gardiner, Garvan Institute, Sydney.

Identification of ENU-induced mutations causing abnormal breast duct growth by Prof. C. GOODNOW with Dr C. Ormandy, Garvan Institute, Sydney.

Gene mapping, gene expression profiling and protein profiling of mouse mutation on an array of arrays by Prof. C. GOODNOW with Dr M. Chee, Illumina, Inc, San Diego.

Analysis of ENU-induced neurological mutations by Prof. C. GOODNOW with Dr C. Fletcher, Genome Institute of The Novartis Foundation, San Diego, CA.

Role of Ikaros in erythropoiesis by Prof. C. GOODNOW with Dr A. Perkins, Monash University.

Genetics and hormonal effects on pancreatic islet B cell failure by Prof. C. GOODNOW with Dr N. Petrovsky, The Canberra Hospital.

Control of humoral immunity by Prof. C. GOODNOW with Dr M. Cook, The Canberra Hospital.

Regulation of pig proislet xenograft destruction and assessment of the potential for xenozoonoses by Dr C.J. SIMEONOVIC with Prof. A. Gibbs, Molecular Genetics and Evolution, Research School of Biological Sciences, ANU; Clin. Assoc. Prof. J.D. Wilson, Department of Endocrinology, The Canberra Hospital, Canberra, ACT.

Role of chemokines in the rejection of pig proislet xenografts by Dr C.J. SIMEONOVIC with Dr W.A. Kuziel, Section of Molecular Genetics and Microbiology, The University of Texas at Austin, Austin, Texas, USA.

Investigation of X maturation of the ileal Peyer's patches by Dr P. McCULLAGH with Prof. C. Press and T. Landsverk, Royal Norwegian Veterinary School, Oslo.

Development of Peyer patches and of immunological function in the gut of the fetal lamb by Dr P. McCULLAGH with Dr S. McClure, McMaster Laboratory, CSIRO, Sydney.

Compartmental modelling of lymphocyte migration by Dr P. McCULLAGH with Dr L. Dedik, Faculty of Mechanical Engineering, Slovak Technological University, Bratislava.

Compartmental modelling of lymphocyte migration by Dr P. McCULLAGH with Dr M. Durisova, Institute of Experimental Pharmacology, Slovak Academy of Sciences, Bratislava.

Pulmonary development in thyroidectomized fetal lambs by Dr P. McCULLAGH with Dr M. Peek, Fetal Medicine Unit, Department of Obstetrics, University of Sydney, Canberra Clinical School.

Electron microscopic examination of the alveoli of athyroid fetal lambs by Dr P. McCULLAGH with Dr J. Dahlstrom, Pathology Department, The Canberra Hospital.

Colonisation of Peyer patches by *Mycobacterium avium* complex by Dr P. McCULLAGH with Dr R. Whittington, Elizabeth Macarthur Institute.

Interaction of action potentials with synaptic events by Dr G. STUART with Dr M. Hausser, University College, London.

The role of IH in spontaneous firing in cerebellar Purkinje neurons by Dr G. STUART with Dr M. Hausser, University College, London.

Dendritic coupling in the VTA and its role in interhemispheric switching by Dr G. STUART with Prof. J. Pettigrew, University of Queensland.

Cell-cell communication in the wall of mouse mesenteric arteries by Dr C. HILL with Prof. C. Garland and Dr K. Dora, University of Bath, UK.

Gap junctions; the critical link in EDHF action by Dr C. HILL with Drs H. Parkinson, H. Coleman, M. Tare, Monash University.

Nerve Growth Factor retrograde axonal signalling may be modified by PI 3-kinase dependent protein associations at the nerve terminal by Prof. I.A. HENDRY with Dr T. Cowen, Department Anatomy and Developmental Biology, Royal Free and University College Medical School, Royal Free Campus, London.

Centaurin-1 by Prof. I.A. HENDRY with Dr T. Cowen, Department Anatomy and Developmental Biology, Royal Free and University College Medical School, Royal Free Campus, London.

Arf6 Divergent pathways linked to PH-domains explain varied roles of PI3-kinase in neurons by Prof. I.A. HENDRY with Dr T. Cowen, Department Anatomy and Developmental Biology, Royal Free and University College Medical School, Royal Free Campus, London.

Neuromuscular growth factors role of TGF-beta and GDNF in motoneurone survival and death by Prof. I.A. HENDRY with Dr Ian MacLennan, Department of Anatomy, University of Otago.

Effect of deletion of the beta-2 calcium channel subunit on transmission between photoreceptors and the inner retina in mouse by Dr C. MORGANS with Dr R. Gregg, University of Louisville, Louisville, KY; Dr S. Ball, Cleveland VA Medical Center, Cleveland, OH.

Role of spinal interneurons in control of movement by Prof. S.J. REDMAN with Dr T. Jessell, Columbia University, New York; Dr M. Goulding, Salk Laboratories, San Diego; and Dr L. Ziskin-Conhaim, University of Wisconsin, Madison.

Serial correlation in transmitter release by Prof. S.J. REDMAN with Drs C. Stricker and A. Cowan, Neuroinformatics Institute, Zurich.

Properties of glycine receptors by Dr P. SAH with Dr R. Callister, Department of Anatomy, University of Newcastle.

Recordings from GSP-positive neurons in brain slices by Dr P. SAH with Dr S. Hestrin, Department of Comparative Anatomy, Stanford University.

Research by Prof. J. WHITWORTH with Dr D. Torpy, Department of Medicine, University of Queensland; Prof. B. Morris, Department of Physiology, University of Sydney; Assoc. Prof. J. Kelly, Department of Medicine, St George Hospital, University of New South Wales; Dr G. Mangos, Department of Medicine, St George Hospital, University of New South Wales.

## **Research School of Pacific and Asian Studies**

### **Division of Economics**

ACIAR funded project, processed food exports from India and Thailand (ongoing project) by Prof. P. ATHUKORALA with R. Mehta, Regional Information Systems, New Delhi, Ashok Gulati International, Food Policy Research Centre, Washington DC, S. Jayasuriya, University of Melbourne.

Regional financial arrangements in East Asia by Prof. P. DRYSDALE with Mr H. Kuroda, Ministry of Finance, Japan, Prof. Ito, Hitotsubashi University, Japan, Dr C Adams, IMF, Japan, Dr Y. Wang, Korea Institute for International Economic Policy, Japan, Prof. E. Ogawa, Hitotsubashi University, Japan, Dr R. Rankin, Reserve Bank of Australia, Dr J. Pisani-Ferry, Conseil d'Analyse Economique, France, Dr S. Grenville, Reserve Bank of Australia, Dr L M Cheong, Bank Negara Malaysia, Dr M. Parkinson, The Treasury, Prof. N. Yoshino, Keio University, Prof. J. Goto, Kobe University, Dr J. Rollo, University of Sussex, UK.

Regional financial markets and centres by Prof. P. DRYSDALE with Mr W. Alexander, IMF, Mr K. Saito, IMF, Dr C. Adams, IMF, Dr J. Edwards, Hong Kong Bank of Australia, Dr S. Yoshikuni, Bank for International Settlements, Dr M. Chinn, University of California, Mr T. Asami, Institute for International Monetary Affairs, Japan, Dr P. Vichyanond, Thailand Development Research Institute Foundation, Dr R. Rankin, Reserve Bank of Australia, Mr S. Ogus, DSG Asia, Hong Kong, Ms A. Tarditi, BT Funds Management, Australia, Dr S. Grenville, Reserve Bank of Australia, Mr W. Studener, European Central Bank, Mr P. Leeahtam, Institute for Saving Development, Thailand, Prof. S. Takagi, Osaka University, Ms Yeo Lian Sim, Monetary Authority of Singapore.

Japanese food market sector by Prof. P. DRYSDALE with Prof. M. Itoh, University of Tokyo, Prof. S. Urata, Waseda University, Mr I. Roberts, Australian Bureau of Agricultural and Resource Economics, Mr Allan McKinnon, Department of Foreign Affairs and Trade (DFAT), Dr J. Davis, RIRDC, Mr J. Kennedy, Supermarket to Asia.

Regional trading arrangements by Prof. P. DRYSDALE with Prof. M. Itoh, University of Tokyo, Dr P. Dee, Productivity Commission, Dr D. Robertson, Productivity Commission, Ms P. Fayle, DFAT, Prof. M. Pangestu, Centre for Strategic and International Studies, Jakarta.

APEC and the Chinese economy by Prof. P. DRYSDALE with Prof. Y. Zhang, Chinese Academy of Social Sciences.

Australia, Japan and the region by Prof. P. DRYSDALE with Prof. K. Ishigaki, Kobe University, Mr H. Konno, Ministry of Economy, Trade and Industry, Japan, Prof. K. Hamada, Yale University, Prof. J. Goto, Kobe University, Prof. E. Ogawa, Hitotsubashi University.

Perspectives on East Asian development: Australia–Japan Cooperation in East Asia by Prof. P. DRYSDALE with Mr A. Kojima, Nihon Keizai Shimbun, Prof. M. Itoh, University of Tokyo, Prof. S. Nagaoka, Hitotsubashi University, Prof. S. Urata, Waseda University, Mr P. Kelly, *The Australian*, Mr K. Waller, Commonwealth Bank of Australia, Mr H. Ergas, Network Economics Consulting Group.

The new economy: challenges for East Asia and the Pacific by Prof. P. DRYSDALE with: Prof. R. Cooper, Harvard University, Prof. Y. C. Park, Korea University, Prof. R. Lipsey, Simon Fraser University, Prof. P. Petri, Brandeis University, Sir F. Holmes, Victoria University of Wellington, Dr R. Crandall, Brookings Institution, Prof. W. Dobson, University of Toronto, Mr F. Hilmmer, Fairfax Holdings Ltd, Dr S. Thangavelu, National University of Singapore, Dr Z. Yusof, Institute of Southeast Asian Studies, Prof. A. Kosaka, Osaka University, Dr V.-L. Chen, Institute of Economics, Taipei,

Prof. S. Urata, Waseda University, Prof. M. Pangestu, Centre for Strategic and International Studies, Jakarta.

Sectoral incidence of Indonesian trade policies by Dr G. FANE with Dr G. Wittwer, University of Adelaide.

Decomposition of alternative measures of the welfare effects of policy changes by Dr G. FANE with Dr H. Ahammad, ABARE.

Study of Indonesian poverty alleviation and social welfare programs by Dr G. FANE with Dr A. Daley, University of Canberra, Visiting Fellow RSSS.

Models of migration and pollution by Prof. R. JHA with John Whalley, Universities of Warwick and Western Ontario and National Bureau of Economic Research (NBER).

Global environmental Kuznets Curve by Prof. R. JHA with K V Bahnu Murthy, University of Delhi.

Debt for nature swaps by Prof. R. JHA with Claudia Schatan, ECLAC, Mexico.

Foodgrain prices and poverty in India by Prof. R. JHA with H.K. Nagarajan, Indian Institute of Management, Bangalore.

Vertical fiscal externalities by Prof. R. JHA with Robin Boadway, Queen's University, Canada and Isao Horiha, Aoyama Gakuin University, Tokyo.

Philippine economy program by Prof. H.C. HILL with Prof. A. Balisacan, University of the Philippines.

East Timor economy program by Prof. H.C. HILL with Dr J. Saldanha, East Timor Study Group.

Asian economies after the crisis by Prof. H.C. HILL with Prof. Y.P. Chu et al, Academia Sinica, Taipei.

Global dimensions of demographic change by Prof. W. McKIBBIN with Dr Ralph Bryant, Brookings Institution, USA.

Economics for an integrated world by Prof. W. McKIBBIN with Prof. Peter Wilcoxon, University of Texas at Austin, USA.

Global costs of policies to reduce greenhouse gas emissions by Prof. W. McKIBBIN with Dr Robert Shackleton, US Congressional Budget Office and Dr P. Bagnoli, OECD, Paris.

Monetary and fiscal policy rules in the European union by Prof. W. McKIBBIN with Prof. Reinhard Neck and G. Haber, University of Klagenfurt, Austria.

The need for both intertemporal optimisation and stickiness in real world policy model by Prof. W. McKIBBIN with Prof. David Vines, Oxford University, UK.

The gains from trade liberalisation with endogenous productivity and risk premia effects by Prof. W. McKIBBIN with Dr Andrew Stoeckel, Centre for International Economics, Canberra.



Greenhouse gas policy in Australia by Prof. W. McKIBBIN with Mr David Pearce, Centre for International Economics, Canberra.

The gains from trade liberalisation with endogenous productivity and risk premia effects by Prof. W. McKIBBIN with Dr K.K. Tang, University of Queensland.

Unemployment and income distribution in urban China by Dr X. MENG with Prof. Shi Li, Institute of Economics, Chinese Academy of Social Sciences.

Intermarriage and assimilation of immigrants in France by Dr X. MENG with Dr Dominique Meurs, University of Paris II.

APEC and liberalisation of the Chinese economy by Dr L. SONG with Y. Zhang, APEC Policy Research Centre, the Chinese Academy of Social Sciences, China.

Finding effective ways of reducing regional disparities by Dr L. SONG with Z. Zhao and L. Feng, Institute of Finance and Trade Economics, the Chinese Academy of Social Sciences, China.

Ownership and technical efficiency — a cross-section study on the third industrial census of China by Dr M. WEN with Dr D. Li, Texas A&M University and Prof. Peter Lloyd, University of Melbourne.

Push or pull? The relationship between development, trade and resource endowment by Dr M. WEN with Prof. Stephen King, University of Melbourne.

### **Division of Pacific and Asian History**

Cooperation by Dr B. BAKKEN with researchers, Raoul Wallenberg Institute for Human Rights, Lund, Sweden.

Violence in Asia project by Dr B. BAKKEN with colleagues from the Nordic Institute of Asian Studies, Copenhagen, ANU and other Australian institutions.

'Race to the Snow Mountains' exhibition, Tropenmuseum, Amsterdam, Cambridge University Museum of Archaeology and Anthropology and Erasmushuis, Jakarta by Dr C. BALLARD with J van Dijk and S Vink, Photobureau, Tropenmuseum, Amsterdam; Joanna Wright, photo archivist, Royal Geographical Society, London; Dr A. Herle, Cambridge University Museum of Archaeology and Anthropology; Dr A. Ploeg, Utrecht University, Netherlands.

The Lorentz Park, documentary film by Dr C. BALLARD with Viewpoint Productions Ltd., Amsterdam and World Fund for Nature Indonesia, Jakarta.

Transformations in collective identity in the South Pacific from early contact to the present day, PICS collaboration between Dr C. BALLARD, RSPAS and CREDO (CNRS/EHESS), Marseilles, France.

Qing dynasty history and the Yuan Ming Yuan by Prof. G.R. BARMÉ with Ms L. Conner, New York, USA.

History of Wang Fu Jing by Prof. G.R. BARMÉ with S. Ye.

Digital encyclopaedia project by Prof. G.R. BARMÉ with colleagues at the Long Bow Group in Boston and the digital media faculty at MIT.

The cultural revolution documentary film project by Prof. G.R. BARMÉ with Dr C Hinton and Mr R. Gordon, Long Bow Group, Boston, Prof. E. Perry, Harvard University, Prof. A. Walder, Stanford University, Prof. A. Nathan, Columbia University, as well as other academics in Sweden and Australia.

20<sup>th</sup> century Chinese intellectual history by Prof. G.R. BARMÉ with Dr G. Davies, Monash University (joint ARC application).

Chinese internet and intellectual activity in contemporary China by Prof. G.R. BARMÉ with Dr G. Davies, Monash University.

Research and directorial work on a historical documentary film *Morning Sun* by Prof. G.R. BARMÉ with the Long Bow Group, Boston.

Internet multi-media encyclopedia of 20<sup>th</sup> century Chinese history by Prof. G.R. BARMÉ with the Long Bow Group.

A history of Papua New Guinea by Prof. D. DENOON with Dr A. Kituai, University of Papua New Guinea.

Edited without a gun: the experiences of Australian peace monitors in Bougainville by Prof. D. DENOON with Ms M Wehner, Melbourne University.

Introduction of the concluding volumes of J. Needham et al, *Science and Civilisation in China* by Prof. J.M.D. ELVIN with the Needham Research Institute.

Environmental history of two Chinese lakes, Erhai and Chaoho by Prof. J.M.D. ELVIN, funded by the Levehulme Trust, with Prof. J Dearing and Drs D. Crook and R. Jones, Liverpool University, UK and Dr S. Ji and colleagues of Nanjing University, PRC.

Dictionary of Pacific Islands Biography by Prof. B.V. LAL with scholars around the world.

Editing a Fiji volume for the British documents on the End of Empire project by Prof. B.V. LAL with Institute of Commonwealth Studies, University of London.

Documentary of the Indian indenture system for the BBC by Prof. B.V. LAL with Dr D. Dabydeen, University of Warwick and Dr U. Mesthrie, University of Cape Town, South Africa.

Situating Okinawa: politics, economy and identity by Prof. G. McCORMACK with Dr G. Hook and Dr R Siddle, University of Sheffield, Sheffield, UK.

Project on the Mekong River region by Prof. G. McCORMACK with President and Vice-President of Osaka Foreign Studies University, Professors Akagi and Nishimura.

Multiculturalism in an age of globalisation by Prof. T. MORRIS-SUZUKI with Prof. T. Iyotani, et al, Hitotsubashi University, Tokyo, Japan.

Internationalisation of Japanese science and technology information by Prof. T. MORRIS-SUZUKI with Dr M. Low, University of Queensland and Prof. S. Nakayama et al, Kanagawa University Kanagawa, Japan.

Americanisation and East Asia by Prof. T. MORRIS-SUZUKI with Prof. T. Nakano, Tokyo University of Foreign Studies and others.

War and media research project by Prof. T. MORRIS-SUZUKI with Prof. S. Yoshimi, Tokyo University and others, funded by the Maison Franco-Japonnais and the Japan Foundation.

Asia-Pacific network of Asian Studies by Prof. T. MORRIS-SUZUKI with 25 representatives from 15 countries.

Cross-border networks in East Asia by Prof. T. MORRIS-SUZUKI with Prof. S. Kang, Tokyo University (funded by the Toyota Foundation).

Research into World War II in Papua New Guinea by Prof. H. NELSON with the Australian War Memorial.

Experiences and participation in World War II in Papua New Guinea by Prof. H. NELSON with Dr H. Iwamoto, Tsukuba University, Tokyo, and other scholars, including from Papua New Guinea.

## **Division of Politics and International Relations**

### **Department of International Relations**

Non-traditional security issues in Southeast Asia (Ford Foundation Project) by Dr L. ELLIOTT with Institute of Defence and Strategic Studies, Nanyang Technological University.

Engaging governance by Dr L. ELLIOTT with the Centre for International Politics, Department of Government, University of Manchester.

The politics of international law by Dr P. KEAL and Dr C. REUS-SMIT with scholars from the University of British Columbia, the University of Utah, the University of California at Berkeley and Irvine, the University of Wales at Aberystwyth, the University of Nottingham, the University of Melbourne, Cornell University and the University of Oxford.

Human security Dr P. KERR with Prof. W. Tow, University of Queensland.

International norms and political change in the Asia-Pacific region by Dr C. REUS-SMIT with Prof. P. Katzenstein, Cornell University.

New liberalism in international studies by Dr C. REUS-SMIT with G. Simpson, London School of Economics.

The day the world changed? Terrorism and world order by Dr C. REUS-SMIT and Prof. S. HARRIS with Prof. A. Saikal, Centre for Arab and Islamic Studies, Faculty of Arts, Prof. R. Price, University of British Columbia and Dr W. Maley, the Australian Defence Force Academy.

Power and responsibility in Chinese foreign policy Dr Y. ZHANG with Dr G. Austin, the International Crisis Group.

### **Department of Political and Social Change**

Beyond bilateralism: US-Japan cooperation/competition in Asia by Dr J. AMYX, project sponsored by the Japan-US Friendship Commission (JUSFC).

Japan: the lost decade by Dr J. AMYX, project sponsored by the Institute of Social Sciences, Tokyo University.

Japan's Bubble Economy by Dr J. AMYX, project sponsored by the National Institute for Research Advancement (NIRA), Tokyo.

Japan's economic crisis: building a new model by Dr J. AMYX, project sponsored by the US-Japan Foundation.

Three projects on Vietnam funded by the Institute in Singapore, AusAID, Canberra and RSPAS co-organised by Prof. B. KERKVLIT and the Institute of Southeast Asian Studies in Singapore.

Analysing land policy in Vietnam paper by Prof. B. KERKVLIT as requested by Department of Agricultural Economic, University of Sydney, and Department of Economics and Rural Development, Agricultural College, Vietnam, for their project on impacts of alternative policy options on the agricultural sector in Vietnam.

Muslim autonomy in Mindanao by Dr R.J. MAY as associate with P. Gowing Memorial Research Center, Marawi City, Philippines.

Regime change and regime maintenance in Asia and the Pacific project, P. Gowing Memorial Research Center, Marawi City, Philippines by Dr R.J. MAY with various institutions in Australia and overseas.

Papua New Guinea election study 1997 by Dr R.J. MAY with Department of Political and Administrative Studies, University of Papua New Guinea.

Dr R.J. MAY, member, APSO Project Team.

## **Division of Society and Environment**

### **Department of Anthropology**

Indigenous agricultural systems in the new Indonesia: impacts of estate monocultures, globalisation and decentralisation by Emeritus Prof. H. BROOKFIELD with Associate Prof. L. Potter and Mr S. Badcock, University of Adelaide.

Lead and social policy by Dr K. ROBINSON with Prof. L. Bryson, RMIT, University of Newcastle and Dr K. McPhillips, School of Humanities, University of Western Sydney.

'Latah', mimicry and revolution by Dr K. ROBINSON with Dr J. Goodall, University of Western Sydney.

Lak Chang: a reconstruction of Tai identity in Daikong by Dr A. WALKER with Prof. Yos Santasombat, Department of Sociology and Anthropology, Faculty of Social Sciences, Chiang Mai University.

La gestion de l'eau: une problématique conflictuelle dans les bassins versants du nord Thaïlande by Dr A. WALKER with N. Becu, Ecole Nationale du Génie Rural, des Eaux et des Forêts, and Dr P. Perez, Centre de Coopération Internationale en Recherche Agronomique pour le Développement.

Mali's Story, a personal and historical film about one family's life in Laos by Saowpha Vilavong, collaboration in production with Dr A. WALKER.

### **Department of Archaeology and Natural History**

Archaeology of West New Britain Papua New Guinea, Obsidian dating temperature monitoring by Mr W. AMBROSE with Dr R. Torrence, The Australian Museum Sydney.

Natural freeze-drying technology for the preservation of historic Antarctic buildings by Mr W. AMBROSE with Dr I. Godfrey, Western Australia Maritime Museum.

Research in the Juan Fernandez Islands by Prof. A. ANDERSON with Dr S. Haberle, Monash University.

Research in French Polynesia by Prof. A. ANDERSON with Prof. P. Kirsch, Berkeley; Dr E. Conte, French University of the South Pacific; Dr M. Weisler, Otago University and Dr P. Vargas, University of Santiago.

Kiritimati Island project by Prof. A. ANDERSON with Dr P. Wallin and Dr H. Martinsson-Wallin, Kon-Tiki Museum, Norway.

Prehistory of Palau project by Prof. A. ANDERSON with Dr S. Wickler, Tromsø University Museum, Norway.

Southern margins project by Prof. A. ANDERSON with Mr G. O'Regan, Ngai Tahu Development Corporation, New Zealand.

Central Pacific pottery sourcing project by Prof. A. ANDERSON with Dr D. Kennett, California State University, USA.

Fijian prehistory project by Prof. A. ANDERSON with Ms T. Sorovi-Vunidilo, Fiji Museum.

Norfolk Island prehistory project by Prof. A. ANDERSON with Dr J.P., White, University of Sydney.

Reconstruction of global environments BIOME300 by Prof. G.S. HOPE with Dr S. Mooney, University of New South Wales.

Reconstruction of global environments BIOME6000 by Prof. G.S. HOPE with Prof. S. Harrison, Max Planck Institute of Geocology, Jena Germany.

Glacial environments of New Guinea by Prof. G.S. HOPE with Dr Peterson, Dr Haberle, Monash University, Dr Prentice, University of New Hampshire, University of New South Wales, Dr Hantoro, LIPI Geoteknologi, Bandung.

Peatlands of montane New South Wales by Prof. G.S. HOPE with Dr P. Kodela, Royal Botanical Gardens, Sydney, Dr R. Good, New South Wales National Parks.

Island change in the Holocene by Prof. G.S. HOPE with Prof. P. Nunn, University of the South Pacific, Fiji.

Sphagnum and Australasian peatlands by Prof. G.S. HOPE with Dr J. Whinam, Tasmanian National Parks and Wildlife.

Palynology of Tirari Sub-basin cores, northern South Australia by Dr M. MACPHAIL with Dr J. Luly, James Cook University, School of Geosciences.

Review of Late Cretaceous-Tertiary palynostratigraphy of Bass Basin by Dr M. MACPHAIL with Dr A. Partridge, La Trobe University, Geology Department.

Plio-Pleistocene palynofloras in the Stoney Creek basin, Victoria by Dr M. MACPHAIL with K. Sneiderman, Monash University, Department of Geography and Environmental Sciences.

Tertiary floras and vegetation of Australia by Dr M. MACPHAIL with Prof. R. Hill, University of Adelaide, Environmental Biology.

Preparation of finding aid to MUIOOF archives held by the Yass and District Historical Society by Dr M. MACPHAIL with P. Gregson, University of Canberra, Cultural Heritage Management.

Cretaceous floras and vegetation of Australia by Dr M. MACPHAIL with Dr M. Dettmann, University of Queensland, Botany Department.

Tertiary floras and vegetation of Australia by Dr M. MACPHAIL with Dr G. Jordan, University of Tasmania, School of Biological Sciences.

Dinocyst floras preserved in ODP Leg 189 drill core by Dr M. MACPHAIL with Dr H. Brinhuis, University of Utrecht, The Netherlands.

Pliocene floras and vegetation preserved in the Yalallie Basin, South West Western Australia by Dr M. MACPHAIL with Prof. John Dodson, University of Western Australia, Department of Geography.

East Timorese archaeological project, The East Timorese Cultural Centre, Dili by Dr S. O'CONNOR with Prof. M. Spriggs.

ARC linkage grant by Prof. M. SPRIGGS with Dr M. Smith, National Museum of Australia.

ARC project in Timor by Prof. M. SPRIGGS with Dr P. Veth, James Cook University.

Chronology of occupation of Pamwak Rockshelter, Manus, PNG by Prof. M. SPRIGGS with W. Ambrose and Dr C. Fredericksen, Northern Territory University.

Suitability of using *Celtis* species seeds in radiocarbon dating by Prof. M. SPRIGGS with Dr E. Lawson, Australian Nuclear Science and Technology Organisation.

Project on dating rat bone from Vanuatu by Prof. M. SPRIGGS with Dr N. Beavan, Rafter Radiocarbon Laboratory, New Zealand.

Research project at the Mangaasi/Arapus site in Central Vanuatu by Prof. M. SPRIGGS with Dr S. Bedford, National Historic Places Trust, New Zealand and University of Auckland.

Training excavation for Vanuatu National Museum staff and fieldworkers at Mangaasi/Arapus by Prof. M. SPRIGGS with Mr R. Regenvanu, Director, Vanuatu National Museum.

Research project on dating animal bone by Prof. M. SPRIGGS with Dr T. Higham, Oxford Radiocarbon Accelerator Unit, Research Laboratory for Archaeology and the History of Art, University of Oxford.

Project on translation of German texts on Bougainville (Solomon Islands), first translated article to be published by *Journal of Pacific History* by Prof. M. SPRIGGS with Antje Sonntag, Australian Museum, Sydney.

### **Department of Human Geography**

Soil characteristics of shifting cultivation systems in Papua New Guinea by Dr B.J. ALLEN with Dr G. Humphreys, Macquarie University.

The social and economic impacts of land use intensity in Papua New Guinea by Dr B.J. ALLEN with Dr G. Curry, Curtin University.

Information for rural development and planning in Papua New Guinea by Dr B.J. ALLEN with Mr C. Madire, Secretary, Papua New Guinea Department of National Planning, Dr G. Wiles, Mr V. Kambori and Mr N. Ahai, Papua New Guinea National Agricultural Research Institute, Mr M. Kanua, Papua New Guinea Department of Agriculture and Livestock.

Australian contribution to the Papua New Guinea national agricultural research system by Dr B.J. ALLEN with Mr V. Kambori, Papua New Guinea National Agricultural Research Institute.

People, land management and environmental change project by Dr B.J. ALLEN with Emeritus Prof. H.C. Brookfield and Mr J. Sowi, United Nations University, Tokyo and Papua New Guinea Institute of National Research, Port Moresby.

Information for rural development and planning in Papua New Guinea by Dr R.M. BOURKE with Mr C.

Madire, Papua New Guinea Department of National Planning, Dr G. Wiles, Mr V. Kambori and Mr N. Ahai, Papua New Guinea National Agricultural Research Institute, Mr M. Kanua, Papua New Guinea Department of Agriculture and Livestock.

Australian contribution to the Papua New Guinea national agricultural research system by Dr R.M. BOURKE with Mr V. Kambori, Papua New Guinea National Agricultural Research Institute.

Food security for Papua New Guinea by Dr R.M. BOURKE with Mr V. Kambori, Papua New Guinea National Agricultural Research Institute.

Socioeconomic factors affecting smallholder productivity in the oil palm industry of Papua New Guinea by Prof. K.D. GIBSON with Ms G. Koczberski and Dr G. Curry, Curtin University.

Community partnering project by Prof. K.D. GIBSON with Dr J. Cameron, Griffith University.

Rethinking economy project by Prof. K.D. GIBSON with Prof. J. Graham, University of Massachusetts.

Community economies and migrant remittances by Prof. K.D. GIBSON with Dr L. Law, National University of Singapore, the Asian Migrant Centre, Hong Kong and Unlad Kabayan Migrant Services Inc., Manila.

Balibkayan boxes by Dr D. McKAY with Dr L. Law, National University of Singapore.

Transnational families by Dr D. McKAY with Dr D. Monares, University of the Philippines.

Female migration in the Asia-Pacific — a review by Dr D. McKAY with Dr C. Cartier, University of Southern California.

Comparative natural resource management by Mr M. PRETES with Prof. M. Berman, University of Alaska-Anchorage.

Globalisation and regionalisation in the Pacific by Mr M. PRETES with Prof. C. Smith, Stanford University.

### **Department of Linguistics**

Languages of Nusa Tenggara by Dr I.W. ARKA with Dr K. Artawa and Dr A. Mbete, Udayana University, Indonesia.

Three-place predicates by Dr J. BOWDEN with Prof. P. Austin, Associate Prof. N. Evans and Dr A. Margetts, University of Melbourne.

Waimoa language studies by Dr J. BOWDEN with Associate Prof. J. Hajek, University of Melbourne.

Kalam ethnobiology by Prof. A. PAWLEY with Dr R. Gardner, Auckland Museum and Dr I. Majnep, Simbai province, Papua New Guinea.

Papuan comparative linguistics project by Prof. A. PAWLEY and Dr M. ROSS with Prof. W A Foley, University of Sydney.

Mission language project by Dr D. TRYON with Prof. P Mühlhäusler, Adelaide University.

### **Contemporary China Centre**

Redressing history Dr P. VAN NESS with Professors D. Blaney, Macalester College, Minnesota, R. Falk, Princeton, K.I. Tsuneishi, Macalester College, W. Sun, Australian National University, D. Wessner, Mennonite University, Winnipeg, O. Yasuaki, Tokyo University, E. Seymour, Denver.

The missile defense controversy Dr P. VAN NESS with Professors R. Tanter, Kyoto Seika University, Japan, Shen Dingli, Fudan University, Shanghai, E. Katahara, Kobe Gakuin University, J. Schell, Wesleyan University, USA, T. Delpech, Atomic Energy Commission, Paris.

Cross-Straits relations Dr P. VAN NESS with Prof. Go Ito, Meiji University, Japan.

### **Gender Relations Centre**

Co-sponsor of research collaboration and lecture tour of Prof. J. Clifford, University of California, Santa Cruz by Prof. M. JOLLY with Prof. Ien Ang, University of Western Sydney.

Gender, fertility and citizenship by Prof. M. JOLLY with Dr Kalpana Ram, Macquarie University, and authors from Curtin University, University of Western Australia, and University of Melbourne, culminating in publication of *Borders of Being* with University of Michigan Press.

Birthing in the Pacific by Prof. M. JOLLY with Drs H. Morton and S. Mallett, La Trobe University, Dr Ruta Fiti-Sinclair, Samoa and Dr C. Salomon, EHESS, Paris, culminating in *Birthing in the Pacific* with University of Hawai'i Press.

Cultural studies in the Pacific by Prof. M. JOLLY with Prof. J. Clifford, University of Santa Cruz, Dr V. Diaz of University of Guam, Dr Kehaulani Kauanui of Northwestern University, culminating in special issue of *The Contemporary Pacific*.

Gender and health in the Pacific by Prof. M. JOLLY with researchers from University of Hawai'i, Guam, Victoria University of Wellington, University of Otago, and Secretariat of the Pacific Community, Nouméa.

Colonial and contemporary encounters in the Pacific by Prof. M. JOLLY with Dr S. Tcherkézoff and the Centre de Recherche et de Documentation sur l'Océanie (CREDO) équipe, Marseille, CNRS.

ASSA and ARC project on postgraduate education by Prof. M. JOLLY with T Jamieson, graduate education in anthropology in Australia and overseas, for volume edited by Dr S Marginson, Monash University.

Race in Oceania project, participant Dr V. LUKERE with James Cook University, University of Otago, Centre de Recherche et de Documentation sur l'Océanie, Marseille.

### **Non-Divisional Groups**

#### **Director's Section**

Prof. J. FOX, Distinguished Visiting Professor, National University of Singapore (NUS); Strategic Update, Australian Defence Force Academy, University of New South Wales.

#### **Internet Publications Bureau**

Coordination by Dr T.M. CIOLEK of activities of the Asian Studies WWW Virtual Library with 50 scholars and librarians from Australian and overseas universities.

#### **Pacific Manuscripts Bureau**

##### *Archival preservation projects:*

The control and housing of the Noser archives, Divine Word University, Madang, PNG by Mr E. MAIDMENT and Mr G.E. RAWLINGS.

Microfilming of the W. C. Groves papers, University of PNG, Michael Somare Library by Mr E. MAIDMENT and Mr G.E. RAWLINGS.

Preservation of Giff Johnson's Marshall Islands resource materials, College of the Marshall Islands by Mr E. MAIDMENT and Mr G.E. RAWLING.

Joint copying project by Mr E. MAIDMENT and Mr G.E. RAWLINGS with Mitchell Library, National Library of Australia, Alexander Turnbull Library, University of Auckland Library, University of Hawaii Library, University of California Library, San Diego, Yale University Library.

#### **Research Management in Asia-Pacific Program**

Community development, urban-rural interaction and transformations in Sarawak by Dr F.M. COOKE as consulting specialist with Curtin University Research Unit for the Study of Societies in Change (RUSSIC) and in conjunction with Curtin University Miri Sarawak.

Consultative discussions by Dr F.M. COOKE with staff of the Faculty of Social Science, University Malaysia Sabah, about possible research collaboration and exchange.

Collaborating partner in property, transactions and creations: new economic relations in the Pacific project by Dr C. FILER funded by the UK Economic and Social Research Council, in association with the University of Cambridge and Brunel University.

Development of research project on small islands in peril in Milne Bay Province by Dr C. FILER with the University of Papua New Guinea and the PNG National Agricultural Research Institute.

Land tenure by Dr A. McWILLIAM with staff of the United Nations Transitional Administration in East Timor.

### **State, Society and Governance in Melanesia Project**

Exhibition 'Tattoo', March 2002 by Dr B. DOUGLAS, adviser to the National Maritime Museum, UK.

Restorative justice in the Pacific Islands by Dr S. DINNEN with legal scholars at the University of the South Pacific.

*Legal systems of the world: a political, social and cultural encyclopedia* by Dr S. DINNEN as contributor under the supervision of Prof. H.M. Kritzer, University of Wisconsin.

Political developments in Papua New Guinea and the Solomon Islands by Dr S. DINNEN for the Australian member committee, Council for Security Cooperation in the Asia-Pacific (AUS-SCCAP).

Risk assessment in PNG by Dr S. DINNEN with Dr C. Filer, Centre for International Strategic Analysis in Perth, WA.

Complex power-sharing as a response to self-determining disputes, sponsored by the International Studies Centre, Cambridge University, UK, participation by Mr A.J. REGAN with the Lauterpacht Centre for International Law, Cambridge, and the European Centre for Minority Rights, Germany.

Economic agendas in civil wars, participation by Mr A.J. REGAN, project sponsored by International Peace Academy, New York.

### **Strategic and Defence Studies Centre**

Effect of information technology revolution in military affairs on security relationships in the Asia-Pacific region by Prof. P. DIBB with US Joint Center for International and Security Studies (JCIS), commissioned by the Office of the US Secretary of Defense (Net Assessment).

Food and water security by Mr A. DUPONT with Australian Centre for International Agricultural Research.

Regional security issues by Mr A. DUPONT with Department of Foreign Affairs and Trade.

Defence issues by Mr A. DUPONT with Department of Defence.

## **Research School of Physical Sciences and Engineering**

### **Applied Mathematics**

Mesostructure of framboidal sulphide mineral aggregates by Dr A. CHRISTY with Dr D.J. Large and coworkers, U. Nottingham, UK.

Modelling incommensurately modulated crystal structures of non-stoichiometric apatites by Dr A. CHRISTY with Prof. S.A. Lidin and Dr P. Alberius-Henning, Stockholm University, Sweden.

Nanomechanical measurements with AFM by Dr V. CRAIG with Dr S. Biggs, University of Newcastle.

Surfactant adsorption: kinetics & equilibrium excess by Dr V. CRAIG with Dr S. Biggs, University of Newcastle.

Deposition of diamond-like films by powerful UV femtosecond and nanosecond laser ablation combining deposition and ion implantation modes by Prof. E. GAMALY with Dr A. Rode and Prof. B. Luther-Davies, Laser Physics Centre, ANU; Prof. C. Fotakis, Institute for Electronic Structure and Lasers, Heraklion, Greece; Prof. A. Perrone and Dr A. Zocco, University of Lecce, Italy.

Excitation of solids by femtosecond lasers: non equilibrium phenomena, phase transitions and ablation of metals and dielectrics by Prof. E. GAMALY with Dr A. Rode and Prof. B. Luther-Davies, Laser Physics Centre, ANU; Prof. V.T. Tikhonchuk, University of Bordeaux, France.

Formation of nanoclusters by femtosecond laser ablation by Prof. E. GAMALY with Dr A. Rode, Prof. B. Luther-Davies, Laser Physics Centre, ANU; Prof. M. Santis and Dr O. Uteza, University of Marseille, France and Prof. V.T. Tikhonchuk, University of Bordeaux, France.

Transient optical properties and phase transition in solids induced by femtosecond lasers by Prof. E. GAMALY with Dr A. Rode and Prof. B. Luther-Davies, Laser Physics Centre, ANU; Prof. M. Santis and Dr Olivier Uteza, University of Marseille, France; Prof. V.T. Tikhonchuk, University of Bordeaux, France.

Solid state networks by Prof. S. HYDE with Prof. M. O'Keeffe, Arizona State University, USA and O. Yaghi, Michigan State University, USA.

The computational surface geometry of proteins by Prof. S. HYDE with Prof. Y. Nagai, Kokushikan University, Tokyo.

Mesoccale physics program for software development of fluid transport and complex disordered and ordered morphologies by Prof. S. HYDE, Dr M. KNACKSTEDT, Dr A. SHEPPARD, S. RAMSDEN with The Australian Partnership for Advanced Computation.

Interpretation of laboratory core measurements by Dr M. KNACKSTEDT with Prof. W.V. Pinczewski, School of Petroleum Engineering (SPE), UNSW and Mr C. Balnaves, BHP Petroleum.

Fluid penetration into paper products by Mr R. ROBERTS, Dr T.J. SENDEN, Dr M. KNACKSTEDT with B. Lyne, International Paper, Tuxedo Park NY, USA.

High speed data acquisition systems by Dr A. SAKEL-LARIOU with Micro-Analytical Research Centre, The University of Melbourne.

Novel radio-therapeutic products by Dr T.J. SENDEN with ANSTO.

Development of novel radio-diagnostic nanoparticles by Dr T.J. SENDEN with Vimed Biosciences Inc.

FDA approval of technegas in the US by Dr T.J. SENDEN with Vita Medical Pty Ltd.

Parallelisation of 3dma skeletonisation software by Dr R.M. SOK and Dr A. SHEPPARD with Dr B. Lindquist, State University of New York (SUNY) at Stony Brook, USA.

Network modelling of multiphase flow by Dr R.M. SOK, Dr A. SHEPPARD, Dr M. KNACKSTEDT with Prof. W.V. Pinczewski. UNSW; Dr B. Lindquist, SUNY, Stony Brook, USA.

Water structure by Dr V. YAMINISKY with The Departments of Bioengineering and Materials Science and Engineering, Pennsylvania State University, USA.

Dynamic wetting by Dr V. YAMINISKY with The Institute for Surface Chemistry, Stockholm.

### **Atomic and Molecular Physics Laboratories**

Low energy electron-molecule scattering by Prof. S.J. BUCKMAN with Dr M.J. Brunger and Prof. P.J.O. Teubner, Flinders University.

Electron scattering from molecular radicals by Prof. S.J. BUCKMAN with Dr M.J. Brunger and Prof. W. Lawrance, Flinders University.

Electron scattering from metal vapours by Prof. S.J. BUCKMAN with Prof. P.D. Burrow, University of Nebraska; Prof. K. Bartschat, Drake University, USA.

Electron-molecule scattering by Prof. S.J. BUCKMAN with Prof. H. Tanaka, Sophia University, Japan; Prof. H. Cho, Chungnam National University, Korea.

Positron scattering from atoms and molecules by Prof. S.J. BUCKMAN with Dr J. Sullivan and Prof. C. Surko, University of California, USA.

Rainbows in scattering of electrons from molecules by Prof. S.J. BUCKMAN and Prof. L.T. CHADDERTON with Prof. S.A. Cruz, Metropolitan Autonomous University of Mexico, Mexico.

Theory and practice of organic radical formation and motion in GeV ion-irradiated polymers by Prof. L.T. CHADDERTON with Prof. S.A. Cruz, Metropolitan Autonomous University of Mexico, Mexico.

Radiation effects on polymers; semiconductors by Prof. L.T. CHADDERTON with Dr D. Fink, Hahn-Meitner Institute, Berlin, Germany.

(e,2e) primary current electron spectroscopy and other surface technical investigations of the graphite/fullerene radiation-induced phase change by Prof. L.T. CHADDERTON with Prof. P.B. Möller, Niels Bohr Institute, Denmark.

GeV ion tracks in alkali and alkali earth halides by Prof. L.T. CHADDERTON with Dr C. Trautmann, GSI, Germany.

Annealing of fission tracks in apatite: kinetics, effects of pressure and applications in geothermometry by Prof. L.T. CHADDERTON with Dr R. Jonckere, Max-Planck Institute, Heidelberg, Germany; Dr A. Wendt, British Antarctic Survey, UK.

Radioactivity in the fine structure of precious opal; exploration and artificial opal synthesis by Prof. L.T. CHADDERTON with Dr B. Senior, Senior and Associates, Canberra; Dr R. Jonckere, Max-Planck Institute, Heidelberg, Germany.

Studies of electronic and nuclear vicinage effects in the stopping of swift clusters in solids by Prof. L.T. CHADDERTON and Prof. E. GAMALY (AM) with Prof. S.A. Cruz, Metropolitan Autonomous University of Mexico, Mexico.

Quantum statistics and Boltzmann's equation by Prof. R.W. CROMPTON, Dr R.E. ROBSON and Dr K. KUMAR (TP) with Prof. M.A. Morrison, University of Oklahoma, USA.

Convergent close-coupling theory of double ionisation by photon and electron impact by Dr A.S. KHEIFETS with Dr I. Bray, Flinders University.

Electron momentum density studies in metals and metal oxides by Dr A.S. KHEIFETS with Dr M. Ford, Flinders University.

Electron impact double ionisation of the helium atom by Dr A.S. KHEIFETS with Prof. A. Lahmam-Bennani, Université de Paris-Sud, Orsay, France; Dr A. Dorn, University of Freiburg, Germany.

Theoretical and experimental studies of double photoionisation of He by Dr A.S. KHEIFETS with Dr T. Reddish, University of Newcastle; Dr L. Avaldi and Dr T. Dörner, University of Frankfurt, Germany.

Multiple atomic photoionisation of metal vapours by Dr A.S. KHEIFETS with Prof. Y. Azuma, Photon Factory, Tsukuba, Japan.

Analysis of EEL Spectra by Dr B.R. LEWIS and Dr S.T. GIBSON with Dr M.J. Brunger, Flinders University; Dr M. Allan, University of Fribourg, Switzerland.

Quantum-mechanical interference between interacting resonances in molecular predissociation by Dr B.R. LEWIS and Dr S.T. GIBSON with Prof.s R.J. Donovan and K.P. Lawley, Dr P. O'Keeffe and Dr T. Ridley, University of Edinburgh, Scotland.

Analysis of REMPI spectra by Dr B.R. LEWIS and Dr S.T. GIBSON with Prof. M.L. Ginter, University of Maryland, USA; Dr J.S. Morrill, Naval Research Laboratory, Washington DC, USA; Dr R.A. Copeland, SRI International, Menlo Park, California, USA.

Coupled-channel calculations of linewidths for the b state of  $N_2$  by Dr B.R. LEWIS and Dr S.T. GIBSON with Prof. H. Lefebvre-Brion, Université de Paris-Sud, Orsay, France; Prof. J.-M. Robbe, Université de Lille, France.

Coupled-channel calculations for atmospheric photochemical models by Dr B.R. LEWIS and Dr S.T. GIBSON with Dr L.W. Torop and Dr F.T. Hawes, University of Adelaide.

$^3D_u$  states of  $O_2$  by Dr B.R. LEWIS and Dr S.T. GIBSON with Dr R.A. Copeland, Dr R. Robertson and Ms A. Tucay, SRI International, Menlo Park, California, USA.

Anomalous isotopic predissociation by Dr B.R. LEWIS and Dr S.T. GIBSON with Prof. G. Stark, Wellesley College, Massachusetts, USA; Dr J.B. West, Daresbury Laboratory, SERC, Warrington, UK.

Development of ultra-high resolution VUV laser Sources by Dr B.R. LEWIS and Dr K.G.H. BALDWIN (LPC) with Prof. B.J. Orr, Macquarie University.

Comparison of high-energy electron scattering with neutron Compton scattering by Dr M. VOS with Prof. E. Gray, Griffith University; Prof. Dr C.A. Chatzidimitriou-Dreismann, Technical University, Berlin.

Electron momentum spectroscopy of atoms and molecules by Prof. E. WEIGOLD with Dr M.J. Brunger and Prof. I.E. McCarthy, Flinders University.

Correlations in the helium asymptotic wavefunction by Prof. E. WEIGOLD with Prof. H. Schmidt-Böcking, University of Frankfurt, Germany.

Electron momentum spectroscopy of solids by Prof. E. WEIGOLD, Dr A. KHEIFETS and Dr M. VOS with Prof. I.E. McCarthy and Dr M. Ford, Flinders University.

(e,2e) processes with polarised electrons and targets by Prof. E. WEIGOLD and Dr J. LOWER with Dr J. Berakdar, Max Planck Institut für Mikrostruktur Physik, Germany; Dr S. Mazevet, Los Alamos Laboratory, USA.

### Director's Unit

Nonlinear modes in quadratic photonic structures by Prof. Y.S. KIVSHAR with Dr O. Bang, Technical University of Denmark; Prof. C. Soukoulis, Ames Laboratories, USA.

Fourth-harmonic generation in nonlinear photonic crystals by Prof. Y.S. KIVSHAR with Dr M. de Sterke, University of Sydney; Prof. S.M. Saitiel, University of Sofia, Bulgaria.

Nonlinearity-induced conformational dynamics of biopolymers by Prof. Y.S. KIVSHAR with Prof. P.L. Christiansen, Technical University of Denmark.

A book for Academic Press: *Optical solitons: from waveguides to photonic crystals* by Prof. Y.S. KIVSHAR with Prof. G. Agrawal, University of Rochester, USA.

Stability analysis of solitary waves by Prof. Y.S. KIVSHAR with Prof. D.E. Pelinovsky, McMaster University, Canada.

Parametric optical conversion due to cascaded nonlinearities by Prof. Y.S. KIVSHAR with Prof. S.M. Saitiel, University of Sofia, Sofia, Bulgaria.

Self-written optical waveguides in polymerised materials by Prof. Y.S. KIVSHAR with Prof. S. Kawata, Osaka University, Osaka, Japan.

Nonlinear localised spin waves by Prof. Y.S. KIVSHAR with Prof. H. Benner, Technical University of Darmstadt, Germany.

Nonlinear photonic crystals: concepts and applications by Prof. Y.S. KIVSHAR with Dr M. Scalora, US Air Force Research Labs, USA.

A book for Springer-Verlag: *The Frenkel-Kontorova model: concepts and methods of nonlinear physics* by Prof. Y.S. KIVSHAR with Prof. O.M. Braun, Institute of Physics, Kiev, Ukraine.

Nonlinear Aharonov-Bohm effect for optical vortices by Prof. Y.S. KIVSHAR with Prof. A. Nepomnyashchy, Technion, Haifa, Israel.

Dynamics of the dispersion-managed solitons in fiber transmission systems by Prof. Y.S. KIVSHAR and Dr E. OSTROVSKAYA with Prof. D. Anderson and Prof. M. Lisak, Chalmers University of Technology, Sweden; Dr A. Berntson, Ericsson, Stockholm, Sweden.

Multimode spatial optical solitons by Prof. Y.S. KIVSHAR and Dr E. OSTROVSKAYA with Prof. C. Denz, University of Muenster, Germany.

Topological states in atomic-molecular Bose-Einstein condensates by Prof. Y.S. KIVSHAR and Dr E. OSTROVSKAYA with Dr P. Julienne, National Institute of Standards and Technology, USA.

Depressed-cladding optical fibres by Prof. J.D. LOVE with Prof. R.H. Stolen, Virginia Tech University, USA.

Multimode fibres & devices by Prof. J.D. LOVE with Dr J. Ockendon et al., University of Oxford, UK.

### Electronic Materials Engineering

DFB lasers by Dr M. BUDA with Dr T.G. van de Roer and Prof. Dr G.A. Acket, Eindhoven University of Technology.

Self assembled monolayers for semiconductor devices by Ms C. CARMODY and Prof. C. JAGADISH with



Dr V. Braach-Maksvytis and Dr B. Raguse, CSIRO, Telecommunications and Industrial Physics.

Microanalysis of nanotube materials by Dr Y. CHEN with Dr Jin Zou, University of Sydney.

Mossbauer study of metal catalysts for nanotube formation by Dr Y. CHEN with Prof. G. Le Caer, LSG2M, Ecole des Mines; Prof. S. Campbell and Dr K.D. Jayasuriya, ADFA, University of New South Wales.

Hydrogen storage by Carbon and BN nanotubes by Dr Y. CHEN with Prof. H.M. Cheng, Institute of Metal Research, Chinese Academy of Science, Shenyang, PR China.

Optical and electronic properties of BN Nanotubes by Dr Y. CHEN with Dr M. Golden and Xianjie Liu, IFW, Dresden, Germany.

Novel processing of vertical cavity surface emitting lasers by Mr M.I. COHEN, Dr H.H. TAN and Prof. C. JAGADISH with Dr A. Allerman, Sandia National Labs; Prof. K. Choquette, University of Illinois at Urbana-Champaign, USA.

Analysis of semiconducting and insulating thin films by XPS by Dr P.N.K. DEENAPANRAY and Prof. C. JAGADISH with Bin Gong and R.N. Lamb, University of New South Wales.

Ion beam mixing: metal films on ceramic substrates by Prof. R.G. ELLIMAN with Dr A. Balogh, Darmstadt University of Technology, Germany.

The effect of impurities on light emission from Si nanocrystals by Prof. R.G. ELLIMAN with Dr G. Ross, INRS — Energie et Matériaux, Quebec, Canada.

Materials analysis with high-energy heavy ions by Prof. R.G. ELLIMAN and Ms T.D.M. WEIJERS with Dr H. Timmers, ADFA, University of New South Wales (from August).

Heavy ion stopping in solids by Prof. R.G. ELLIMAN, Dr H. TIMMERS and Ms T.D.M. WEIJERS with Prof. H. Whitlow, University of Lund, Sweden and Dr D.J. O'Connor, University of Newcastle.

Pulse height deficits in surface barrier detectors by Prof. R.G. ELLIMAN, Dr H. TIMMERS and Ms T.D.M. WEIJERS with Prof. J.A. Davies, Chalk River, Ontario, Canada.

Flute acoustics by Prof. N.J. FLETCHER with A/Prof. J. Wolfe and Dr J. Smith, University of New South Wales.

Vibrating reed valves and rotational aerophones by Prof. N.J. FLETCHER with A/Prof. J. Lai and Dr A. Tarnopolsky, ADFA, University of New South Wales.

Biological acoustics by Prof. N.J. FLETCHER with Prof. W. Bailey, University of Western Australia; Dr H.C. Bennet-Clark, Oxford, UK.

Optical spectroscopy studies on semiconductor quantum wires and dots by Ms L. FU, Dr H.H. TAN and Prof. C. JAGADISH with Prof. S.C. Shen, Prof. Wei Lu, Dr Xingquan Liu, Dr Li Na, Dr Z. Chen, Mr Li Ning, Dr Yong Chang and Ms H.F. Dou, Shanghai Institute of Technical Physics, Chinese Academy of Sciences; Dr Ying Fu and Prof. M. Willander, Chalmers University of Technology, Gothenberg, Sweden.

Optical spectroscopy of semiconductor quantum structures and devices by Mr Q. GAO, Ms L. FU, Ms P. LEVER, Mr S.O. KUCHEYEV, Ms J. HAY, Ms C. CARMODY, Dr P.N.K. DEENAPANRAY, Dr M. BUDA, Dr H.H. TAN and Prof. C. JAGADISH with Dr B.Q. Sun, Dr M. Zhang, Mr P. Reece and Prof. M. Gal, University of New South Wales.

Dry etching of gallium nitride by Ms J. HAY, Dr M. BUDA, Dr H.H. TAN and Prof. C. JAGADISH with Dr F. Karouta, Eindhoven University of Technology, The Netherlands.

Processing of GaN and related compounds for blue light emission by Prof. C. JAGADISH, Dr H.H. TAN, Mr S. KUCHEYEV and Prof. J.S. WILLIAMS with Dr A.G. Li, Ledex Corporation, Taiwan.

Molecular effect in semiconductors under heavy ion bombardment by Mr S.O. KUCHEYEV with Prof. A.I. Titov and Dr V.S. Belyakov, St. Petersburg State Technical University, Russia.

Cathodoluminescence and environmental SEM studies of ion implanted GaN by Mr S.O. KUCHEYEV, Prof. J.S. WILLIAMS and Prof. C. JAGADISH with Mr M. Toth and Dr M. Phillips, University of Technology, Sydney.

Cathodoluminescence imaging of quantum wires and dots by Ms P. LEVER, Dr H.H. TAN and Prof. C. JAGADISH with Dr M.R. Phillips and Dr M.A. Stevens Kalceff, University of Technology Sydney.

Optical spectroscopy of quantum dots by Ms P. LEVER, Dr H.H. TAN and Prof. C. JAGADISH with Prof. J. Wolter, Eindhoven University of Technology, The Netherlands.

Surface analysis using a free electron laser by Dr M. PETRAVIC with A/Prof. B.V. King, University of Newcastle; Prof. R. Clark, University of NSW and Dr M.J. Pelin, Argonne National University, USA.

Characterisation of standards for surface composition and sputter depth profiling by Dr M. PETRAVIC with Dr D.W. Moon, Korean Research Institute of Standards and Science.

Photon induced fabrication of atomic scale structures on Semiconductor Surfaces by Dr M. PETRAVIC and Dr P.N.K. DEENAPANRAY with Dr G. Comtet, University Paris-Sud, Orsay, France.

Selective photon stimulated desorption of hydrogen from GaAs surfaces by Dr M. PETRAVIC and Dr

P.N.K. DEENAPANRAY with Dr B. Usher, LaTrobe University, Melbourne and Dr J.M. Chen, Synchrotron Radiation Research Center, Hsinchu, Taiwan.

Roughening of Si surface under oxygen and nitrogen ion bombardment by Dr M. PETRAVIC and Dr P.N.K. DEENAPANRAY with Dr D.W. Moon, Korean Research Institute of Standards and Science.

Formation of dilute  $\text{GaAs}_x\text{N}_{1-x}$  and  $\text{Ga}_x\text{Mn}_{1-x}\text{As}$  Alloys by ion implantation by Dr M.C. RIDGWAY with Dr O. Dubon, University of California (Berkeley), USA; Dr K.M. Yu, Lawrence Berkeley National Laboratory, USA.

EXAFS characterisation of amorphous semiconductors by Dr M.C. RIDGWAY, Dr G. AZEVEDO and Mr C.J. GLOVER with Dr G. Foran, Photon Factory, Japan; Dr K.M. Yu, Lawrence Berkeley National Laboratory, USA.

Irradiation-induced defect characterisation with perturbed angular correlation by Dr M.C. RIDGWAY, Dr A.P. BYRNE and Dr N. RAO with Dr R. Vianden, Universität Bonn, Germany.

Nanocavity evolution in Si under ion irradiation by Dr M.C. RIDGWAY and Prof. J.S. WILLIAMS with Dr X. Zhu, University of Illinois, USA; Dr H. Bernas, Dr M.-O. Ruault, and Dr F. Fortuna, Centre National Research Scientifique, Orsay, France.

Thermionic cooling in semiconductors by Dr H.H. TAN and Prof. C. JAGADISH with A/Prof. R. Lewis, University of Wollongong.

POLIS structures and hot electron injection lasers by Dr H.H. TAN and Prof. C. JAGADISH with Dr J. Van der Tol and Dr T. Van de Roer, Eindhoven University of Technology, The Netherlands.

Design, fabrication and testing of high power and multi-wavelength lasers by Dr H.H. TAN, Mr M.I. COHEN, Ms L. Fu, Dr M. BUDA and Prof. C. JAGADISH with Dr F. Karouta, Eindhoven University of Technology, The Netherlands.

Defects in ion implanted silicon by Dr J. Wong-LEUNG and Prof. C. JAGADISH with Prof. G. Davies and Ms R. Harding, King's College, London, UK.

Electron microscopy study of defects in ion implanted semiconductors by Dr J. WONG-LEUNG, Dr H.H. TAN, Ms C. CARMODY, Prof. C. JAGADISH and Prof. J.S. WILLIAMS with Dr J. Zou, University of Sydney; Dr J. Fitz Gerald, Research School of Earth Sciences; Prof. D.J.H. Cockayne, Oxford University, UK.

### Laser Physics Centre

High resolution XUV laser spectroscopy by Dr K.G.H. BALDWIN with Dr W. Ubachs and Prof. W. Hogervorst, Vrije Universiteit Amsterdam, The Netherlands.

Ultracold atomic collisions by Dr K.G.H. BALDWIN with Dr I. Whittingham, James Cook University.

Development of ultra-high resolution VUV laser sources by Dr K.G.H. BALDWIN and Dr B.R. LEWIS (AMPL) with Prof. B.J. Orr, Macquarie University.

Solitons in nonlocal nonlinear media by Dr W. KROLIKOWSKI with Dr O. Bang and Prof. J. Rasmussen, Technical University Denmark; Prof. J. Wyller, Norway Agricultural University.

Composite solitons by Dr W. KROLIKOWSKI with Prof. C. Denz, University of Muenster, Germany.

Ultrabroadband output coupling mirrors for octave-spanning frequency comb generation in a Kerr-lens mode-locked titanium sapphire laser by Dr M. LEDERER with Mr R. Ell, Dr U. Morgner and Prof. F.X. Kärtner, Institut für Hochfrequenztechnik und Quantenelektronik, Universität Karlsruhe (TH), Germany.

Passive mode-locking of the novel Yb:YAB laser crystal by Dr M. LEDERER with Dr J. Dawes, Macquarie University Sydney.

Ultrafast nonlinear optical absorption in ion-implanted and Beryllium doped GaAs by Dr M. LEDERER with Mr M. Haiml, Dr U. Siegner and Prof. U. Keller, Swiss Federal Institute of Technology, ETH Zuerich, Switzerland.

Femtosecond laser-matter interaction by Dr A. RODE with Dr O. Uteza; CNRS, Université Aix-Marseille II, France.

Subpicosecond laser ablation of dental enamel by Dr A. RODE with Ms B.T. Taylor and Dr J. Dawes, Macquarie University; Mr A. Chan, Dental Practice, Canberra; Dr R.M. Lowe and Prof. P. Hannaford, Swinburne University of Technology.

Deposition of diamond-like films by powerful UV femtosecond laser ablation by Dr A. RODE with Prof. C. Fotakis, Director, Foundation for Research and Technology — Hellas (F.O.R.T.H.), Institute of Electronic Structure & Laser.

Sub-picosecond laser deposition of optical films by Dr A. RODE with Dr B.N. Chichkov; Laser Zentrum Hannover e.V., Germany.

Nonlinear optical properties of substituted poly(phenylenevinylenes) by Dr A. SAMOC, Dr M. SAMOC, Prof. B. LUTHER-DAVIES with Prof. H.-H. Hoerhold, University of Jena, Germany.

Nonlinear optical properties of soluble oligomers of PPV by Dr A. SAMOC, Dr M. SAMOC, Prof. B. LUTHER-DAVIES with Dr M.S. Wong, Baptist University, Hongkong.

Identification of role of arsenic-antisite traps in ion-implanted GaAs by Dr A. SAMOC, Dr M. SAMOC, Prof. B. LUTHER-DAVIES with Prof. E. Weber, UC Berkeley California, USA.

Deposition of diamond-like films by powerful UV femtosecond and nanosecond laser ablation combining deposition and ion implantation modes by Dr A. SAMOC, Dr M. SAMOC, Dr A. RODE and Prof. B. LUTHER-DAVIES with Prof. C. Fotakis, Institute for Electronic Structure and Lasers, Heraklion, Greece; Prof. A. Perrone and Dr A. Zocco, University of Lecce, Italy.

Excitation of solids by femtosecond lasers: non equilibrium phenomena, phase transitions and ablation of metals and dielectrics by Dr A. SAMOC, Dr M. SAMOC, Dr A. RODE and Prof. B. LUTHER-DAVIES with Prof. V.T. Tikhonchuk, University of Bordeaux, France.

Formation of nanoclusters by femtosecond laser ablation by Dr A. SAMOC, Dr M. SAMOC, Dr A. RODE and Prof. B. LUTHER-DAVIES with Prof. M. Santis and Dr O. Uteza, University of Marseille, France; Prof. V.T. Tikhonchuk, University of Bordeaux, France.

Transient optical properties and phase transition in solids induced by femtosecond lasers by Dr A. SAMOC, Dr M. SAMOC, Dr A. RODE and Prof. B. LUTHER-DAVIES with Prof. M. Santis and Dr O. Uteza, University of Marseille, France; Prof. V.T. Tikhonchuk, University of Bordeaux, France.

## Nuclear Physics

Very high spin states in  $^{174}\text{O}$ s populated with cold symmetric reactions by Dr R.A. BARK and Prof. G.D. DRACOU LIS with H. Hübel, University of Bonn, Germany; R. Julin, University of Jyväskylä, Finland.

Intrinsic and rotational bands in  $^{180}\text{Ta}$  by Dr R.A. BARK and Prof. G.D. DRACOU LIS with G. Sletten, Niels Bohr Institute, University of Copenhagen, Denmark; Euroball Collaboration, Strasbourg, France.

Development of an ion implanter for radioisotopes by Dr A.P. BYRNE with A/Prof. D.H. Chaplin and Dr H. Timmers, ADFA, University of NSW.

Superallowed Fermi decays by Dr A.P. BYRNE with A/Prof. P.H. Barker, University of Auckland, New Zealand.

Diffuse damage in semiconductors by Dr A.P. BYRNE and Prof. N.M. RAO; Dr M. C. RIDGWAY (EME) with Dr R. Vianden and T. Dessauvagie, ISKP, Universität Bonn, Germany.

Fusion and breakup of light ions near the fusion barrier by Drs M. DASGUPTA and D.J. HINDE with Prof. P.R.S. Gomes, Universidade Federal Fluminense, Niterói, Brazil.

High-K isomers by Prof. G.D. DRACOU LIS with Prof. P.M. Walker, University of Surrey, UK; Dr D.M. Cullen, University of Liverpool, UK.

Spectroscopy of very heavy nuclei by Prof. G.D. DRACOU LIS with Prof. J.F. Sharpey-Schafer, National

Accelerator Centre, South Africa; Prof. P.A. Butler, University of Liverpool, UK.

Systematics of isomer structure in the  $N = 74$  region by Prof. G.D. DRACOU LIS with Dr A.M. Bruce, University of Brighton, UK.

High-K isomers in hafnium by Prof. G.D. DRACOU LIS with Dr F.G. Kondev and Dr. R. Janssens, Argonne National Laboratory, USA.

Laser spectroscopy of deformed isomers by Prof. G.D. DRACOU LIS and Dr A.P. BYRNE with Dr J. Billowes, University of Manchester, UK; Prof. J.A.R. Griffith, University of Birmingham, UK; Dr P. Dendooven, University of Jyväskylä, Finland.

Spectroscopy of heavy nuclei by Prof. G.D. DRACOU LIS and Dr A.P. BYRNE with Prof. A.R. Poletti, University of Auckland, NZ.

Deep-inelastic excitation of high-K states by Prof. G.D. DRACOU LIS, Dr R.A. BARK and Dr A.P. BYRNE with Dr S.M. Mullins, National Accelerator Centre, Faure, South Africa.

Neutron rich translead nuclei using radioactive beams by Prof. G.D. DRACOU LIS, Dr G.J. LANE and Dr A.P. BYRNE with Prof. P.M. Walker, University of Surrey.

Spectroscopy of neutron deficient lead and Thallium nuclei by Prof. G.D. DRACOU LIS, Dr G.J. LANE and Dr A.P. BYRNE; Dr A.M. BAXTER (Faculties) with Dr A.O. Macchiavelli, LBL, Berkeley, USA.

The terrestrial age of the Canyon Diablo meteorite from measurements of  $^{59}\text{Ni}$ ,  $^{36}\text{Cl}$ ,  $^{10}\text{Be}$ ,  $^{26}\text{Al}$  and  $^{41}\text{Ca}$  in fragments from a range of depths by Dr L.K. FIFIELD and AMS Group with Prof. G. Herzog, Rutgers University, USA; Dr. C Schnabel, ETH, Zurich, Switzerland.

Tracing releases of plutonium from the mayak production plant, Southern Urals, Russia by Dr L.K. FIFIELD and AMS Group with Dr D. Oughton, Agricultural University of Norway.

Uptake by humans of plutonium following inhalation by Dr L.K. FIFIELD and AMS Group with Prof. N.D. Priest, Middlesex University, UK; Dr N. Stradling and G. Etherington, National Radiation Protection Board, UK.

Dating of ice in temperate-region glaciers with  $^{32}\text{Si}$  by Dr L.K. FIFIELD and AMS Group with Dr U. Morgenstern and Dr A. Zondervan, Geological and Nuclear Sciences, Lower Hutt, New Zealand.

Long-term retention and excretion of plutonium by the human female by Dr L.K. FIFIELD and AMS Group with Dr D. Newton and Dr R.J. Talbot, AEA Technology, Harwell, UK.

Plutonium in the deep ocean by Dr L.K. FIFIELD and AMS Group with Dr P. Povinec, IAEA Marine Research Laboratory, Monaco.

Tracing of groundwater flow and mixing in the Temora and Broken Hill areas of NSW by Dr L.K. FIFIELD and AMS group with Dr R.G. Cresswell and Dr P. de Caritard, Bureau of Rural Sciences.

Tracing of groundwater flow in a natural analogue of a nuclear waste repository using  $^{36}\text{Cl}$  by Dr L.K. FIFIELD and AMS Group with Dr Y Mahara, Geosphere, Abiko Research Laboratory, Japan; Dr R. Habermehl and Dr R.G. Cresswell, Bureau of Rural Sciences.

The origin of brines from a geothermal area in Mexico by Dr L.K. FIFIELD and AMS Group with Dr P. Birkle, Instituto de Investigaciones Electricas, Mexico.

Dating archaeological sites in Brazil by Dr L.K. FIFIELD and AMS Group with Dr N. Added, Sao Paulo; Dr. C.I. Parellada, Paranense Museum.

Quaternary evolution of the Parana coastal plain, South Brazil by Dr L.K. FIFIELD and AMS Group with Dr N. Added and Dr P.C. Giannini, Sao Paulo.

Surface diffuseness anomaly in heavy-ion fusion potentials by Dr D.J. HINDE, Dr M. DASGUPTA and I.I. GONTCHAR with Dr K. Hagino, YITP, Kyoto University, Japan.

Measurement of nuclear g-factors and investigation of transient magnetic fields by Dr A.E. STUCHBERY with Prof. H.H. Bolotin, University of Melbourne.

Nuclear moments and structure changes in exotic nuclei by Dr A.E. STUCHBERY with Dr P.F. Mantica, Michigan State University, USA.

Nuclear structure through measurements of g-factors in even Xe isotopes by projectile excitation by Dr A.E. STUCHBERY with Prof. N. Benczer-Koller, Rutgers University, USA; Prof. K.-H. Speidel, University of Bonn, Germany; Dr A. Pakou, Ioannina, Greece; Dr A. Macchiavelli, Lawrence Berkeley Laboratory, USA.

Evaluation of the quadrupole moment of  $^{59}\text{Fe}$  and applications to solid-state physics by Dr A.E. STUCHBERY with A/Prof. D.H. Chaplin and Dr W.D. Hutchinson, ADFA, University of NSW.

Single particle degrees of freedom in transitional Nd nuclei from projectile-excitation g-factor measurements by Dr A.E. STUCHBERY with Prof. N. Benczer-Koller, Rutgers University, USA; Prof. K.-H. Speidel, University of Bonn, Germany; Dr A. Macchiavelli, Lawrence Berkeley Laboratory, USA; Dr W. Rogers, Westmont College, USA.

Hyperfine interactions spectrometer by Dr A.E. STUCHBERY with A/Prof. D.H. Chaplin, ADFA, University of NSW; Prof. H.H. Bolotin, University of Melbourne; Dr A. Byrne, Department of Physics, The Faculties.

Stopping and energy straggling of heavy ions in technologically relevant materials by Dr H. TIMMERS with Prof. H. Whitlow, Lund Institute of Technology, Lund

University, Sweden; A/Prof. J. O'Connor, University of Newcastle.

Elastic recoil detection analysis of GaN films by Dr H. TIMMERS with Dr S. Butcher, Macquarie University, Sydney.

## Optical Sciences Centre

Observation of soliton explosions by Prof. N. AKHMEDIEV with Prof. S.T. Cundiff, JILA, National Institute of Standards and Technology and University of Colorado, Boulder, Colorado, USA; Dr J.M. Soto-Crespo, Instituto de Optica, Madrid, Spain.

Interaction of pulses in dispersion-managed fiber systems by Prof. N. AKHMEDIEV with Dr F. Zen, Institute of Technology, Bandung; Prof. Pak Chu, City University of Hong Kong.

Soliton states in a nonlinear directional coupler with intermodal dispersion by Prof. N. AKHMEDIEV with Dr V. Rastogi and Prof. K.S. Chiang, City University of Hong Kong.

Linear guidance properties of solitonic Y-junction waveguides by Prof. N. AKHMEDIEV with Dr J.A. Besley, Racal Research Ltd., Berkshire, UK; Dr P.D. Miller, University of Michigan, USA.

Multi-frequency pulsations in mode-locked fiber lasers by Prof. N. AKHMEDIEV with Dr J.M. Soto-Crespo, Instituto de Optica, Madrid, Spain; Dr G. Town, University of Sydney.

Pulse propagation in optical fibers with random dispersion by Prof. N. AKHMEDIEV with Dr I. Gabitov, Los Alamos National Laboratory, USA; Dr G. Kovacic, Rensselaer Polytechnique Institute, USA.

What makes a corporate champion by Prof. A.W. SNYDER with Prof. J. George, University of Sydney; McKinsey & Company, Sydney.

The physics of network computation by Prof. A.W. SNYDER with Prof. T. Bossomaier, Charles Sturt University.

## Plasma Research Laboratory

Soft X-ray measurements on H-1NF by Dr B.D. BLACKWELL and Dr J. HOWARD with A/Prof. A.D. Cheetham, University of Canberra.

RF plasma wave studies in H-1NF by Dr G.G. BORG, Dr I.V. KAMENSKI and Dr D.G. MILJAK with Dr T. Seki, National Institute for Fusion Science, Japan.

Plasma antenna concept demonstrator by Dr G.G. BORG and Prof. J.H. HARRIS with Dr N.M. Martin, Defence, Science and Technology Organisation.

Plasma switches for mobile phones by Dr G.G. BORG and Mr P. LINARDAKIS with Dr R. Scheer, Motorola, Harvard, USA.

HARE by Prof. R.W. BOSWELL and Dr C. CHARLES with Prof. D. MacKenzie, Dr B. James and Dr I. Falconer, University of Sydney.

High brightness ion source by Prof. R.W. BOSWELL and Mr O. SUTHERLAND with FEI Company, MA USA.

Plasma deposition of Palladium by Dr.C. CHARLES and Prof. R.W. BOSWELL with Dr P. Brault, University of Orleans, France.

Fibre optic probes for plasma diagnostics by Dr J. HOWARD with Mr V. Everett and Prof. G. Woolsey, University of New England.

Measurement of electric field in H-1NF using laser induced fluorescence techniques by Dr J. HOWARD with Mr P. Feng and A/Prof. B.W. James, University of Sydney.

Electron cyclotron heating of plasma in stellarators by Dr M.G. SHATS with Dr K. Nagasaki, Kyoto University, Japan.

Turbulent transport in tokamaks and stellarators by Dr M.G. SHATS with Dr J. Boedo, University of California, San Diego, USA.

High confinement studies in stellarators by Dr M.G. SHATS with Prof. K. Toi, National Institute for Fusion Science, Japan.

### **Theoretical Physics**

Electron correlation and metal-insulator transition by Dr Mukunda DAS with Prof. D. Neilson, University of NSW, Kensington.

Fluctuations in mesoscopic systems by Dr Mukunda DAS with Dr F. Green, CSIRO/ UNSW, Sydney.

Two dimensional interacting coulomb systems by Dr Mukunda DAS with Prof. K.I. Golden, University of Vermont, USA.

Anderson localisation of ballooning modes, quantum chaos and the stability of compact quasiaxially symmetric stellarators by Prof. Robert DEWAR with M.H. Redi, Princeton University, USA.

Cluster formation in random spin systems by Dr Miklos GULACSI with Prof. Zs. Gulacsi, University of Debrecen, Hungary.

Effects of phonons on magnetic impurities by Dr M. GULACSI with Dr A.R. Bishop, Los Alamos National Laboratory, USA; Dr A. Bussmann-Holder, Max-Planck Institut, Stuttgart, Germany.

Metal-insulator transition in strongly correlated electron systems by Dr M. GULACSI with Prof. K.S. Bedell, Boston College; Dr J. Gubernatis, Los Alamos National Laboratory, USA.

Impurity effects in mesoscopic systems by Dr M. GULACSI with Prof. A. Rosengren and Mr A.

Juozapavicius, Royal Institute of Technology, Stockholm, Sweden.

Convergent close-coupling theory of double ionisation by photon and electron impact by Dr Anatoli KHEIFETS with Dr I. Bray, Flinders University of South Australia.

Electron momentum density studies in metals and metal oxides by Dr Anatoli KHEIFETS with Dr M. Ford, Flinders University of South Australia.

Electron impact double ionisation of the Helium atom by Dr Anatoli KHEIFETS with Prof. A. Lahmam-Bennani, University of Paris — Orsay, France; Dr A. Dorn, University of Freiburg, Germany.

Theoretical and experimental studies of double photoionisation of He by Dr Anatoli KHEIFETS with Dr T. Reddish, University of Newcastle; Dr L. Avaldi and Dr R. Dörner, University of Frankfurt, Germany.

Multiple atomic photoionisation of metal vapours by Dr A.S. KHEIFETS with Prof. Y. Azuma, Photon Factory, Japan High Energy Accelerator Research Organisation, Japan.

New method to probe coherent many-body dynamics: concept of nonergodic molecules in continuum by Dr Sergey KUN with Prof. W. Greiner, Johann Wolfgang Goethe University, Frankfurt am Main, Germany; Dr A.V. Vagov, University of Sheffield, U.K.

Experimental test of slow phase randomisation and quantum chaos in finite highly excited many-body systems by Dr S.Yu KUN with Prof. Wang Qi, Dr Tian Wendong, Dr Li Songlin and Dr Jiang Zhonghe, Institute of Modern Physics, Lanzhou, China; Prof. Li Zhichang, Dr Lu Xiuqin, Dr Xhao Kui, Dr Fu Changbo, Dr Liu Jiancheng, Dr Jiang Hua and Dr Hu Guiqing, China Institute of Atomic Energy, Beijing, China.

Critical phenomena in microscopic and mesoscopic complex collisions by Dr S.Yu. KUN with Dr L. Bennet, Max Planck Institute for Nuclear Physics, Heidelberg, Germany; Prof. T.H. Seligman, University of Mexico, Cuernavaca and International Center of Science, Cuernavaca, Mexico.

Fusion and fission reactions by Dr Brian ROBSON with Prof. G. Do Dang, Université de Paris Sud, France.

Antiproton Scattering by Dr B.A. ROBSON with Prof. Zhang Yu-shun, Institute of High Energy Physics, Academia Sinica, Beijing, P.R. China.

Electromagnetic Corrections to Hadronic Processes by Dr William WOOLCOCK with Dr A. Gashi, Dr E. Matsinos and Prof. G. Rasche, University of Zürich, Switzerland; Prof. G.C. Oades, University of Aarhus, Denmark.

## Research School of Social Sciences

### Demography and Sociology Program

Modelling and forecasting mortality by Dr H. BOOTH with Dr Len Smith, NCEPH/ACPR, J. Maindonald, Statistical Consulting Unit, Graduate School and L. Tickle, Macquarie University.

Sexuality and gender in Southeast Asia by Dr T.H. HULL with Dr M. Budiharsana, Ford Foundation, Jakarta, Dr R. Lee, De LaSalle University, Manila, Dr N.D. Anh, Institute of Sociology, Hanoi, Dr W. Im-Em, Mahidol University, Bangkok and Dr D. Muhadjir, Centre for Population and Policy Research, Gadjah Mada University, Yogyakarta, Indonesia.

Megacity trends in South-East and East Asia by Prof. G.W. JONES and Dr Y. ZHU with Dr C.-L. Tsay, Academia Sinica, Taiwan, Dr J. Sutiprapa, National Economic and Social Development Board, Thailand, Dr Si Gde Made Mamas, Central Statistical Board, Indonesia and Dr R. Racelie, University of Philippines.

Outcomes for the second generation of immigrant origin by Dr S. KHOO, Prof. P. McDONALD and Dr D. GIORGAS with Dr R. Birrell, Monash University.

The AHURI project on projection of housing demand in Australia by Dr Y. KINFU, Prof. P. McDONALD, R. KIPPEN and A. MERLO.

Analysis of the 10% sample of the 1996 South African census data: 1. Immigration to South Africa, and South African Emigration to Australia and elsewhere; 2. Race, Place and Unemployment in South Africa; 3. The Young Adult Years in South Africa by Dr D. LUCAS with Prof. I. Kalule-Sabiti, University of the North West and Assoc Prof. Amoateng, University of the Western Cape.

Perceived influences upon Australian family formation decisions by Prof. P. McDONALD with Dr G. Carmichael, ANU and Dr A Whittaker, University of Melbourne.

Explanations of the fertility decline in Iran by Prof. P. McDONALD and Dr M.J. ABBASI-SHAVAZI (Tehran University) funded by the Wellcome Trust.

The negotiating the life course survey by Prof. P. McDONALD, Dr A. EVANS and Dr E. GRAY with Dr D. Mitchell, ANU and Dr J. Baxter, University of Queensland.

Managers, experts and organisations: contemporary careers and organisational change by Prof. J. WAJCMAN with Prof. B. Martin, Flinders University.

### Centre for Tax Systems Integrity

Organisation culture by Dr E. AHMED with Prof. H. Begum, University of Dhaka, Bangladesh.

The cash economy project: international comparisons by Dr V. BRAITHWAITE with Prof. F. Schneider, University of Linz.

A comparative study of restorative justice in Australia and Japan by Dr G. MASTERS with colleagues at Toyo University, Tokyo.

The regulation of financial markets and financial professions by Dr Y. SAKURAI with Dr G. Gillian, Monash University.

A cultural comparative analysis of the influences of personal-ties on interpersonal trust as social capital and partnership formation as a new governance in public sector by Ms H. SHIN with Prof. Tonghee Park, Ewha Woman's University, Seoul, South Korea.

The assessment of asserted increase in 'certainty' arising from the introduction of the Tax Value Method (TVM) by Dr M. WENZEL with Prof. G. Cooper, University of Melbourne.

### Director

Australian electoral change by Dr I. McALLISTER with A/Prof. C. Bean Queensland University of Technology and Dr D. Gow, University of Queensland.

Northern Ireland society and politics by Dr I. McALLISTER with Prof. B. Hayes, Queens University of Belfast.

Comparative political leadership by Dr I. McALLISTER with Prof. H. Schmitt, Mannheim, Zentrum für Europäische Sozialforschung, Mannheim.

Handbook of Australian social science by Dr I. McALLISTER with Prof. S. Dowrick, Faculty of Economics and Commerce, ANU and Prof. R. Hassan, Flinders University.

### Economics Program

*(incorporating the Centre for Economic Policy Research and the Social Policy Evaluation, Analysis and Research Centre)*

NB: As much of the output of the Economics Program, CEPR and SPEAR is performed across the boundaries of each area, their joint research projects have been combined in this section.

Information aggregation in legislatures: effects of hate speech on hate crimes by Dr D. DHARMAPALA with Richard McAdams, University of Illinois.

Economic analysis of hate crimes by Dr D. DHARMAPALA with Nuno Garoupa, New University of Lisbon.

Economic analysis of accident law by Dr D. DHARMAPALA with Sandra Hoffmann, Resources for the Future and Warren Schwartz, Georgetown University.

Child care costs and the effectiveness of government policy on labour supply by Dr D. DOIRON with Guy-

onne Kalb, University of Melbourne and Rosanna Scutella, University of Melbourne.

Work on Melbourne Institute tax and transfer simulator using the Melbourne Institute labour supply model based on micro-simulations, Melbourne Institute of Applied Economic and Social Research by Dr D. DOI-RON with Guyonne Kalb, University of Melbourne.

Cultures of inequality: conflict and consensus over ideals about earnings in international perspective by Dr J. KELLEY with M.D.R. Evans, University of Melbourne. A book from this project has been accepted for publication by the State University of New York Press in the series: *The New Inequalities*, Gary Dworkin (editor).

The consequences of divorce for children's education by Dr J. KELLEY with M.D.R. Evans, University of Melbourne and Richard Wanner, Calgary University.

Varieties of capitalism and class conflict by Dr J. KELLEY with M.D.R. Evans, University of Melbourne and Francis Castles, University of Edinburgh.

Community norms about medical treatment and research by Dr J. KELLEY with M.D.R. Evans, University of Melbourne and Esmail Zanjani, University of Nevada.

Marital conflict and children's education by Dr J. KELLEY with M.D.R. Evans and Bruce Headey, University of Melbourne.

Inequality and economic development: the Brazilian case by Dr J. KELLEY with Archibald O. Haller, University of Wisconsin, Madison.

Effects of siblings on education by Dr J. KELLEY with M.D.R. Evans, University of Melbourne, Lawrence Saha, The Australian National University and Gary Dworkin, University of Houston.

Class, economic ideology and politics by Dr J. KELLEY with Joanna Sikora, University of New Mexico.

Business cycle analysis by Prof. A.R. PAGAN with D. Harding, University of Melbourne.

Duration analysis in time series data by Prof. A.R. PAGAN with L Taylor, Lehigh University.

Income inequality and health by Dr R. VAITHIANATHAN with Bobbi Wolfe, University of Wisconsin-Madison.

The interaction of private and public health care systems in Australia: lessons for Canada by Dr R. VAITHIANATHAN with Tom Crossley, York University, Jerry Hurley, McMaster University, Deb Cobb-Clark, ANU.

## **Centre for Economic Policy Research**

The socio-economic consequences of university charging by Prof. Bruce CHAPMAN with Chris Ryan, private consultant and CEPR visitor.

Cross-sectoral funding models for a consistent Australian approach to post-compulsory schooling by Prof. Bruce CHAPMAN with Louise Watson University of Canberra.

Forgone earnings from child rearing by Prof. Bruce CHAPMAN with Dr Mathew Gray, Australian Institute of Family Studies.

Forecasting property crime by Prof. Bruce CHAPMAN with Cezary Kapuscinski, Department of Education, Training and Youth Affairs.

Education, unemployment duration and property crime by Prof. Bruce CHAPMAN with Dr Cezary Kapuscinski, Department of Education, Training and Youth Affairs and Dr Don Weatherburn, NSW Bureau of Crime Statistics and Research.

Counselling and monitoring of the very long term unemployed by Dr Bob BREUNIG with Deborah Cobb-Clark, Economics, RSSS, Yvonne Dunlop, Victoria University of Technology and Marion Terrill, Department of Family and Community Services.

Non-parametric panel data methods by Dr Bob BREUNIG with N. Roy, University of Victoria, Canada.

Intra household models and the US food stamp program by Dr Bob BREUNIG with I. Dasgupta, Nottingham University.

The ethics of taxation and government policy in the family by Dr Bob BREUNIG with P. Apps, University of Sydney and R. Rees, University of Munich.

Food and housing insufficiency among the poor in the United States (panel Data from USDA and SIPP data) by Dr Bob BREUNIG with C. Gunderson, U.S. Department of Agriculture.

## **Social Policy Evaluation, Analysis and Research Centre**

Food and housing insufficiency among the poor in the United States (panel Data from USDA and SIPP data) by Dr Bob BREUNIG with C. Gunderson, U.S. Department of Agriculture.

Assessing the family investment hypothesis in immigrant families by Dr D. COBB-CLARK with Dr T. Crossley, McMaster, Canada.

Assessing the immigrant/native-born wealth gap in the United States by Dr D. COBB-CLARK with Dr Vincent Hildebrand (McMaster University).

Assisting the very long-term unemployed by Dr D. COBB-CLARK with Dr R. Breunig, ANU, Yvonne Dunlop, Victoria University of Technology and Mari-

on Terrill, Department of Family and Community Services.

Post-migration human capital investment in immigrant families by Dr D. COBB-CLARK with Dr C. Worswick, Carleton University and Dr M. Connolly, Chatham College, Pittsburgh.

Sexual harassment in the US military by Dr D. COBB-CLARK with Dr H Antecol, Claremont-McKenna College.

The role of mobility in offsetting inequality: a non-parametric exploration of the CPS by Dr Tue GORGENS with Catherine de Fontenay, University of New South Wales and Haoming Liu, National University of Singapore.

### **History Program**

Inflows: the Channel Country by Dr T. GRIFFITHS with Dr J. Carruthers, University of South Africa, G. Fitzhardinge, University of West Sydney, and M. Martin, Australian National University.

Forests of ash by Dr T. GRIFFITHS with Dr A. Yen and others, Museum Victoria.

Australians in Antarctica by Dr T. GRIFFITHS with Dr B. Hains, Monash University.

Theoretical and methodological comparisons of oral and written sources in the historical study of domestic service in Australia in the twentieth century by Prof. B.W. HIGMAN with Dr P. Hamilton, University of Technology, Sydney.

Jamaican Toponyms by Prof. B.W. HIGMAN with Dr B. Hudson, Queensland University of Technology, Brisbane.

Life of Western Rubuntja by Dr T. ROWSE with Ms J. Green, under the auspices of the Aboriginal Areas protection Authority, Northern Territory.

### **Law Program**

Information feudalism by Prof. J. BRAITHWAITE with Dr P. Drahos, University of London.

Meta risk management and tax system integrity by Prof. J. BRAITHWAITE with R. Williams, Australian Taxation Office.

Shame management through reintegration by Prof. J. BRAITHWAITE, Dr E. AHMED, Dr V. BRAITHWAITE with Dr N. Harris, Leuven University.

Aggressive tax planning by Prof. J. BRAITHWAITE and Dr T. MURPHY with K. Fitzpatrick, Australian Taxation Office.

Risk indicators for tax compliance by high wealth individuals by Prof. J. BRAITHWAITE and Y. PITTELKOW with R. Williams, Australian Taxation Office.

Reintegrative shaming experiments (RISE) by Prof. J. BRAITHWAITE and Dr H. STRANG with Prof. L. Sherman, University of Pennsylvania.

Liberalisation of postal services: diversity in the face of Europeanisation? by Ms I. MAHER with Dr M. Lodge, London School of Economics.

National and supranational economic policy to correct disequilibrium under EMU by Ms I. MAHER with Dr B. Ardy, Prof. I. Begg, Mr D. Hodson and Prof. D. Mayes, South Bank University.

Delivering a coordinated economic policy: a normative analysis by Ms I. MAHER with Prof. I. Begg and Mr D. Hodson, South Bank University.

The comparative dimension of regulation inside government by Mr C. SCOTT with Prof. C. Hood, All Souls College, Oxford and Prof. B.G. Peters, University of Pittsburgh.

Private governance of the public sector by Mr C. SCOTT with Prof. C. Hood, All Souls College Oxford, Dr M. Lodge, London School of Economics and Dr R. Kaye, London School of Economics.

Regulatory innovation in high-tech sectors by Mr C. SCOTT with Dr M. Thatcher, European University Institute, Florence and Dr M. Lodge, London School of Economics.

Controlling the new media by Mr C. SCOTT with Mr A. Murray, London School of Economics.

Safe and just communities project by Prof. C. SHEARING with J. Wood, University of Toronto and E. Font, University of Rosario.

Community peace program by Prof. C. SHEARING with J. Cartwright, University of the Western Cape.

Justice research consortium by Dr H. STRANG with Lawrence Sherman, University of Pennsylvania.

An empirical study of new forms of conflict resolution and the prevention of repeated delinquency by Dr H. STRANG, Dr G. MASTERS and Prof. J. BRAITHWAITE with Prof. Haruo Nishimura and Prof. Yoko Hosoi of Toyo University, Tokyo.

### **Philosophy Program**

Dr Daniel STOLJAR, associate investigator on Australian Research Council Large Grant A00103679: "Irrationality and explanation in schizophrenia: a case study in the foundations of neuroscience" 2001-2003.

### **Political Science Program**

Democracy in East and South East Asia by Dr Ian MARSH with Prof. J. Blondel, European University Institute, Florence and Prof. T. Inoguchi, University of Tokyo.



Impact of globalisation: a survey of public attitudes in nine Asian and nine European countries by Dr Ian MARSH with Prof. J. Blondel, European University Institute, Florence, Prof. T. Inoguchi, University of Tokyo, Prof. I. Kabeshima, University of Tokyo, and Prof. R. Sinnott, University College, Dublin.

Australia's choice: options for a prosperous and fair society by Dr Ian MARSH with Prof. J. Disney, University of NSW, Prof. S. Fitzgerald, Asia-Australia Institute and Prof. J. West, Harvard Business School.

Comparative ministerial ethics by Dr John UHR with C. Sampford and Prof. P. Weller, Griffith University.

Departing from Westminster: by design or default by Dr M. SAWER with Prof. A. Brown, University of Edinburgh.

Black and white politics: Australian political cartooning by Dr M. SAWER with Prof. C. Lloyd, University of Canberra.

### **Social and Political Theory Program**

Discretionary time by Prof. R. GOODIN with Prof. Peter Saunders and Dr Michael Bittman, Social Policy Research Centre, UNSW.

Revealing altruism by Prof. R. GOODIN with Prof. N. Folbre, U Massachusetts, Amherst.

Epistemic democracy by Prof. R. GOODIN with Mr C. List, Harvard University.

The de-casualisation of care by Prof. R. GOODIN with Dr D. Gibson, Australian Institute of Health & Welfare.

Welfare state regimes and pillars by Prof. R. GOODIN with Prof. M Rein, MIT and Hanse- Wissenschaftskolleg, Delmenhorst.

Analytic conservatism by Prof. H.G. BRENNAN with Prof. Alan Hamlin, Economics, Southampton.

Australia's economic institutions by Prof. H.G. BRENNAN with Prof. Jonathan Pincus, Economics, Adelaide.

The analytics of trust by Prof. H.G. BRENNAN with Prof. Hartmut Kliemt, Philosophy, Duisburg.

Constitutional analysis in Buchanan by Prof. H.G. BRENNAN with Prof. Giuseppe Eusepi, Economics, Rome 1.

Post-communist democratisation by Prof. John DRYZEK with Prof. Leslie Holmes, Department of Political Science, University of Melbourne.

States and social movements: environmentalism in four countries by Prof. John DRYZEK with Dr David Schlosberg (Northern Arizona University), Dr Christian Hunold (Drexel University), Dr David Downes (Victoria Department of Education), Dr Hans-Kristian Hernes (University of Tromsø).

Social choice theory and deliberative democracy by Prof. John DRYZEK with Christian List (Nuffield College, Oxford).

Environmental valuation in Europe (EVE), funded by the European Commission by Mr Simon NIEMEYER with Prof. Clive Spash, Cambridge Research for the Environment, Department of Land Economy, University of Cambridge.

Restorative justice as deliberative democracy, joint project by Mr John PARKINSON with Dr Declan Roche, Law, London School of Economics and Political Science.

### **Research Evaluation and Policy Project**

Non-intended impacts of evaluation-based research funding on knowledge production by Drs G. LAUDEL and J. GLÄSER, Ms L. BUTLER with Dr S. Hinze, Fraunhofer-ISI, Karlsruhe, Germany.

### **Centre for Resource and Environmental Studies**

#### *Collaboration with individuals*

- M. Anderies, CSIRO Sustainable Ecosystems
- N. Ashbolt (UNSW)
- R. Bartnik, School of Mathematics and Statistics, University of Canberra.
- R. Benjamin, D. Page and A. Wade (ECOWISE)
- W.H. Berger, Scripps Institution of Oceanography, University of California, San Diego
- K.A. Bjorndal, Archie Carr Center for Sea Turtle Research and Department of Zoology, University of Florida
- L.W. Botsford, Department of Wildlife, Fish, and Conservation Biology, University of California
- B.J. Bourque, Department of Anthropology, Bates College, Lewiston, Maine
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- O.T. Denmead, CSIRO Land and Water
- J.A. Estes, U.S. Geological Survey, University of California
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- A. Falkland, Ecwise Environmental, ACTEW-AGL Corp
- T. Fatai, Ministry of Lands, Surveys and Natural Resources, Nuku'lofa, Kingdom of Tonga
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- R. Hawken, Canefarmer, Duranbah, NSW
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- E. Metai, Public Works Division, Ministry of Works and Energy, Tarawa, Republic of Kiribati
- T. Metutera, Pubic Utility Board, Ministry of Works and Energy, Tarawa, Republic of Kiribati
- D. Ogburn, NSW Fisheries
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- M. Overmars, South Pacific Applied Geoscience Commission, Suva, Fiji
- J.M. Pandolfi, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution, Washington
- C. Perrings, University of York
- R. Perman, University of Strathclyde
- C.H. Peterson, Institute of Marine Sciences, University of North Carolina at Chapel Hill, Morehead City, North Carolina
- R. Quirk, Canefarmer, Duranbah, NSW
- S. Santomartino, Department of Earth Sciences, LaTrobe University
- D.E. Smiles, CSIRO Land and Water
- R.S. Steneck, School of Marine Sciences, University of Maine, Orono, Maine
- L. Stocker, Murdoch University
- M.J. Tegner, Scripps Institution of Oceanography, University of California, San Diego
- H. Thulstrup, UNESCO Office for the Pacific States, Apia, Samoa
- M. Toman, Resources for the Future, Washington DC

- M. Tunks, Tweed Shire Council, Murwillumbah, NSW
- P. Van Oploo, School of Geography, The University of NSW
- R.R. Warner, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, California
- B.P. Wilson, Charles Sturt University
- R. Wilkinson, Victoria Department of Agriculture
- M. Young, CSIRO

#### *Collaboration with organisations*

- Australian Cotton Research Institute
- Australian Forest History Society Inc
- Brisbane City Council
- Coastal Cooperative Research Centre
- Cooperative Research Centre for the Sustainable Development of Tropical Savannas
- CSIRO Sustainable Ecosystems
- Department of Physical Geography, Macquarie University
- Kempsey Shire Council
- Land and Water Australia
- Macleay Acid Sulphate Soils Action Group (MASSLAG)
- Marine Plant Ecology Group, Department of Primary Industries Queensland
- Murray Darling Basin Commission
- National Center for Ecological Analysis and Synthesis, Santa Barbara, California
- NLC Caring for Country Unit
- North Australia Research Unit
- NSW Department of Agriculture
- NSW Department of Land and Water Conservation
- Oyster Research Advisory Committee
- Pacific North West Research Station (USA)
- Parks and Wildlife Commission of the Northern Territory
- Queensland Environmental Protection Agency
- Ramingining Community
- Wanga Djakamirr Ranger Unit

## **The Faculties**

### **Faculty of Arts**

#### **School of Archaeology & Anthropology**

Analysis of Fijian archaeological sites by Dr CLARK with the Fiji Museum, Suva, Fiji.

Joint project by Dr CLARK with the Kon-Tiki Museum in Oslo, Norway.

Eastern sequence project by Dr HISCOCK with Dr Val Attenbrow of the Australian Museum.

Chert sourcing on Timor by Dr HISCOCK with the Australian Institute of Nuclear Science and Engineering.

Preparation of a report on the Aboriginal ownership of the Gulaga National Parks for the office of the Registrar, Aboriginal Land Rights Act 1983 (NSW) by Dr PETERSON, with the University of Canberra.

Rat bones as a suitable material for radiocarbon dating by Prof. SPRIGGS with Nancy Beavan, Rafter Radiocarbon Laboratory, New Zealand.

Suitability of *Celtis* sp. seeds for radiocarbon dating by Prof. SPRIGGS with Ewan Lawson, of ANSTO, Lucas Heights, NSW.

Assistance in production of a book on Manus History by Prof. SPRIGGS with Stephen Pokawin, Premier of Manus Province, PNG.

Research and training project at the Mangaasi site, Efate Island, Vanuatu by Prof. SPRIGGS with Vanuatu National Museum.

Bridging Sunda and Sahul: the archaeology of the border area between Asia, Australia and Melanesia in East Timor by Prof. SPRIGGS with Dr S. O'Connor, ANH RSPAS, ANU and Dr P. Veth, James Cook University.

Analysis and dating of the Kilu site by Prof. SPRIGGS with Dr S. Wickler, University of Tromso, Norway.

Dating of the Pamwak site, PNG by Prof. SPRIGGS with Dr C. Fredericksen, Northern Territory University.

Research on the archaeology and oral history of Timorese resistance to Indonesian rule by Prof. SPRIGGS with Dr B. Corte-Real, University of East Timor.

Research on archaeology of Vanuatu by Prof. SPRIGGS with Dr S. Bedford, NZ Historic Places Trust.

Prehistoric fauna of Vanuatu, with Prof. D. Steadman, Florida Natural History Museum, USA.

Sourcing of Pacific pottery by Prof. SPRIGGS with Prof. W. Dickinson, Arizona State University, USA.

### **School of Social Sciences**

Concord Hospital colorectal project by Dr DENT with Assoc. Prof. P.H. Chapuis and Prof. E.L. Bokey, The University of Sydney and Concord Hospital.

Workforce in internal medicine and paediatrics in Australia by Dr DENT with the Royal Australasian College of Physicians.

Prognostic significance of microsatellite instability and related factors in colorectal cancer by Dr DENT with Dr M. Walsh and others at the Department of Pathology, University of Queensland Medical School.

Structure of the clothing industry by Dr GREIG with Prof. J.F. Marceau and colleagues at Australian Expert Group in Industrial Studies at the University of Western Sydney (continuation of 1998 ARC Large Grant).

Networks and the spread/control of tuberculosis by Dr KLOVDAHL with Baylor College of Medicine, the Medical Center Houston and the Rocky Mountain National Laboratory in Hamilton, Montana.

Factors affecting the spread of sexually transmitted diseases among young adults by Dr KLOVDAHL with the University of Texas School of Public Health.

Two research grant proposals on the introduction of pathogens into human populations to the US National Institutes of Health by Dr KLOVDAHL with colleagues at the University of Texas and the Medical Centre, Houston, Texas

Politics of 'light handed' regulation: new environmental policy instruments in Australia by Prof. PAPADAKIS with Dr Andrew Jordan, University of East Anglia, UK.

Regional population projections by Dr ROWLAND with Dr Bob Birrell, Centre for Population and Urban Research, Monash University.

Large ARC grant: interest groups and environmental policy in Australia, 2000 and 2001 by Dr SIMMS with Prof. Aynsley Kellow, University of Tasmania and Prof. Theodore Lowi, Cornell University.

Constitutional politics: the 1999 republic referendum and the future by Prof. WARHURST with Assoc. Prof. Malcolm Mackerras, University of New South Wales, ADFA and others.

The corporatisation of Australian health care by Dr WHITE with Dr Fran Collyer, Sydney University.

The significance of evidence based medicine by Dr WHITE with Prof. Evan Willis, La Trobe University Victoria.

### **Faculty of Asian Studies**

Dr Tomoko AKAMI, member, executive board, Japanese Studies Association of Australia (Canberra rep).

Dr Adrian BURTON, tutored in Sanskrit and coordinated the ANU students participating in the Sanskrit courses offered by Dr Peter Oldmeadow, University of Sydney through videoconferencing; conducted Hindi videoconferencing courses at the University of Sydney.

Dr Christine CAMPBELL, attended the Seminar Sastra Antarabangsa (International Seminar for Southeast Asian Literature), in Kuala Lumpur, Malaysia.

Ms Diana CARROLL presented scholarly research papers at the 5th ASEAN Inter-University Seminar On Social Development, National University of Singapore.

Dr Anita CHAN, presented a conference paper to the international conference 'Labour in a globalising world: the challenge for Asia' in Hong Kong, sponsored by the Centre for Comparative Public Management and Social Policy, City University of Hong Kong; invited participant, China Human Rights Strategy Study Group meeting, New York; delivered occasional lectures at the

Stanford University Law School and Center for Asian Studies and the Institute of Industrial Relations at the University of California, Berkeley; presented a conference paper to the China Studies Association of Australia's biennial conference (ANU) and to the Sociology Department, University of Beijing.

Prof. Jenny CORBETT co-organised a Tokyo conference in her continuing capacity as coordinator of the London-based Centre for Economic Policy Research sponsored European Network on the Japanese Economy; work on a new, externally-funded project on Electronic Financial Transactions Systems in the APEC economies.

Christian COSERU, presented a paper at the Australasian Association of Philosophy Conference, University of Tasmania, Hobart.

Dr Anthony DILLER, presented an invited seminar on Thai etymology in the Faculty of Arts, Chulalongkorn University, Bangkok; presented a keynote address at an international conference in Bangkok, for the Southeast Asian Linguistic Society's 11th Annual Meeting; presented a paper in the 15th International Conference on Historical Linguistics, Melbourne, and attended the Annual Meeting of the Australian Linguistics Society.

Dr Timothy HASSALL, presented a conference paper at the 6th ASILE (Australian Society of Indonesian Language Educators) Conference at Melbourne University.

Prof. Virginia HOOKER, external examiner, History Department, Brunei Darussalam.

Dr Tamara JACKA, participant, exchange program between ANU and Peking University; undertook ethnographic research into the experiences of rural women working in Beijing.

Dr Colin JEFFCOTT, developing collaboration with Dr Lewis Mayo, University of Melbourne for a more general study of current approaches to the society and culture of Song China.

Angela A-Jeoung KIM, presented a conference paper to the Japanese Studies Association of Australia (JSAA) Biennial Conference 2001, Sydney, co-hosted by University of New South Wales and University of Sydney; presented a conference paper to the Applied Linguistics Association of Australia (ALLA) National Congress, organised by and hosted by University of Canberra; presented a paper at a conference in Kitakyushu, Japan, organised by Japan Association for Language Teaching (JALT) Kokura, Kitakyushu, Japan.

Dr Ann KUMAR, member, Australia-Japan workshop on the nation in Southeast Asia (Japan) under the auspices of the Japan Society for the Promotion of Science.

Dr Helmut LOOFS-WISSOWA, prepared the final report of the finds of the Thai-British Archaeological Expedition deposited at ANU, concentrating on the

most recent season of excavations at the neolithic burial site of Khok Charoen in north-eastern Central Thailand; scientific consultant to Bang Productions, Hong Kong, for a documentary on 'Forestman' in Vietnam and Laos for the their 'Asian Enigmas' — series; this documentary was based on his research in 1995–1996 under the auspices of 'Japan TV Workshop' and was filmed following his itinerary; delivered the keynote address at the 'Myths & Monsters 2001' Australian Cryptozoology Conference, Sydney.

Pamela LYON, received an Ian Langham Memorial Bursary award for conference paper delivered to the Australasian Association of the History, Philosophy and Social Studies of Science (Melbourne); delivered paper to the annual conference of the Australasian Philosophy Association (Hobart).

Prof. Anthony MILNER, continued ARC funded project on Vietnamese business culture with the St James Ethics Centre, Sydney and the Vietnamese Ministry of Culture

Dr Wendy MUKHERJEE, presented conference paper at the First International Conference on Sundanese Culture, Bandung, West Java, Indonesia; presented a conference paper at the Academy of Malay Civilisation, at the National University of Malaysia, Bangi.

Dr C. John POWERS, delivered a paper to the American Academy of Religion in Denver, Colorado, entitled 'Fighting with History', which focused on Tibetan and Chinese productions on Tibetan history.

Dr Ian PROUDFOOT, member, advisory board, 'Indonesia and the Malay World'.

Dr George QUINN, invited as principal speaker, third Javanese Language Congress held in Yogyakarta.

Mr Ton-That QUYNH-DU, teacher, first-year Vietnamese, University of Sydney as part of a joint agreement between the ANU and the University of Sydney.

Dr Craig REYNOLDS, collaborating with a Filipino colleague on a volume of essays on scholarly dissemination in selected Southeast Asian countries; gave a seminar in Thai at Chulalongkorn University on Thai historiography; supervisor, pro bono Ms Sopha Chanamool, a Thai PhD candidate, at Chulalongkorn University; director, Centre for the Study of the Chinese Southern Diaspora (CSCSD), the Centre collaborated with National Taiwan University's Interdisciplinary Group for Australian Studies to publish a collection of essays, *Australian Chinese Histories*, edited by Ann Curthoys and Henry Chan; attended a meeting in Kuala Lumpur of the Southeast Asia Regional Advisory Panel of the Social Science Research Council.

Lorraine SALAZAR, delivered conference paper to the ASEAN Inter-University Conference, Singapore; participant, Third International Malaysian Studies Conference in Bangi, Universiti Kebangsaan Malaysia.

Mrs Chintana SANDILANDS, with the Thai Program, University of Sydney, co-presented conference paper 'Teaching Thai Language to Foreigners: Lessons from Australia' in the International Academic Training on Teaching Thai Language to Non-Thai Speakers Conference, in Thailand, organised by the Center for Teaching Thai Language as a Foreign Language, Faculty of Education, Chiang Mai University, Thailand; research task for the 'Economic Base of Thai Artists' component of the Comparison of the Chinese and Thai Art Worlds in the 1980s and 1990s study with Dr John Clark, University of Sydney, with funding from an Australian Research Council Grant.

Dr Gi-Hyun SHIN, delivered a conference paper on Korean pragmatics at 2nd Biennial Korean Studies Association of Australasia conference, Monash University.

Mr Larry STRANGE, presented a conference paper at the Australian Studies Association's Nation and Narration Conference, University of Queensland.

Dr Surjohudojo SUPOMO and Professor Peter Worsley, Sydney University continued their work on the *Sumanas\_ntaka*, a twelfth century Old Javanese poem of more than 1,100 stanzas.

Dr Royall TYLER, taught at Harvard as a visiting professor in the Department of East Asian Languages and Civilizations; gave keynote address at the Japanese Studies Association of Australia conference at the University of New South Wales; in Japan gave a paper on the Noh theatre at the International Research Center for Japanese Studies in Kyoto; in the US he lectured on GENJI at Harvard, Columbia, Berkeley, Stanford, and the University of Washington.

Dr Kenneth WELLS, organiser, symposium on the state of Korean Studies in Australia, New Zealand and Southeast Asia with Dr Suh Chung-Sok, UNSW; collaborated with Professors Ron Duncan and Peter Drysdale to secure funding for the training of North Korean students at the ANU; negotiated the initial agreement on this project with the Korea Development Institute in Seoul, and prepared the way for Prof. Duncan to finalise KDI support; president, Korean Studies Association of Australasia; member, Organising Committee for 2nd Biennial Conference of Korean Studies Association of Australasia, Monash University; invited speaker, Geneva-based International Korean Residents' Association Annual Conference, Sydney.

Dr Yin-Wai WONG, faculty representative on Selection Committee for the 2001–2002 Scholarship for Mandarin Training in Taiwan.

Mr Amrih WIDODO, presented a conference paper to the Centre for Southeast Asian Studies, Kyoto University, Japan; presenter on local politics in Indonesia in a panel discussion with Dr Heru Nugroho, Gadjah Mada University, organised by the Institute of Cultural and Social Change, Muhammadiyah University in Surakar-

ta; presented a conference paper in a panel on 'Globalization, Market, and Citizenship' at a conference on 'Post Southeast Asian Crisis,' The National University of Singapore; presented and facilitated discussion on the 'Samin Movement in Contemporary Indonesia' and 'New Social Movement in Indonesia' to a group of MPs in Jakarta; spoke at a workshop promoting pluralism in Indonesia 'National Dialogue on State, Religion and Culture,' organised by Desanta Cultural Studies Institute; assisted the Desanta Cultural Studies Institute by participating in a panel discussion on 'Rethinking Indonesia' with Dr Daniel Dhakidae, Director of Research and Information Centre of Kompas Daily.

Ms Tiejun YANG, delivered a conference paper to Chinese Studies Association of Australia.

Ms Akiko YOSHIDA, presented a conference paper to the National Congress of the ALAA, University of Canberra.

## **Faculty of Economics and Commerce**

### **School of Business and Information Management**

CEO-Speak: the language of leadership by Prof. R. CRAIG with Prof. J. Amernic, University of Toronto.

e-Commerce in agribusiness by Prof. S. GREGOR with Prof. J. Rolfe, Central Queensland University.

EMA-Links — the promotion of environmental management accounting and the role of government by R. BURRITT with S. Schaltegger, University of Lueneburg, Germany and T. Hahn, University of Lueneburg, Germany.

Investigation into corporate environmental management accounting information and appraisal of staff members: cross country evidence from Australia, Germany and Japan by R. BURRITT with Prof. S. Schaltegger, University of Lueneburg, Germany, Prof. K. Kohubu, Kobe University, Japan and M. Wagner, University of Leuneburg, Germany.

Leadership in Asia project by G. FISHER with M. Bibo, University of Queensland and D. Youngsamt, University of Queensland.

Rhetorical roles of accounting in the privatisation of a national railway by Prof. R. CRAIG with Prof. J. Amernic, University of Toronto.

Roles and social construction of accounting in industrial relations by Prof. R. CRAIG with Prof. J. Amernic, University of Toronto.

Self service technology in international hotels by G. FISHER with Ashton University, UK.

Theory of interorganisational systems by Prof. S. GREGOR with Dr R. Johnston, University of Melbourne.

Third party facilitation of interorganisational system development by Prof. S. GREGOR with Prof. S. Elliot, University of Newcastle.

Use of metaphor to structure thought about accounting by Prof. R. CRAIG with Prof. J. Amernic, University of Toronto.

Virtual teams project by G. FISHER with M. Bibo, University of Queensland and D. Youngsamart, University of Queensland.

### **School of Finance and Applied Statistics**

Explanatory power of political risk in emerging markets by Prof. T. BRAILSFORD and Dr C. BILSON with Dr V. Hooper, University of New South Wales.

Information effects of voluntary suspensions on the London Stock Exchange by Prof. T. BRAILSFORD with Prof. A. Hodgson, Griffith University.

Performance benchmarking in the funds management industry by Prof. T. BRAILSFORD with Prof. D. Allen, Edith Cowan University and Prof. R. Faff, RMIT University.

Selecting macroeconomic variables as explanatory factors of emerging stock returns by Prof. T. BRAILSFORD and Dr C. BILSON with Dr V. Hooper, University of New South Wales.

Trade size in futures markets comparing information and liquidity effects by Prof. T. BRAILSFORD with Prof. H. Berkman, University of Auckland and Prof. A. Frino, University of Sydney.

## **Faculty of Engineering and Information Technology**

### **Department of Computer Science**

Interactive sound sculpturing in a virtual environment by Dr Henry GARDNER with Dr Steven Barrass, CMIS, CSIRO.

Proof theory of nonclassical logics by Dr Rajeev GORÉ with Dr Sephane Demri, Ecole Normale Superieure de Cachan.

Proof theory of intuitionistic modal logics Dr Rajeev GORÉ with Prof. Jean Goubault-Larrecq, Ecole Normale Superieure de Cachan.

Automated deduction in, and the proof theory of, intuitionistic lax logic by Dr Rajeev GORÉ with Dr Matt Fairtlough, University of Sheffield and Dr Gilles Barthe, INRIA Sophia-Antipolis.

Security of mobile code by Dr Rajeev GORÉ with Dr Bernhard Beckert, University of Karlsruhe.

Hardware verification by Dr Rajeev GORÉ and Dr Jeremy DAWSON with Dr Matt Fairtlough, University of Sheffield.

Proof theory of nonclassical logics by Dr Rajeev GORÉ and Dr Jeremy DAWSON with Prof. Hiroakira Ono and Mr Tadamune Arase, Japanese Advanced Institute for Science and Technology.

Dr Chris JOHNSON and Dr CHUAN-KUN WU with CRC for Smart Internet Technology projects.

Data warehousing by Dr Weifa LIANG with Prof. Maria Orlowska, University of Queensland.

Routing algorithm design for WDM Networks by Dr Weifa LIANG with Prof. Xiaojun Shen, University of Missouri at Kansas City, USA.

Materialised view maintenance by Dr Weifa LIANG with Assoc. Prof. Jeffery Yu, Chinese Hong Kong University.

Smart Personal Assistant by Dr Eric McCREATH with Prof. John Lloyd, CRC Smart Internet Technology and RSISE.

Intelligent Email Sorter by Dr Eric McCREATH with Assoc. Prof. Judy Kay, University of Sydney.

Computational methods for enumeration of combinatorial objects by Prof. Brendan McKAY with Dr Gunnar Brinkmann, University of Bielefeld, Germany; Dr Catherine Greenhill, University of Melbourne; Prof. Robin Thomas, Georgia Institute of Technology, USA; Prof. Wendy Myrvold, University of Victoria, Canada; Dr Marlio Paredes, University of Santander, Colombia.

Graph drawing problems by Prof. Brendan McKAY with Prof. Peter Eades and Dr Seokhee Hong, University of Sydney.

Theoretical enumeration problems by Prof. Brendan McKAY with Prof. Rodney Canfield, University of Georgia, USA; Dr Xiaoji Wang, DSTO; Dr Ian Wanless, Oxford University, UK; Dr Nicholas Wormald, University of Melbourne.

Combinatorial problems in theoretical physics by Prof. Brendan McKAY with Prof. Norman Megill, Boston Information Group, USA; Prof. Mladen Pavicic, University of Zagreb, Croatia.

Computational and theoretic graph theory by Prof. Brendan McKAY with Dr Konrad Piwakaowski, University of Gdansk, Poland; Prof. Stanislaw Radziszowski, Rochester Institute of Technology, USA.

Applications of graph theory in psychology by Prof. Brendan McKAY with Prof. Diana Richards, University of Minnesota, USA; Prof. Whitman Richards, Massachusetts Institute of Technology, USA.

### **Department of Engineering**

Information archival and retrieval system, Simpress by Dr Mick CARDEW-Hall, collaborative research and development activity with the Ford Motor Company and Deakin University.

Modular manufacturing techniques for UAV by Dr Shankar KALYANASUNDARAM with Coddara systems.

Simulation of the dynamics of dummies in crash situations by Dr Shankar KALYANASUNDARAM with Federal Office of Road Safety.

Developing biomechanical models of infant dummies for side impact problems by Dr Shankar KALYANASUNDARAM with Mark Terrel and Craig Newland, Vehicle Standards Division, Commonwealth Department of Transport and Regional Services.

Development of child restraint capsules and sandwich panels for side impact by Dr Shankar KALYANASUNDARAM with Mark Terrel and Craig Newland, Vehicle Standards Division, Commonwealth Department of Transport and Regional Services.

Numerical and experimental investigation of toughening mechanisms of interlayer toughened composites by Dr Shankar KALYANASUNDARAM and Dr Adrian LOWE with Dr Ben Jar, University of Alberta, Canada.

Development of solar thermal course materials by Dr Keith LOVEGROVE with Murdoch University.

Student exchange for traineeships by Dr Keith LOVEGROVE with Prof. Aldo Steinfeld, ETH Zurich.

Solar decomposition of zinc ferrite by Dr Keith LOVEGROVE with Prof. Yutaka Tamaura, Tokyo Institute of Technology.

Long term stability of polymeric resins for advanced composite products by Dr Adrian LOWE with Prof. D. Craigh, University of Canberra; Dr J. Hodgkin, CSIRO; Prof. P. Hogg, University of London; Dr V. Otiengo, University of Canberra and Prof. R. Young, Manchester Materials Centre.

Use of synchrotron radiation in assessing the curing and deformation mechanisms in polymeric and elastomeric materials by Dr Adrian LOWE with Prof. D. Craigh and Dr V. Otiengo, University of Canberra.

Multilayer technical textiles for high performance rigid composite products by Dr Zbigniew STACHURSKI with Dr Ian Crouch, CRC for Advanced Composite Structures, Dr S. John, RMIT and Mr Peter Leipnik, Speciality Group Pty Ltd.

The effect of loading rate on automotive knee joint injuries by Dr Zbigniew STACHURSKI with Dr K. Oloyede, Queensland University of Technology.

New design of hybrid sandwich composite panel for improved impact strength and energy dissipation by Dr Zbigniew STACHURSKI and Dr Shankar KALYANASUNDARAM with Dr R. Heslehurst, ADFA.

Structure property relationship in porous stoneware ceramic bodies by Dr Zbigniew STACHURSKI and Dr Ying CHEN with Dr J. Bartlett, ANSTO.

## Faculty of Law

Prof H.C. CHARLESWORTH, co-chief investigator, London School of Economics, research project on women and international dispute resolution (with Professor C.M. Chinkin); co-chief investigator, United Nations University, research project on legitimacy and international institutions (with J.M. Coicaud).

Dr M. RIMMER, Australian Centre for Intellectual Property in Agriculture (ACIPA) is jointly based at the ANU and Griffith University. There is collaboration between the two universities in terms of research, teaching, and administration; ACIPA hosted a visit from Dr Margaret Llewellyn, an expert in plant breeder's rights and biotechnology patents, from Sheffield University.

Ms A. STONE, co-conference organiser with Professor Jeffrey Goldsworthy, Faculty of Law Monash University; Prof. Tom Campbell, Centre for Applied Philosophy and Public Ethics, Charles Sturt University, jointly organised a workshop (Human Rights: Challenges and Boundaries), Melbourne attended by scholars from Australia, the United States, Canada, New Zealand and the United Kingdom.

## Faculty of Science

### Department of Chemistry

New synthetic methods using transition metals by Dr B. FLYNN with Adam Meyer, CSIRO Division of Molecular Science.

New synthetic methods using transition metals by Dr B. FLYNN with Armin de Meyere, Institute für Organische Chemie der Georg-August-Universität Göttingen Germany.

Developing novel anti-cancer agents by Dr B. FLYNN with Ernest Hamel, National Cancer Institutes, USA.

The singlet and triplet valence excited states of pyrimidine by Dr G. FISCHER with P. Wormell (University of Western Sydney) and J. Reimers (University of Sydney).

Spectroscopy of long chain carbon compounds by Dr G. FISCHER with J. Maier (University of Basel).

Electronic spectroscopy of dicyanoacetylene and related molecules by Dr G. FISCHER with D. Ramsay (NRC, Canada) and I.G. Ross (ANU).

Analysis of puckering mode in infrared spectrum of perfluorocyclobutane by Dr G. FISCHER with D. McNaughton (Monash University).

Drs M. HUMPHREY and M. CIFUENTES with University Murcia, Spain; University Jaume I, Spain; University of Lisbon, Portugal; University of Konstanz, Germany; Catholic University of Leuven, Belgium; RIKEN, Japan; and University of Canberra, Australia.

Transition metal-based anticancer agents by Dr G. SALEM with John Th'ng (Cancer Care Ontario, Canada).

Primary phosphines in the elucidation of insect toxicology of phosphine by Dr G. SALEM with J. Desmarchelier of CSIRO.

Studies of the Oxygen Evolving Centre of Photosystem II during the second turnover of the enzyme by Dr K. AHLING with S. Styring, Biochemistry, Lund University, Sweden.

Comparative Biophysical Studies on Photosystem II of Higher plants and Cyanobacteria by Dr R. PACE with S. Styring, University of Lund, Lund, Sweden.

Complexes of secondary amides by Dr P. ANGUS with W. G. Jackson, Department of Chemistry, ADFA.

Dr C. CHAI with University of Cologne, Germany.

Lichenological and chemotaxonomic projects by Prof. J.A. ELIX with Dr A.W. Archer (National Herbarium of New South Wales), Dr G. Kantvilas (Tasmanian Herbarium), Dr P.M. McCarthy (ABRS), Dr K. Kalb (Lichenologisches Institut, Neumarkt, Germany), Dr H.T. Lumbsch & Prof. G.B. Feige (Fachbereich 9/Botanik, Universität Essen, Germany), Dr H. Mayrhofer and Dr W. Obermayer (Institut für Botanik, Karl Franzens Universität, Graz, Austria), Dr L. Ferraro (Universidad Nacional del Nordeste, Corrientos, Argentina), Prof. T.H. Nash (Department of Botany, Arizona State University, Tempe, AZ, USA), Mr Jianbin Chen (Institute of Microbiology, Chinese Academy of Sciences, Beijing, China), Dr Kansri Boonpragob (Ramhamkhaeng University, Bangkok, Thailand), Prof. Mohd Wahid bin Samsudin, Prof. Laily bin Din (University Kebangsaan Malaysia, Bangi, Selangor, Malaysia), Dr Felix Schumm (Stuttgart, Germany), Ms Pauline Barwingan (St. Louis University, Baguio City, Philippines), Prof. P.M. Jørgensen, Dr T. Tønsberg and Dr D. Øvstedal (University of Bergen, Norway), Dr D.K. Upreti (National Botanical Research Institute, Lucknow, India), Prof. M. Manandhar (Tribhuvan University, Kathmandu, Nepal), Dr N.J.M. Gremmen (Data Analyse Ecologie, Dwaarsdrift, The Netherlands) and Prof. A. Crespo, Universidad Complutense de Madrid, Spain), Dr H.J.M. Sipman (Freie Universität Berlin, Germany) and Dr E. Stocker-Wörgötter (University of Salzburg, Austria).

The role of the hydrophobic region AGAAAAGA in the formation of PrP[106-126] channels in planar lipid bilayers by Dr J. KOURIE with Dr Cappai R. (Melbourne).

Quinacrine and chlorpromazine act by two different mechanisms on ion channels by Dr J. KOURIE with Drs Salmons, M. & Forloni G. (Italy).

Polyamidoamine Dendrimer (starburst), Coproporphyrin I, polypropylenimine dotriacontamine dendrimer and modulation of PrP-formed channels by Dr J. KOURIE with Drs Salmons, M. & Forloni G. (Italy).

Transition metals and amyloid beta protein- and prion-formed channels by Dr J. KOURIE with Barnham K. & Curtain C. (Melbourne).

NMR studies on natriuretic peptides models of the mechanisms of ion channel formation by Dr J. KOURIE with Pallaghy P. (Melbourne).

Modulation of recombinant prion protein- and fragment-formed channels by Dr J. KOURIE with Dr D.R. Brown (UK).

Computational studies involving the modelling of oxo-, carboxylato- and peroxy-bridged Mn dimers by Dr R. STRANGER with Dr J.E. McGrady (University of York, United Kingdom).

High temperature phase equilibria, structure and kinetic studies relevant to ilmenite upgrading processes by Dr R. STRANGER with Dr I.E. Grey (CSIRO Division of Minerals, Clayton).

Density functional study of the effect of high-spin/low-spin equilibria on metal-metal bonding in binuclear  $d^3d^5$  complexes of Fe, Ru and Os by Dr R. STRANGER with Dr T. Lovell (The Scripps Research Institute, La Jolla, California) and Dr J.E. McGrady (University of York, United Kingdom).

Density functional study of nitro and nitrito isomers of Co, Cr, Ni, Zn and Cd complexes by Dr R. STRANGER with Dr M.A. Hitchman (University of Tasmania)

Density functional study of photoluminescent tetrahedral Au(I) phosphine complexes by Dr R. STRANGER with Dr G.F. Swiegers (CSIRO Division of Molecular Science, Clayton).

New antibiotics by Dr R. BARROW with T. Mukkur and M. Kotiw, University of Southern Queensland; S. Tomasi, University of Rennes, France; S. Bloor, Industrial Research Ltd., Lower Hutt, New Zealand.

## Department of Geology

Studies of sulfide mineralogy in volcanic rocks and peridotites from the Solomon Islands by Prof. R.J. ARCULUS with Dr C. Ballhaus, Max-Planck-Institut fuer Chemie, Mainz, Germany.

Age determinations for rocks of the Solomon Islands by Prof. R.J. ARCULUS with Prof. R.A. Duncan, Oregon State University, USA.

Studies of volcanic rock geochemistry from Honsu, Japan and Kamchatka by Prof. R.J. ARCULUS with Assoc. Prof. D.A. Gust, Queensland University of Technology, and Dr A.B. Kersting, Lawrence Livermore, USA.

Age determinations of granitoids of New England by Prof. R.J. ARCULUS with Dr M. Cosca, Université du Lausanne, Switzerland.



Redox controls on determining ore element ratios in intrusion-related mineralisation by Dr P.L. BLEVIN with Prof. P.A. Candela, University of Maryland, USA.

Textural and chemical evidence for the exsolution and transport of volatiles in felsic magmas by Dr P.L. BLEVIN with Prof. P.A. Candela, University of Maryland, USA.

Vertebrate fossils from Gogo by Prof. K.S.W. CAMPBELL and Dr R.E. BARWICK, with Dr P.A. Pridmore, LaTrobe University and Dr J. Long, Western Australian Museum.

Hot Dry Rock geothermal energy in the Hunter Valley by Dr P. CHOPRA and Dr D. WYBORN with Mr Carl Webber, Pacific Power, funded by Australian Greenhouse Office.

Gypsum cements in Cenozoic sediments in the Murray basin, South Australia, their age and origin. Honours project at the geology department University of Adelaide by D.R.J. CLARKE with Goran Kiasatpur, Dr Y. Bone, Adelaide University.

Geochemical study of the salinity and pollution of groundwater, surface waters in the Murray Basin, Renmark to Morgan, South Australia. Honours project at the Geology Department, University of Adelaide by Dr J.D.A. Clarke with Brett Thomas, Dr Y. Bone, Adelaide University.

Fossil whale bones in the Miocene Glenforslan Formation, Morgan, South Australia by Dr J.D.A. Clarke with Brett Thomas, Dr Y. Bone, Adelaide University.

Stratigraphy, sedimentology, and palaeoecology of Eocene spicular sediments in southern Western Australia by Dr J.D.A. Clarke with Dr P. Gammon, Dr Y. Bone, Adelaide University, Prof. N.P. James, Queens University, Ontario.

Prof. S.F. Cox, member, committee of the ACT Board of Secondary Studies which oversees Year 11/12 curricula in Earth Sciences.

Benthic ostracods from Kerguelen Plateau by Dr P. De DECKKER with Dr M. Ayress (UK) and Dr R. Benson, Smithsonian Institution, Washington D.C., USA.

The history of Saline Lakes from New Mexico by Dr P. De DECKKER with Dr R.M. Forester, US Geological Survey.

Quaternary palaeoceanography of the Tasman Sea by Dr P. De DECKKER with Dr S. Nees, GEOMAR, Kiel, Germany and Dr K. Swanson, University of Canterbury, New Zealand.

Past productivity levels in the eastern Indian Ocean by Dr P. De DECKKER with Prof. H. Okada, Hokkaido University and Dr O. Kawahata, Geological Survey of Japan.

The evolution of the warm pool in SE Asia by Dr P. De DECKKER with Dr S. Van der Kaars (Monash Univ),

Dr S Trollstra, University of Amsterdam and Dr F Grichard, CNRS, Paris.

Cooperative Research Centre for Landscape Evolution and Mineral Exploration by Prof. R.A. EGGLETON with Geoscience Australia, the University of Canberra, CSIRO Exploration and Mining.

Cooperative Research Centre for Landscape, Environments and Mineral Exploration by Prof. R.A. EGGLETON with Geoscience Australia, the University of Canberra, CSIRO Exploration and Mining, Curtin University, Primary Industries South Australia, NSW Dept of Mineral Resources, University of Adelaide, AMIRA.

Prof. R.A. EGGLETON, Centre for Australian Regolith Studies, with University of Canberra.

Palaeobiogeography of the Carboniferous biota of Australasia by Dr P.J. JONES with A/Prof. I. Metcalfe, University of New England, A/Prof. B.A. Engel, University of Newcastle, Prof. J. Roberts, University of NSW, Prof. G. Playford, University of Queensland, Dr S. Turner, Queensland Museum, and Dr G. Webb, University of Queensland.

Magnetostratigraphic and biostratigraphic correlation of the base of the Kiaman Reversed Superchron in Nova Scotia, Canada and the northern Tamworth Belt, NSW by Dr P.J. JONES with Prof. N.D. Opdyke, University of Florida, Prof. E. Irving, Geological Survey of Canada, Vancouver, Dr J. Clauoué-Long, AGSO, and Prof. J. Roberts, University of NSW.

Taxonomy of new Carboniferous (Namurian) glaciomarine ostracods from Patagonia, Argentina by Dr P.J. JONES with P. Diaz Saravia, Fundacion Miguel Lillo, Tucuman, Argentina.

Revision of the Carboniferous and Permian Leioidea (Branchiopoda; Conchostraca) from Australia by Dr P.J. JONES with Prof. Chen Pei-ji, Nanjing Institute of Geology and Palaeontology.

Taxonomic comparison of Early Carboniferous (Tournaisian) ostracods from the Bonaparte Basin, northwestern Australia with those from Belgium by Dr P.J. JONES with Dr Michel Coen, Université de Louvain-la-Neuve, Belgium.

Taxonomy of Late Permian (Kazanian?) ostracods and palynomorphs from the Petrel Sub-basin, Bonaparte Basin by Dr P.J. JONES with Dr C.B. Foster, AGSO.

Quaternary history of the Australian monsoon and megafaunal extinctions by Dr J.W. MAGEE with Prof. G.H. Miller (Univ Colorado, Bolder) and Dr B. Johnson (Bates College, Maine) and Dr M. Fogel (Carnegie Institute, Washington D.C.).

Quaternary history of the Lake Eyre Basin by Dr J.W. MAGEE with Dr R.H. Tedford (American Museum of Natural History, New York), and Dr R. Wells (Flinders University/Australian Museum).

Quaternary geochronology and megafaunal extinction at Lake Callabonna, SA by Dr J.W. MAGEE with Dr T. Flannery (SA Museum) and Dr R.G. Roberts (Wollongong University).

Age and correlation of Middle Palaeozoic microvertebrate assemblages from eastern Australia and Antarctica by Dr G.C. YOUNG with Dr S Turner (Queensland Museum), with Dr J.A. Long, W.A. Museum, C. Burrow, University of Queensland, and A. Basden, Macquarie University.

Palaeobiogeography of Australasian faunas and floras by Dr G.C. YOUNG with Prof. A.J. Wright, University of Wollongong, and Prof. J.A. Talent, Macquarie University.

Study of Devonian placoderms from the Urals by Dr G.C. YOUNG with Dr E Mark-Kurik, Institute of Geology, Estonian Academy of Sciences, Tallinn, Estonia).

Biostratigraphy and biogeography of vertebrate faunas of Gondwana and Euramerica across the Frasnian-Famennian boundary (Late Devonian) by Dr G.C. YOUNG with Prof. H.-P. Schultze (Humboldt Museum, Berlin).

Description of Middle-Late Devonian fish fauna from Sierra de Perija, western Venezuela by Dr G.C. YOUNG with Dr J. Moody (University of Zulia, Maracaibo, Venezuela), and Dr J. Casas (Maraven, Caracas, Venezuela).

Description, age and international correlation of Devonian vertebrate assemblages from the Darling Basin (western NSW) and Georgina Basin (Qld-NT) by Dr G.C. YOUNG with Prof. D. Goujet (Museum National d'Histoire Naturelle, Paris).

Study and comparison of Burrinjuck (NSW) Early Devonian placoderm assemblages with new faunas from Morocco and Saudi Arabia by Dr G.C. YOUNG with Dr H. Lelievre (Museum National d'Histoire Naturelle, Paris).

## Department of Physics

All departmental staff involved with ACT Careers Market, Open Day, Science Festival, NYSF, Physics Olympiad, Schools Visits

Questacon public lecture on Einstein by C.M. SAVAGE, Chief Examiner, Australian Physics Olympiad

In the area of quantum communication with continuous variables, H.A. BACHOR elected with P.K. LAM as official members of QUICOV, a research network funded by the European community.

Press releases on BEC leading to radio interviews around the country and newspaper articles by J.D. CLOSE.

J.D. CLOSE spoke at two local high schools, was involved with the national youth science forum; attended

and contributed to five meetings at Questacon regarding their photonics promotion; gave an AIP talk that was attended by several school teachers.

D.E. McCLELLAND, president, Australasian Society for General Relativity and Gravitation; organiser and chair, Scientific Advisory Committee, Amaldi Conference

S.M. SCOTT, associate editor, *Journal of Classical and Quantum Gravity*

## School of Biochemistry and Molecular Biology

The characterisation of ligands for human NK cell surface molecules on endothelial cells by Dr J. ALTIN with Dr H.S. Warren, Cancer Research Unit, Royal Canberra Hospital, Canberra ACT.

Characterising the interaction between HRG and the bacterial protein autolysin (from *Actinobacillus actinomycetemcomitans*) to better elucidate the molecular mechanism(s) leading to pathology in oral gum disease by Dr J. ALTIN with Prof. B. Henderson, Cellular Microbiology Research Group, Eastman Dental Institute for Oral Health Care Sciences, London, UK.

Molecular biology of nematodes by Dr C BEHM with Dr W.N. Grant, Molecular Parasitology, AgResearch, Upper Hutt, New Zealand; Dr S. Trowell, CSIRO Division of Entomology.

The electrophysiological characterisation of brain glutamine transporters by Dr S BRÖER with Prof. Lang, University of Tübingen, Germany.

Expression of glutamine transporters in the aging brain by Dr S BRÖER with Dr N. Brookes, University of Maryland, Baltimore.

Structure-function analysis of monocarboxylate transporters by Dr S BRÖER with Prof. J.W. Deitmer, University of Kaiserslautern.

Is NO production a feature of severe malaria by Prof. I. CLARK with Dr T Taylor and Dr M Molyneux.

Immunohistochemical staining for iNOS, nitrotyrosine (a footprint for NO generation and degree of permeation) and MIF (the endogenous antagonist to glucocorticoids) by Dr I. CLARK with Queen Elizabeth Central Hospital, Blantyre, Malawi.

Heart muscle injury in malaria by Dr I. CLARK with Dr R. Bellomo at Austin Hospital, Melbourne.

Structure, function and regulation of ammonium transporters by Dr S. HOWITT with Dr M. Udvardi, Max Planck Institute of Molecular Plant Physiology, Germany; Dr P. Ryan, CSIRO, Division of Plant Industry, Canberra; Dr J. Whelan, Biochemistry Department, University of Western Australia.

Studies of milk proteins in the tammar wallaby by Dr P. JANSSENS with Dr Kevin Nicholas of the Victorian Institute of Animal Science.

Nuclear receptors in corals by Dr P JANSSENS with Ms L. Grasso.

Studies on fox testis proteins by Dr P JANSSENS with Drs Jianwei Xu, Peter Bird, Mark Bradley and Chris Hardy of the CRC for Pest Animal Control Osmoregulation in parasitic protozoa by Prof. K Kirk with Dr G. Biagini and Assoc Prof. M. Edwards, School of Biochemistry and Molecular Genetics, UNSW.

The molecular basis of antimalarial drug resistance by Prof. K. KIRK with Dr A.F. Cowman and Dr M. Reed, Walter and Eliza Hall Institute for Medical Research.

Transport of cations in the malaria-infected erythrocyte by Prof. K KIRK with Dr H.M. Staines and Prof. J. C. Ellory, University Laboratory of Physiology, University of Oxford.

Control of pH in the digestive vacuole of the malaria parasite by Prof. K. KIRK with Dr P. Bray and Dr S.A. Ward, School of Tropical Medicine, University of Liverpool.

Effects of prenatal hypoxia on cardiorespiratory control in juveniles by Dr Rosemary Martin with Dr D. Megirian.

Detection of somatic hypermutation in vitro by Dr H. O'NEILL with Dr C.J. Jolly, Centenary Institute, Sydney.

Regulation of carotenoid biosynthesis and chloroplast development by Dr B. POGSON with Dr H. Park, A. Cuttriss, and D. Della Penna, Michigan State University.

Genomics of abiotic stress and oxidative damage by Dr B. POGSON with B. Rossel, Drs I. Wilson and L. Dennis, CSIRO Plant Industry, Dr P. Mullineaux, John Innes Inst., U.K.

Dr G. SMITH with Prof. M. Tredici, Dipartimento di Biotecnologie Agrarie Università degli Studi di Firenze P.le delle Cascine, 27 50144 — Firenze.

The structural determination of the soluble extracellular domains of the nicotinic acetylcholine by Dr Louise TIERNEY with Dr Unwin at the MRC — Laboratory of Molecular Biology, Cambridge, UK.

The structural determination of the binding domains of a number of neurotransmitter-gated ion channels, aimed at identifying residues which impart ligand specificity. collaboration by Dr Louise TIERNEY with Dr Stowell from the MRC — Laboratory of Molecular Biology, Cambridge, UK.

Shigella O-antigen modification by Dr N. VERMA with Dr A. Weintraub, Karolinska Institute, Sweden.

Shigella and Enterohaemorrhagic E. coli by Dr N. VERMA with Prof. C. Sasakawa, University of Tokyo, Japan.

Generation and characterisation of monoclonal antibodies against Barmah Forest virus by Dr R. WEIR with L. Hueston, Centre for Infectious Diseases and

Microbiology, Institute for Clinical Pathology and Medical Research, Westmead Hospital.

Characterisation of epitopes for virus-neutralising monoclonal antibodies to Ross River virus using phage-displayed random peptide libraries by Dr R. WEIR with Dr Janet Davies, Department of Allergy, Asthma and Clinical Immunology, Monash Medical School, Melbourne.

## **School of Botany and Zoology**

Avian endocrinology Andrew COCKBURN by with Dr Lee Astheimer (University of Wollongong).

Theoretical basis of mate choice and cooperative breeding by Andrew COCKBURN with Dr Hanna Kokko (University of Glasgow).

Phylogeny and evolution of galling in scale insects by Lyn COOK with Prof. Penny Gullan (University of California, Davis).

Phylogeny of Chironomidae (Diptera) by Lyn COOK with Prof. Peter Cranston (University of California, Davis).

Systematics of the Australian legume group Mirbelieae and Bossiaeeae by Mike CRISP with Dr Jenny Chappill (University of Western Australia), and with Drs Rogier de Kok and Randy Bayer (Centre for Plant Biodiversity Research, CSIRO).

Collaboration by William FOLEY with Dr Denise Dearing (University of Utah); Dr Jonathan Gershenzon (Max Planck Institute for Chemical Ecology); Dr Alan Duncan (Macaulay Institute For Landuse Research); Dr Ian Payton (Landcare Research Lincoln NZ); Dr Andrew Krockenberger, Dr Chris Johnson, Dr Ivan Lawler (James Cook); Dr Clare McArthur, Dr Stuart McLean (University of Tasmania); Dr Joe Brophy (University of NSW); Dr Peter Waterman (Southern Cross University); Dr Paul Else (University of Wollongong); and Dr Rob Floyd (CSIRO Canberra).

Evolution and ecology of colicins by David GORDON with colleagues at Yale University.

Evolution of virulence in *Escherichia coli* by David GORDON with Minnesota State University.

Thermal niche and adaptation in *Escherichia coli* by David GORDON University of California, Irvine.

Fieldwork on fossil corals in Papua New Guinea by Michael JENNIONS with Dr John Pandolfi (Smithsonian, USA).

On-going collaborations by Michael JENNIONS with Anders Møller (France), Clint Kelly (Canada), Marion Petrie (UK), Manuel Velez (U.S.A.), Rob Brooks (UNSW, Australia) and John Hunt (UNSW, Australia).

The health status of Tasmanian devils, as measured by hormone levels, pathogens and parasites by Menna JONES with Dr Bradley (University of Queensland)

and Drs Bettiol, Jones and Woods (University of Tasmania).

Molecular phylogenetics of tiger snakes by Scott KEOGH with Dr Steve Donnellan and Dr Mark Hutchinson of the South Australian Museum.

Higher level molecular studies of elapid snakes by Scott KEOGH with Dr Joe Slowinski, the California Academy of Sciences.

Studies of the ecology and natural history of African elapid snakes by Scott KEOGH with Prof. Richard Shine, University of Sydney and Dr Bill Branch, Port Elizabeth Museum, South Africa.

Behavioural ecology projects on South African flat lizards by Scott KEOGH with Dr Martin Whiting, University of Witwatersrand, South Africa.

Evolution of chick begging signals and brood parasitism in the UK and Australia by Naomi LANGMORE with Drs Kilner (Cambridge University) and Hunt (Bristol University).

Research on bird behaviour and ecology by Rob MAGRATH with Drs Andy Horn and Marty Leonard (Dalhousie University, Canada), Prof. Tore Slagsvold (University of Oslo, Norway) and Mr Golo Maurer (University of Bonn, Germany).

Development of an effective commercial biological control inoculum against the take-all root rotting fungal disease of wheat using genetic engineering by Murali NAYUDU with funding from GRDC and other sources.

Collaborative research by Adrienne NICOTRA with colleagues at CSIRO Entomology and Plant Industry, RSBS, and the University of Connecticut.

Research on ecological and physiological characteristics of widespread and narrowly distributed species by Adrienne NICOTRA with Dr Brad Murray (CSIRO Plant Industry).

Collaborative research by Dr Rod PEAKALL with Prof. Peter Smouse, Rutgers University, USA; Dr Bob Lacy, Chicago Zoological Society, USA; Dr Florian Schiestl, Geobotanical Institute, Zurich, Switzerland; Dr James Robertson, Forensics, Australian Federal Police, Canberra; Mr Peter Smith, Department of Land and Water Conservation of NSW (DLWC); Drs Tina Maguire and Leon Scott, Queensland University, Brisbane, Qld; Dr Col Bower, Orchid Research, Orange, NSW; Dr Peter Saenger, Southern Cross University, Lismore, NSW; Dr Cathy Offord, Mt Annan Botanic Gardens, Mt Annan, NSW; Dr Mike Ramsey, University of New England, NSW.

Speciation and evolution of onychophora and conservation of forest invertebrates by David ROWELL with Dr N.N. Tait (Macquarie), Matt Rockman (Duke) and Dr Paul Sunnucks (LaTrobe). Large ARC for 2002 with Sunnucks.

Developing new phylogenetic methods by John TRUEEMAN with Dan Faith (Australian Museum), includes a project with Dan Faith and David Swofford (Florida State University) to evaluate Profile Parsimony, a new objective function for phylogenetic tree estimation.

Work on the philosophical basis of phylogenetics (major paper in Systematic Biology by John TRUEEMAN.

Latest paper an eDebate paper in Science, February 2002 and on a variety of permutation tests for hypotheses of monophyly and nonmonophyly under various tree search methods.

Collaborations by John TRUEEMAN with CSIRO Entomology including 2 jointly supervised PhD students: Mark Short, working on parasitic Hymenoptera to control infestations of Autumn Gum Moth in eucalypt plantations (CRC for Sustainable Forest Development is also involved in this project); Andreas Zwick, from Germany, to be studying a group of Australian endemic moths.

Collaboration by John TRUEEMAN with CSIRO Entomology (Brisbane) on phylogenetics of whitefly. Chris Palmer, working on the biology, distribution, ecology and phylogenetics of the Apteropanorpidae, a family of rare, wingless scorpion flies.

SPIRT funded project: 'Development and application of powerful new DNA tools for investigative forensics and agricultural utilisation in Cannabis sativa' by Dr Rod PEAKALL and PhD student Mr Simon GILMORE with the Australian Federal Police, Canberra Institute of Technology and Australian Hemp Resource and Manufacture Pty Ltd.

SPIRT funded project: 'Application of new DNA tools to quantify animal dispersal in fragmented landscapes: practical implications for biodiversity conservation and landscape restoration' by Dr Rod PEAKALL with Dr David LINDENMAYER, Centre for Resources and Environmental Management with Mr Peter Smith, Department of Land and Water Conservation of NSW and Dr Bob Lacy, Chicago Zoological Society.

## School of Psychology

Prof. John TURNER, chief investigator on two Large ARC Grants 'The role of individual and group factors in prejudice' (with Dr Katherine Reynolds and Prof. Alex Haslam) and 'Social identity processes in groups and organisations: Issues of leadership and power' (with Dr Katherine Reynolds). Prof. Turner's research grants involve both national and international collaborations, currently working with Prof. Alex Haslam, University of Exeter, UK; Dr John Duckitt, University of Auckland; New Zealand; Dr Michael Platow, LaTrobe University, Melbourne; and Prof. Tom Tyler, New York University, USA.

Effect of optic nerve pressure lesions on properties of retinal ganglion cells and their axons by Prof. William

LEVICK with Prof. W. Burke, Department of Anatomy, University of Sydney.

Joint research project by Mr Bernd HEUBECK, honorary adviser to a Sydney Positive Parenting Program, investigating experiences in the parent role as well as changes after completing a PPP training course.

### **School of Resources, Environment & Society**

Evaluation of soil organic matter as a meaningful indicator of important soil properties and processes in native forest ecosystems by Dr J. BAUHUS with Dr P. K. Khanna, CSIRO F&FP, Dr P. Hopmans, Centre for Forest Tree Technology, and Dr C. Weston, Univ Melbourne.

Private native forest management in the Eden region of NSW by Dr J. BAUHUS and P. DEANE with L. Maud, South-East NSW Private Forestry.

Modelling change in forest soil carbon by Dr J. BAUHUS with Dr P. Polglase and Dr K. Paul, CSIRO Forestry and Forest Products.

Decomposition of coarse woody debris in Australian native forests by E. WEBBER and Dr J. BAUHUS with CRC Greenhouse Accounting and Dr D. Hilbert, CSIRO Sustainable Ecosystems.

Above-ground interactions and productivity in mixed-species plantations of *Acacia mearnsii* and *Eucalyptus globulus* by A. VAN WINDEN and Dr J. BAUHUS with CRC Greenhouse Accounting.

Soil organic C sequestration in mixed and pure plantations of *Acacia* and *Eucalyptus* by A. PARES and Dr J. BAUHUS with CSIRO Forestry and Forest Products and Dr P. K. Khanna, Institute of Soil Science and Forest Nutrition, University of Göttingen.

Dynamics of mixed-species plantations by D. FORRESTER and Dr J. BAUHUS with CRC Greenhouse Accounting and Dr A. Cowie, State Forests of NSW.

Modelling crown rise in *Eucalyptus grandis* by T. KLOOTWIJK, Dr R. JAMES and Dr J. BAUHUS with Dr G. Smith and Dr K. Montagu, State Forests of NSW.

Forest and Woodland Structure as an index of biodiversity by C.M. MCELHINNY and Dr J. BAUHUS with Dr P. Gibbons, NSW National Parks and Wildlife Service.

Nutrient dynamics in coarse woody debris of European beech by Dr J. BAUHUS with Dr N. Bartsch, Institute of Silviculture, University of Göttingen.

Dynamics of forest floor soil C and N pools following gap creation and liming in a European beech forest by Dr J. BAUHUS with Dr N. Bartsch and Dr T. Vor, Institute of Silviculture, University of Göttingen.

Organic P in Australian forest soils by C. O'HARA and Dr J. BAUHUS with Dr P.K. Khanna and Dr J. Raison, CSIRO F&FP.

Assessment of the role of earthworms in maintaining biological soil fertility in wet eucalypt forest ecosystems by S. EMMETT and Dr J. BAUHUS with Forestry Tasmania, Centre for Forest Tree Technology and CSIRO Forestry and Forest Products.

Silvicultural implications of changing stand structures in White Cypress Pine by Dr J. BAUHUS with A. Deane, State Forests of NSW.

Regeneration and growth of *E. obliqua* following a range of harvesting systems by Dr J. BAUHUS with M. Neyland and J. Hickey, Forestry Tasmania.

Prediction and inventory of carbon sequestration and biomass change on a spatial and temporal basis at a variety of scales by Dr C. BRACK, Dr G. RICHARDS (visiting fellow) and the Australian Greenhouse Office.

Implementing an Australian fire regime model in a northern Rocky Mountain Ecosystem by Dr G. CARY with Dr Bob Keane, USDA forest service.

Dr G. CARY, co-leader, GCTE Task 2.2.2 (Relationships between Global Change and Fire Effects at Landscape) who continued their research on landscape fire model comparisons during 2001.

Collaborative research on aeolian dust by Dr R. GREENE with a) staff from the United States Department of Agriculture and University of Nebraska, Lincoln, and b) staff from the CRC for Landscape Environments and Mineral Exploration.

Collaborative research by Dr R. GREENE with Dr P. Hocking from the CSIRO Division of Plant Industry on "P release from strongly fixing krasnozem soils".

SRES is a significant partner in the CRC for Greenhouse Accounting, with Dr B. MACKEY as Leader of the research project "Ecosystem Vulnerability to Change".

Collection and analysis of data concerning the rise of "Green Crown" levels in plantation grown Flooded Gum by an Honours student T. KLOOTWIJK with the Northern Research Station of State Forests of NSW, jointly supervised by Dr Geoff Smith of SF-NSW and Dr R. JAMES of SRES.

A description of the specifications used in Australia to describe log grades. A project carried out in conjunction with the Joint Venture Agroforestry Project by Dr R.N. James.

Inheritance of wood properties in Slash x Caribbean Pine hybrids, by D.P. KAIN with Prof. P.J. KANOWSKI; Dr P.D. EVANS; Dr M.J. Dieters, Queensland Forestry Research Institute; Dr K.J. Harding, Queensland Forestry Research Institute.

The relationship between inbreeding and growth in radiata pine by S. PATON, with Prof. P.J. KANOWSKI; Dr G. Moran, CSIRO Forestry and Forest Products.

Conservation genetics of the endangered shrub *Grevillia isapicula*, by S. HOBEE, with Prof. P.J. KANOWSKI; Dr R. Macgrath, School of Botany and Zoology; Dr A. Young, CSIRO Centre for Plant Biodiversity Research.

Dr B. MACKEY is collaborating with a global network of colleagues in developing educational curriculum based on the Earth Charter, including Prof. Aberlardo Brenes, United Nations University for Peace, Prof. Ed O'Sullivan, University of Toronto, and colleagues at the Paulo Freire Institute, Brazil.

Carbon offsets in forest plantations by Dr S. MAHENDRARAJAH with Prof. E. Wilman, University of Calgary.

Valuation of environmental resources under distorted factor markets by Dr S. MAHENDRARAJAH with Prof. D.J. Thampapillai, Graduate School of the Environment, Macquarie University.

Reclaiming the tree of life — coconut in the South Pacific by Dr S. MAHENDRARAJAH with Dr D.M. Etherington, Kokonut Pacific Pty Ltd, Hawker ACT. Paper presented at the conference 'The Future of Perennial Crops Investment and Sustainability in the Humid Tropics', Yamoussoukro, Cote d'Ivoire.

Review of the potential for a social forestry course in PNG by Dr D. RACE for the Australian Centre for International Agricultural Research (ACIAR).

Evaluation of Stage 2 of the Farm Forestry Support project by Dr D. RACE and Dr Martin Andrew (URS Corp) for Agriculture, Fisheries & Forestry — Australia (AFFA) and Greening Australia Ltd.

Conducted a workshop on community participation in forestry by Dr M. BUCHY and Dr D. RACE for ANUTECH's PNG Human Resource Development in Forestry.

Reviewed leading farm forestry case studies for lessons on marketing by Dr D. RACE for the Joint Venture Agroforestry Program.

Developed the National Graduate Program in Farm Forestry for distance education by Dr J. BAUHUS, Dr C. BRACK, Dr J. FIELD, Prof. P. KANOWSKI, Dr DRACE. Dr C. TIDEMANN with Environment Australia.

Long-distance flying-fox movements by Dr C.R. TIDEMANN with Dr J.E. Nelson of Monash University and another on flying-fox population demography with Dr M.J. Vardon, Australian Bureau of Statistics and Dr G.M. O'Brien, University of New England.

Impacts of removal of pest birds from nature reserves by Dr C.R. TIDEMANN and Mr M. Moncur with Dr D. Shorthouse, Environment ACT.

Investigation of factors affecting marsupial roadkill to inform mitigation by Dr C.R. TIDEMANN with honours student Mr B. BROWN with Mr T. McCoy, NSW Roads and Traffic Authority and Mr W. Allen, NSW National Parks and Wildlife Service

Strategic forest planning models using control theory approaches by Dr B. TURNER with Dr O. Chikumbo, The Swedish University of Agricultural Sciences.

Evaluation of data and methods for estimating the sustainable yield of sawlogs in Victoria by Dr B. TURNER with Prof. J. Vanclay, Southern Cross University.

## **Integrated Catchment Assessment and Management**

iCAM staff were centrally involved with the organisation of the International Congress on Modelling and Simulation which was held in Canberra in December 2001 and attracted 370 participants. Prof. JAKEMAN, and PhD student Juliet GILMOUR are President and Treasurer of the associated society, The Modelling and Simulation Society of Australia and New Zealand (MSSANZ Inc.). Susan Kelo, iCAM's half-time administrative assistant, undertook much of the administrative work.

iCAM works closely with CSIRO Divisions of Information and Mathematical Sciences, and Land and Water and the CRC for Catchment Hydrology and has good working relationships with ACT EPA, NSW EPA and DLWC.

## **University Schools and Centres**

### **Asia-Pacific School of Economics and Management**

Water allocation in the Fitzroy River by Jeff BENNETT with John Rolfe, Central Queensland University, Emerald.

Environmental values of rivers in NSW by Jeff BENNETT with Mark Morrison, Charles Sturt University, Bathurst.

Urban Water supply economics, by Jeff BENNETT with Darla Hatton, CSIRO, Adelaide.

Forest values by Jeff BENNETT with Steve Harrison, University of Queensland, Brisbane.

Consumer reaction to GMO foods by Jeff BENNETT with John Rolfe, Central Queensland University, Rockhampton.

Kiribati update by Ron DUNCAN, Maree TAIT and Debra GROGAN with Terry DWYER, ANU, Canber-

ra; Bureti Williams, Ministry of Finance and Economic Planning, Kiribati; Teuea TOATU, ANU, Canberra; Uriam Timiti, University of the South Pacific, Kiribati; Tukabu Tauati, Ministry of Finance and Economic Planning, Kiribati; Peter Tong, Ministry of Finance and Economic Planning, Kiribati; Elizabeth PETERSEN, ANU, Canberra.

Pacific update — Canberra and Brisbane by Ron DUNCAN, Maree TAIT and Debra GROGAN with David Throsby, Macquarie University; Tony Deklin, University of Canberra; Teuea TOATU, ANU, Canberra; Elaine Chanter, University of Canberra; Leigh Harkness, ACTEW AGL, Canberra; Desh Gupta, School of University of Canberra; Paul Kringas, University of Canberra; Amaramo Sialao, KVA Consult, Apia; Terry DWYER, ANU, Canberra; Desmond Amosa, University of Canberra; John Halligan, University of Canberra; Leiataua Dr Kilifoti S. Eteuati, Samoan High Commissioner to Australia; Ben REILLY, ANU, Canberra; Clem Tisdell, University of Queensland; Robert Scollay, APEC Study Centre, Auckland; John Conroy, The Foundation for Development Cooperation; Anthony Van Fossen, Griffith University.

Tonga update by Ron DUNCAN, Maree TAIT and Debra GROGAN with Leigh Harkness, Buoyant Economics and ACTEW Corporation, Canberra; Utoikamanu Tupou, National Reserve Bank of Tonga; Satish CHAND, ANU, Canberra; Paula Lavulo, Director of Central Planning, Tonga; Terry DWYER, ANU, Canberra; Viliami Liava'a, Central Planning Department, Tonga; Seini Fili'ai, Bureau of Statistics, Tonga; Tuotuoatasi Fakafanua, Minister for Education, Tonga; 'Eseta Fusitu'a, Cabinet Secretary, Tonga.

Samoa update by Ron DUNCAN, Maree TAIT and Debra GROGAN with Afioga Misa Telefoni Retzlaff, Deputy Prime Minister and Minister for Finance, Samoa; Rosita Lafi-Esera, National University of Samoa; Amaramo Sialao, KVA Consult; Iosefo Bourne, Central Bank of Samoa; Satish CHAND, ANU, Canberra; Terry DWYER, ANU, Canberra; Iulai Lavea, Treasury Department, Samoa; Erna Va'ai, Central Bank of Samoa; Puni Punivalu, National University of Samoa; Afioga Lemalu Tate Simi, Labour Department of Samoa; Herman Retzlaff, National University of Samoa; Afioga Nanai Tanielu Su'a, Fisheries Department, Samoa; Elizabeth PETERSEN, ANU, Canberra.

Papua New Guinea Update — Goroka, Port Moresby, Townsville and Canberra by Ron DUNCAN, Maree TAIT and Debra GROGAN with Michael Baxter, AusAID, Canberra; Glenn Banks, ANU, Canberra; Peter Lamour, ANU, Canberra; Sinclair Dinnen; Bryant Allen; Sue Crockett, AusAID, Canberra; Felix Babilis, University of Goroka, PNG; Chris Anders, Goroka Chamber of Commerce, PNG; David Lea, University of Papua New Guinea; Mel Togolo, Placer Niugini, PNG; Tony Williamson, Department of Mining and

Petroleum, PNG; Jerry Semos, University of Goroka, PNG; Gerald Saleu, Institute of Medical Research, PNG; Euan Fleming, University of New England Chris Gimbol, CIC, PNG; Ben REILLY, ANU, Canberra; Mike Manning, Institute of National Affairs, PNG; Api Maha, University of Goroka, PNG; Tang Rabuni, University of Goroka, PNG; Robert Aisi, Business Council of PNG; Elizabeth PETERSEN, ANU, Canberra; Ronald Kuk, National Fisheries Authority, PNG; Mel Togolo, Placer Niugini; Euan Fleming University of New England, Armidale; David Lea, University of Papua New Guinea, Ben Reilly, ANU, Canberra; John Nonggor, University of Papua New Guinea; Maxine Pitts; Barrie Lovett, Townsville Enterprise; David King, James Cook University; Su Bandaranaikae, James Cook University; Rosemary Omundsen, PNG Investment Promotion Authority.

Regional financial arrangements in East Asia by Gordon de BROUWER and Peter DRYSDALE with Haruhiko Kuroda, Ministry of Finance, Tokyo; Takatoshi Ito, Hitotsubashi University, Tokyo; Charles Adams, East Office, IMF, Tokyo; Yunyong Wang, Korea Institute for International Economic Policy, Seoul; Eiji Ogawa, Hitotsubashi University, Tokyo; Ramkishan Rajan, University of Adelaide; Bob Rankin and Stephen Grenville, Reserve Bank of Australia, Sydney; Jean Pisani-Ferry, Conseil d'Analyse Economique, Paris; Latifah Merican Cheong, Central Bank of Malaysia, Kuala Lumpur; Martin Parkinson, Department of Treasury, Canberra; Naoyuki Yoshino, Keio University, Tokyo; Junichi Goto, Kobe University; Jim Rollo, University of Sussex; Ted Evans, Canberra; Anwar Nasution, Bank of Indonesia, Jakarta; Michael McKenzie, RMIT, Melbourne.

Regional financial markets and centres by Gordon de BROUWER and Peter DRYSDALE, with Bill Alexander, IMF, Washington; Charles Adams, IMF, Tokyo; John Edwards, HSBC Group, Sydney; Bob Rankin and Stephen Grenville, Reserve Bank of Australia, Sydney; Shinichi Yoshikuni, Bank for International Settlements, Hong Kong; Alison Tarditi, BT Funds Management, Sydney; Les Hosking, AXISS, Sydney; Yeo Lian Sim, Monetary Authority of Singapore; Tadahiro Asami, Institute for International Monetary Affairs, Tokyo; Pakorn Vichyanond, Thailand Development Research Institute, Bangkok; Kevin Davis, University of Melbourne; Menzie Chinn, University of California, Santa Cruz; Shinji Takagi, Osaka University; Simon Ogus, DSGASia, Hong Kong; Werner Studener, European Central Bank, Frankfurt; Pisit Leeahtam, Chulalongkorn University, Bangkok.

Japanese food market sector by Peter DRYSDALE with Ray TREWIN, Motoshige Itoh, University of Tokyo; Shujiro Urata, Waseda University, Tokyo; Ivan Roberts, ABARE, Canberra; Allan McKinnon, DFAT, Canberra; Jeff Davis, RIRDC, Canberra; Jim Kennedy, Supermarket to Asia, Canberra.

Regional trading arrangements by Peter DRYSDALE with Motoshige Itoh, University of Tokyo; Philippa Dee, Productivity Commission, Canberra; David Robertson, Productivity Commission, Melbourne; Pamela Fayle, DFAT, Canberra; Mari Pangestu, CSIS/ANU, Jakarta/ Canberra.

China's APEC agenda: Shanghai 2001 by Peter DRYSDALE with Yunling Zhang, APEC Studies Centre, Chinese Academy of Social Sciences, Beijing; Chen Luzhi, China Institute for International Studies, Beijing.

Australian, Japan and the region by Peter DRYSDALE and Christopher FINDLAY with Kenichi Ishigaki, Kobe University; Michael Plummer, Brandeis University, Tokyo; Masakazu Toyoda, Ministry of Trade, Economy and Industry, Tokyo; Andrew ELEK, ANU; Hiro Lee, Kobe University; Ligang SONG, ANU; Mari Pangestu, CSIS/ ANU, Jakarta/Canberra; Ipeei Yamazawa, Institute of Developing Economies, Tokyo; Akio Hosono, Kobe University; Junichi Goto, Kobe University; Eiji Ogawa, Hitotsobashi University, Tokyo; Hiroyuki Hino, IMF, Washington; Greg TAYLOR, ANU.

Agenda for Australia-Japan cooperation in East Asia by Peter DRYSDALE, Gordon de BROUWER and Christopher FINDLAY with Sadao Nagoka, Hitotsobashi University, Tokyo; Paul Kelly, *The Australian*, Sydney; Ken Waller, Commonwealth Bank of Australia, Melbourne; Henry Ergas, Network Economics Consulting Group, Canberra; Akira Kojima, Asahi Shimbun, Tokyo.

The new economy: challenges for East Asia and the Pacific by Peter DRYSDALE and Ross GARNAUT, with Hugh Patrick, Columbia University, New York; Richard Cooper, Harvard University, Boston; Yung Chul Park, Korea University, Seoul; Richard Lipsey, Simon Fraser University, British Columbia; Peter Petri, Brandeis University, Waltham; Frank Holmes, Victoria University, Wellington; Robert Crandall, Brookings Institute, Washington; Henry Ergas, Network Economics Consulting Group, Canberra; Wendy Dobson, University of Toronto; Fred Hilmer, Fairfax Holdings, Sydney; Shandre M Thangavelu, National University of Singapore; Zainal Aznam Yusof, Institute for Strategic and International Studies, Kuala Lumpur; Akira Kosaka, Osaka University; Vei-Lin Chan, Institute of Economics, Taipei; Shu Urata, Waseda University, Tokyo; Mari Pangestu, CSIS/ANU, Jakarta/ Canberra; Mangesh G Korgaonker, Indian Institute of Technology; Juan Palacios, University of Guadalajara; Yasunori Baba, University of Tokyo.

Ted Tschang, Singapore Management University; Hadi Soesastro, CSIS, Jakarta; Somkiat Tangkitvanich, Thailand Development Research Institute, Bangkok; Keith Maskus, World Bank, Washington; Allan Fels, ACCC, Melbourne; Mario Lamberte, Philippine Institute for Development Studies; John Rimme, National Office for the Information Economy, Canberra; Lew Evans, Victoria University, Wellington; Rohan PITCHFORD,

ANU, Canberra; Haryo Aswicahyono, CSIS, Jakarta; Donny Ardiyanto, CSIS, Jakarta; Christopher FINDLAY, ANU, Canberra; David Kennedy, National Office for the Information Economy, Canberra; Ralph Huenemann, Victoria University, Victoria, BC; Peter Forsyth, Monash University, Melbourne; Emmanuel C Lallana, ASEAN task force, Manila; Wisarn Puppaveisa, National Institute of Development Administration, Bangkok; Alexandra SIDORENKO, ANU, Canberra; Edsel Custodio, Philippine Ambassador to WTO, Geneva; Richard Snape, Productivity Commission, Melbourne.

Chia Siow Yue, Institute for South East Asian Studies, Singapore; Sung-Hoon Park, Korea University, Seoul.

New public policy paradigms by Michael HESS with David Adams, Department of Premier and Cabinet, Victoria, Melbourne.

Health and environment by Helen JAMES with Allan Cripps, University of Canberra, Canberra.

Law, governance and public sector reform in ASEAN by Helen JAMES with Allan Cripps, University of Canberra, Canberra.

Technology and society by Helen JAMES with M. Yahya, University Kebangsaan, Kuala Lumpur.

Public health, science and research by Helen JAMES with Myo Myint, Institute of Medicine Myanmar.

Urban water management and climate change by Meg KEEN with Chris Cocklin, Monash University, Melbourne and Richard Berk, UCLA, Los Angeles.

Fiji sugar industry: assessing international sugar market reforms and their impacts and defining appropriate responses by Padma LAL with Jenny Bellamy, CSIRO, Brisbane; Kalio Tavola, Sugar Commission of Fiji, Fiji; Mahendra Reddy, University of the South Pacific, Fiji; Inoke Ratukalou, Ministry of Agriculture, Forestry and Fisheries, Fiji; Keshwa Reddy, Ministry of Planning, Fiji; Mark Williams, Ministry of Lands, Fiji.

Welfare effects of closer economic relations between Latin America and Australia/New Zealand by Elizabeth PETERSEN with Rukmani Gounder, Massey University, New Zealand.

Greenhouse gas abatement issues in Australian agricultural systems by Elizabeth PETERSEN with Steven Schilizzi, University of Western Australia, Perth; David Bennett, Natural Resource Management Consultants, Perth.

Review of social surveying by Elizabeth PETERSEN with David Pannell, University of Western Australia, Perth.

Reducing regional disparities in China by Ligang SONG with the Institute of Finance and Trade Economics of the Chinese Academy of Social Sciences, China.



Asian Food demand by Ray TREWIN with Mark Rosegrant, IFPRI, Washington.

Agricultural domestic support and export subsidies by Ray TREWIN with Andy Stoeckel and Alastair Watson, Centre for International Economics, Canberra.

Review of the survey of regional trade impediments by Ray TREWIN with Bijit Bora, UNCTAD, Geneva.

Measuring technical and regulatory impediments by Ray TREWIN with Philippa Dee, Productivity Commission, Canberra.

## **Centre for Aboriginal Economic Policy Research**

CAEPR's core research partners are ATSIC and DFACS. A great deal of CAEPR research and policy advice collaboration is provided to officers of these departments.

Advice and supporting documentation by Jon ALTMAN to the Northern Land Council and the NT Bushfires Council on the Greenhouse Gas Abatement Program (Round 2 Proposal) 'The Arnhem Land fire abatement project'.

Advice and supporting documentation by Jon ALTMAN to ATSIC National Policy Office on Tangentyere Banking Trial.

Meeting with Maari Ma Health Aboriginal Corporation on the development of a joint research project by Jon ALTMAN, Bill ARTHUR, Maggie BRADY, Dale SUTHERLAND and John TAYLOR.

Mining and sustainable regional development project, discussions by Jon ALTMAN with Helen Cheney and Fiona Solomon, CSIRO Minerals, Social Values and Sustainability Group, Melbourne.

Discussions on potential Foundation underwriting of research at CAEPR from 2002 by Jon ALTMAN and Jerry SCHWAB with Andrew Brookes and David Adams, Colonial Foundation, Melbourne.

Advice by Jon ALTMAN to Maningrida Arts and Culture on Ozeculture Grant application for 2002 to develop e-commerce for the marketing and sale of Aboriginal art.

Advice to Murdi Paaki Regional Council on Indigenous health research proposal by Jon ALTMAN, Bill ARTHUR, Maggie BRADY, Frances PETERS-LITTLE, Diane SMITH and John TAYLOR.

Preparation and production of a flip-over resource for health professionals 'Talking about alcohol with Indigenous patients', with Professor Ernest Hunter for Department of Health and Aged Care and University of Queensland by Maggie BRADY.

Presentation of research report on 'Monitoring the long-term social and environmental effects of changes in alcohol availability in an Aboriginal community: A ten-year follow up study' by Joe Byrne, Maggie BRADY and Graham Henderson at Yalata and Ceduna, by Maggie BRADY.

Visit to alcohol rehabilitation residential program in Rockhampton, by Maggie BRADY.

Banking project by Siobhan McDONNELL with Colin Neave, Commonwealth Banking Ombudsman; Gordon Renouf, Australian Securities and Investment Commission (ASIC) consultant; Pia Di Mattina and members of the ACCC; and Christine Rowley, Banking Policy Officer, Consumer Legal Centre of Victoria.

Assistance by David MARTIN in redeveloping Australian Anthropological Society web site and shifting to ANU server; and redeveloping accounting and management systems.

Provision of advice and drafting of report sections for Fitzgerald enquiry into community justice and alcohol issues in Cape York by David MARTIN.

Advice to Commonwealth Interdepartmental Committee examining potential reform of the Prescribed Bodies Corporate regime under the NTA by David MARTIN.

Assisted in drafting terms of reference for a project to develop a framework for the Annual Report to Parliament on the educational performance of Indigenous students, Indigenous Education Branch, DETYA by Jerry SCHWAB.

Assisted in development of proposal for Jawoyn Association and Fred Hollows Foundation community literacy project, including scoping trip to Darwin and Katherine by Jerry SCHWAB and Dale SUTHERLAND.

John TAYLOR, participated in a consortium led by the VKHRCDU at the University of Melbourne to develop an ARC Linkage Project grant application for the purposes of constructing a historic database of the Victorian Aboriginal population.

John TAYLOR, consultancy for Parks Australia North division of Environment Australia on 'Population dynamics in the Mutitjulu community', projecting future growth to the year 2021.

John TAYLOR, consultancy for Rio Tinto on 'Implementing regional agreements: Issues for Aboriginal population projection in Rio Tinto mine hinterlands' with Martin Bell, University of Queensland.

## **Centre For Cross-Cultural Research**

Blue Mud Bay project by Professor Howard MORPHY (with Dr Nicholas Peterson and Dr Annie Clarke) with the Northern Land Council.

Renior and Algeria, art exhibition by Dr Roger BEN-JAMIN with The Sterling and Francine Clark Art Institute, Williamstown, Massachusetts, USA, Musee Fabre, Montpellier, France and Institut du Monde Arabe, Paris, France.

## **Centre for Educational Development and Academic Methods (CEDAM)**

DEST funded evaluations and investigations project: postdoctoral training and employment outcomes by Margot PEARSON.

Data collection on attitudes of ACT students to study and careers in science, engineering and technology by Pam ROBERTS, invited committee member, women from government, business and academia; responsible for the literature review for the study entitled: 'SET For Life: Listening to ACT student choices in science, engineering and technology' produced by the committee.

Careers review of engineering women: a study investigating women's retention in the Australian engineering workforce by Pam ROBERTS with Mary Ayre (University of SA) as principal researchers for the study commissioned by the National Women in Engineering Committee, Institution of Engineers Australia (IEAust) and sponsored by the Office of the Status of Women and engineering employers.

Developing a shared understanding of IT-supported learning environments, collaborative research by Chris TREVITT with University of Canberra and University of South Australia.

## **Centre for Mental Health Research**

### *Projects concerned with cognitive aging:*

Dr Scott Hofer, assistant professor, Human Development, Pennsylvania State University

Assoc. Prof. Andrew Mackinnon, Mental Health Research Institute of Victoria

Dr Tarja-Brita Robins-Wahlin, Stockholm Gerontology Research Center, Sweden.

Prof. Mary Luszcz, Flinders University of South Australia

Dr D. Grayson, CERA, Concord Hospital, Sydney, NSW.

Catherine Heal RN, clinical nurse consultant, Hornsby/Ku-ring-gai Hospital.

Alzheimer's Association of Australia.

ADARDS Nursing Home, Hobart

### *Projects concerned with social capital:*

Ms Lynette Russell, Eurobodalla Shire Council, Moruya (The Eurobodalla Study)

### *Projects concerned with psychiatric epidemiology:*

Dr M. Lynskey, lecturer, National Drug & Alcohol Research Centre, University of New South Wales, Sydney.

### *Projects concerned with genetic epidemiology:*

Prof. M. Prior, Dr A. Sanson, and Ms D. Smart, Department of Psychology, University of Melbourne.

### *Projects concerned with e-mental health policy development*

Prof. Gavin Andrews, director, Clinical Research Unit for Anxiety and Depression, University of New South Wales.

Mr Phillip Chynoweth, Marketing, TRANSACT Canberra

Mr Peter Conroy, chief executive officer, 110

Dr Michael Fotheringham, NHMRC Public Health research fellow, Anti-Cancer Council of Victoria, VicHealth Centre for Tobacco Control.

Dr David Hawking, Mathematical and Information Sciences Technologies for Electronic Documents Group, CSIRO

Prof. Ian Hickey, chief executive officer, Beyondblue

Mr Tony Hill, executive director, Internet Society of Australia.

Assoc. Prof. Justin Kenardy, Department of Psychology, University of Queensland

Prof. Ken Kirkby, Department of Psychiatry, University of Tasmania

Dr Nick Kowalenko, Child and Adolescent Psychiatrist, Northern Sydney Health Service.

Mr Chess Krawczyk, Approved Systems, Canberra

Dr Peter MacIsaac, Department of General Practise, Commonwealth Department of Health and Aged Care

Assoc. Prof. Andrew Mackinnon, Mental Health Research Institute of Victoria

Prof. Graham Martin, executive director, Australian Early Intervention Network, Flinders University

Mr Jonathan Nicholas, manager, ReachOUT!, member of the Board of Directors, Inspire Foundation.

Mr Mick O'Hara, Health Priorities Management, Commonwealth Department of Health and Aged Care

Mr John Payne, Primary and Co-ordinated Care, Commonwealth Department of Health and Aged Care

Ms Leanne Pethick, founder and manager, DepressioNet.com.au

Dr Judy Proudfoot, Institute of Psychiatry/Neurology, Gladesville Sydney

Prof. Jeff Richards, Department of Psychology, University of Ballarat

Ms Suzy Saw, National Action Plan for Depression, Commonwealth Department of Health and Aged Care.

Dr Stephen Rosenman, private psychiatrist, Canberra.

Dr Elizabeth Scott, director, SPHERE Depression Initiative.

Dr Dennis Tannenbaum, executive chair, InfraPsych, West Perth.

Prof. Peter Yellowlees, director, Centre for Online Health, Head of the Department of Psychiatry, University of Queensland

#### *Projects concerned with psychiatric services*

Dr R. Marshall, manager, Information and Performance Evaluation, Department of Human Services, Melbourne.

## **Humanities Research Centre**

The Consortium for Research and Information Outreach (CRIO) is a joint initiative of the CCR and HRC and seeks to partner with cultural institutions in Australia in order to make the results of research available to a broad range of people and groups in a variety of forms, but particularly through digital media technologies. The first of our partners is the National Museum of Australia (NMA), and we are currently in discussions with the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) with a view to their future membership.

The HRC organised and hosted a three day conference of the Consortium of Humanities Centres and Institutes of Australia which brought together the Directors of a number of Australian and New Zealand like bodies on the one hand and a number of international scholars on the other for the express purpose of furthering the humanities in the Antipodes.

The HRC also conducted the following joint conferences:

- The Libertine Enlightenment with the University of Queensland
- Adventures of Dialogue: Bakhtin and Benjamin with the ADFA
- The Importance of Italy with Griffith University
- Law and the Enlightenment: The British Imperial State at Law, 1689–1832 with University of Newcastle
- Foreign Bodies; Oceania and Racial Science (1750–1940) with RSPAS
- Spies and Surveillance in the Eighteenth Century with University of York, UK
- Modern Indonesian Art with the Asia Society Austral Asia Centre

The HRC was awarded an ARC Linkages Grant in collaboration with the National Museum of Australia for a research project on Asian Pacific museums.

## **National Centre for Epidemiology and Population Health**

Study of gender and diabetes by DOROTHY BROOM with Dr Andrea Whittaker, Melbourne University.

Study of working conditions and the health of workers' children by DOROTHY BROOM with Dr Julie McMillan, Australian Centre for Educational Research, and Dr Jennifer Bowes, Macquarie University.

Perceived influences upon Australian family formation decisions by Dr G.A. CARMICHAEL with Key Centre for Women's Health in Society, University of Melbourne

Risk and protective factors for adolescent alcohol use by ROBYN DAVIES with the Centre for Adolescent Health, Royal Children's Hospital, University of Melbourne, Victoria.

Cochrane collaboration acute respiratory infections group by Keith DEAR and Bob DOUGLAS with University of Queensland.

Work, family and health study by Jane DIXON, Dorothy BROOM and Lyndall STRAZDINS with immunologists from the University of Canberra.

The Australian Unity Wellbeing Index by Richard ECKERSLEY with Bob Cummins, Professor of Psychology at Deakin University, Julie Pallant, a statistician at Swinburne University, and Melanie Davern and RoseAnne Misajon, PhD students at Deakin University; sponsored by Australian Unity.

Revision of ICD-10-AM external causes coding by David MCDONALD for National Centre with Classification in Health, University of Sydney

WHO Global survey of the use of rapid assessment methods in connection with drug use by David MCDONALD with Centre for Research on Drugs and Health Behaviour, Imperial College, University of London

Climatic influences on food poisoning trends by Anthony McMICHAEL and Rennie D'SOUZA with the London School of Hygiene and Tropical Medicine.

Co-investigator in studies of climatic influences on Ross River virus disease by Anthony McMICHAEL with Queensland University of Technology, School of Public Health.

Studies of environmental influences on multiple sclerosis by Anthony McMICHAEL and Ane-Louise PONSONBY with the University of Tasmania, Menzies School of Population Health Research.

Risks and benefits of arsenic mitigation in Bangladesh by Wayne SMITH, Bruce CALDWELL, Geetha RANMUTHUGALA, Jack CALDWELL, Keith DEAR, Bob DOUGLAS, Kamalini LOKUGE, MD ABUL HASNAT MILTON with A/Professor Malcolm Sim,

Dr Martha Sinclair, and Dr Anthony Harris from the Department of Epidemiology and Preventive Medicine at Monash University, Dr Jack Ng and Professor Michale Moore from the National Research Centre for Environmental Toxicology at the University of Queensland, and Dr Md Abul Hasnat Milton from the NGO Forum for Drinking Water Supply and Sanitation in Dhaka, Bangladesh, Mitra and Associates — Bangladesh.

Skin irritant effects of blue green algae toxins by Geetha RANMUGHUGALA with the Australian Water Quality Centre and the Department of General Practice, Flinders University, Adelaide.

Accessibility of health and reproductive health in Dhaka slums by Bruce CALDWELL, Jack CALDWELL, Pat CALDWELL with Barkat-e-Khuda, International Centre for Diarrhoeal Research, Bangladesh (ICDDR,B) SN Mitra, Mitra and Associates, Dhaka and Indrani Pieris, Canberra.

## School of Mathematical Sciences

### Centre for Mathematics and its Applications

Expansion of immersed curves by B.H. ANDREWS with D.-H. Tsai and T.-C. Lin (NSTC, Taiwan).

Christoffel-Minkowski problems by B.H. ANDREWS with P.-F. Guan (McMaster, Canada) and X.-N. Ma (ECNU, China).

Revision of an introduction to the theory of point processes by D.J. DALEY with D. Vere-Jones (Victoria, NZ).

Long range dependence properties of point processes by D.J. DALEY with R. Vesilo (Macquarie).

Sub-exponentiality properties of network systems by D.J. DALEY with C. Kluppelberg (Munich, Germany) and A. Baltrūnas (Vilnius, Lithuania).

Heterogeneity in epidemic modelling by D.J. DALEY with J. Gani and F. Ball (Nottingham, UK).

Explaining historical measles epidemic data via simple models by D.J. DALEY with V. Isham (UCL, UK) and B. Grenfell (Cambridge, UK).

Estimation problems in simple queueing models by D.J. DALEY with P.M. Glynn (Stanford, USA).

Efficient error-correcting strategies by D.J. DALEY with L.D. Servi (MIT, USA).

On anomalous asymptotics of heat kernels on groups of polynomial growth by N. DUNGEY and D.W. Robinson with A.F.M. ter Elst (Eindhoven, The Netherlands).

A short monograph treating analysis and homogenisation theory of subelliptic differential operators on groups of polynomial growth by N. DUNGEY with D.W. Robinson and A.F.M. ter Elst (Eindhoven, The Netherlands).

Minimal surfaces theory by Dr Y. FANG with J.-F. Hwang (Academia Sinica, Taiwan).

On patterns in sequences in random events by J.M. GANI with A. Irle (Kiel, Germany).

Bootstrap methods by P.G. HALL with B.M. Brown (South Australia), W. Härdle and T. Kleinow (Berlin, Germany), P. Schmidt (Banking Industry, Germany), G.A. Young (Cambridge, UK).

Curve estimation by P.G. HALL with J. Garza (TTU, USA), E. Choi (Finance industry, Singapore), S. Penev (New South Wales), A. van Rooij (Nijmegen, The Netherlands), V. Rousson (Zürich, Switzerland), F.T. Ruymgaart (TTU, USA) and M. York (Macquarie Bank, Sydney).

Discrimination by P.G. HALL with D.S. Poskitt (ANU) and B. Presnell (Florida, USA).

Extreme value analysis by P.G. HALL with A. Guillou (Paris, France).

Methods for extreme values by P.G. Hall with N. Tajvidi (Lund, Sweden).

Quantum ergodicity by A.W. HASSELL with S. Zelditch (John Hopkins, USA).

Scattering theory for nondecaying potentials by A.W. HASSELL with R. Melrose and A. Vasy (MIT, USA).

Upper and lower bounds of normal derivatives of Dirichlet eigenfunctions by A.W. HASSELL with T. Tao (UCLA, USA).

Legendrian distributions on manifolds with corners by A.W. HASSELL with R. Melrose and A. Vasy (MIT, USA).

Schrödinger kernel by A.W. HASSELL with J. Wunsch (Columbia, USA).

Ergodicity of eigenvalues by A.W. HASSELL with S. Zelditch (Johns Hopkins, USA).

Global existence of rough solutions to dispersive and wave equations and control of solutions to elliptic equations by Andrew HASSELL with T. Tao (UCLA, USA).

Algorithms for large scale data analysis and data mining by T.M. HEGLAND, O. Nielsen and S.G. Roberts with G. Williams (CSIRO), W. Graco (HIC), P. Christen (DCS) and T. Semenova (RSISE, ANU).

History of statistics by C.C. HEYDE with E. Seneta (Sydney).

Risky asset modelling by C.C. HEYDE and S. Liu, with R. Gay (Monash) and S.G. Kou (Columbia, USA).

Long-range dependence by C.C. Heyde with V.V. Anh (QUT).

Partial regularity of minimisers in the calculus of variations by M.-C. HONG with M. Giaquinta (Pisa, Italy).

Actions of the unitary group on complex manifolds by biholomorphic transformations by A.V. ISAEV with N.G. KRUZHILIN (Steklov Mathematical Institute, Moscow).

Module structure of free Lie rings and free Lie algebras by L.G. KOVÁCS with R.M. BRYANT and Dr R. Stöhr (UMIST, UK).

Operator algebras and operator modules — an operator space approach (a book in progress) by C. LE MERDY with D. BLECHER (Houston, USA).

H-functional calculus on non commutative  $L^p$ -spaces by C. LE MERDY with M. JUNGE (Urbana, USA) and Q. XU (Besançon, France).

Factorisation of normal completely bounded maps by C. LE MERDY with B. MAGAJNA (Ljubana, Slovenia).

The Johnson-Jones factorisation theorem on non commutative  $L^p$ -spaces by C. LE MERDY with M. JUNGE (Urbana, USA).

Solitonic solutions for the triple tau-function equations by V. MANGAZEEV with S. SERGEEV (JINR, Russia).

Separation of variables for Calogero-type models by V. MANGAZEEV with V. KUZNETSOV (Leeds, UK).

The solution of the Kato problem for divergence form elliptic operators with Gaussian heat kernel bounds by A.G.R. M<sup>C</sup>INTOSH with S. HOFMANN (Missouri, USA), M. LACEY (Georgia, USA).

The solution of the Kato square root problem for second order elliptic operators on  $\mathbb{R}^n$  by A.G.R. M<sup>C</sup>INTOSH with P. AUSCHER (UPJV, France), S. HOFMANN (Missouri, USA), M. LACEY (Georgia, USA) and P. TCHAMITCHIAN (Faculté des Science, Marseille).

The Kato square root problem for higher order elliptic operators and systems on  $\mathbb{R}^n$  by A.G.R. M<sup>C</sup>INTOSH with P. AUSCHER (Université de Picardie Jules Verne, Amiens), S. HOFMANN (Missouri, USA) and P. TCHAMITCHIAN (Marseille, France).

Noncommutative K- and L-theory localisation by A. NEEMAN with A. RANICKI (Edinburgh, UK).

Geometric invariant theory by A. NEEMAN with B. MARTIN (Sydney).

Lie rings with maximal class by M.F. NEWMAN with A. CARANTI (Trento, Italy).

Soluble length of groups with prime-power order by M.F. NEWMAN with S. EVANS-RILEY (Sydney).

Groups defined by powers by M.F. NEWMAN with D.F. HOLT (Warwick, UK).

Minimal presentations by M.F. NEWMAN with G. HAVAS (Queensland) and E.A. O'Brien (Auckland, NZ).

The breadth and nilpotency class of groups with prime-power order by M.F. NEWMAN with B. EICK (Germa-

ny), E.A. O'Brien (Auckland, NZ) and J. WIEGOLD (Cardiff, UK).

Pathology explorer by O.NIELSEN with G.William (CSIRO, CMIS) and P. Christen (Computer Science, ANU).

Polyhedral constrained optimisation by M.R. OSBORNE with G.A. Watson (Dundee, UK).

Recursive computation of regression splines by M.R. OSBORNE with T. Prvan (Canberra).

Analysis on Lie groups of polynomial growth by D.W. ROBINSON and N. Dungey (ANU), A.F.M. ter Elst (Eindhoven, The Netherlands) and A. Sikora (ANU/New Mexico) .

Spectral multipliers for self-adjoint operators by A. SIKORA with X.-T. Duong (Macquarie) and El Maati Ouhabaz (Bordeaux, France).

On second-order periodic elliptic operators in divergence form by A. SIKORA and D.W. Robinson with A.F.M. ter Elst (Eindhoven, The Netherlands) .

A spectral multiplier theorem for a sublaplacian on  $SU(2)$  by A. SIKORA with M. Cowling (New South Wales).

A note on the heat kernel on the Heisenberg group by A. SIKORA with J. Zienkiewicz (Wroclaw, Poland).

Bochner Riesz summability for analytic functions on complex m-sphere by A. SIKORA with T. Tao (UCLA, USA).

On a maximal operators associated to a Laplace-type operator by A.SIKORA with H. Gunawan (ITB, Indonesia).

Decompositions of the time-frequency phase plane, bounds for rough singular integral operators, Bochner-Riesz multipliers and similar objects by T. TAO with A. Sikora (New Mexico, USA).

Discrete schemes for elliptic and parabolic equations by N.S. TRUDINGER with H.-J. Kuo (NCHU, Taiwan).

Degenerate Hessian equations by N.S. TRUDINGER and X.-J. Wang with N.N. Ivochkina (St Petersburg, Russia).

Interior curvature bounds for a class of curvature equations by J.I.E. URBAS and X.-J. Wang with W. Sheng (Zhejiang, China) .

A generalised Minkowski problem by X.-J. WANG with K. Chou (CUHK, Hong Kong).

Determining the genetic basis of Crohn's disease and ulcerative colitis by S.R. WILSON with J. Cavanaugh and P. Pavli (Canberra Hospital) and D. Callen (Women's and Children's Hospital, North Adelaide).

Unsaturated iron binding capacity and transferrin saturation in the detection of HFE-hemochromatosis by S.R. WILSON with M. Bassett (Canberra Hospital).

Analysis of HIV/AIDS surveillance data by S.R. WILSON with P. J. Solomon (Adelaide).

On analysis of transmission disequilibrium in atopic dermatitis families by S.R. WILSON with G. Stewart & H. Kalouche (Westmead Hospital, Sydney).

Molecular genetics of anorexia nervosa by S.R. WILSON with R. Urwin and B. Bennetts (Children's Hospital at Westmead, Sydney).

Statistical evaluation of the genetic profiles used in fungal identification by S.R. WILSON with W. Meyer (Westmead Hospital, Sydney).

The effects of compositional heterogeneity on phylogenetic analyses and subsequent estimates of sequence divergence by S.R. WILSON with L. Jermin (Sydney) and S. Easteal, (JCSMR, ANU).

### Department of Mathematics.

Stromatolite morphogenesis by M.T. BATCHELOR with R.V. Burne (Geology) and B.I. Henry (UNSW).

Random walks with absorbing boundaries by M.T. BATCHELOR with B.I. Henry (UNSW).

Solvable models and combinatorics by M.T. BATCHELOR with J. de Gier, B. Nienhuis and S. Mitra (Amsterdam, The Netherlands).

Integrability and delta interaction by M.T. BATCHELOR with J. de Gier and J.B. McGuire (Florida Atlantic, USA).

Dilute lattice models and related universality classes by M.T. BATCHELOR with K.A. Seaton (La Trobe).

Covering groups with subgroups by R.A. BRYCE with L. Serena (Florence, Italy).

Products of finite groups by P.J. COSSEY with A. Ballster-Bolinches and R. Esteban (Valencia, Spain), M.-C. Pedraza-Aguilera (Polytechnic Uni of Valencia, Spain), and M. Alejandro (Elche, Spain).

Permutable subgroups of finite groups by P.J. COSSEY with S. Stonehewer (Warwick, UK).

Numerical invariants and structure of finite groups by P.J. COSSEY with T. Hawkes (Warwick, UK).

Six — Vertex model with domain wall boundary conditions. Variable inhomogeneities by J. de GIER with V. Korepin (Stony Brook, USA).

The quantum symmetric XXZ chain at  $\Delta=-1/2$ , alternating-sign matrices and plane partitions by J. de GIER with M.T. Batchelor and B. Nienhuis (Amsterdam, The Netherlands).

Critical  $Q=1$  Potts Model and Temperley-Lieb Stochastic Process by J. de GIER with P.A. Pearce (Melbourne) and Vladimir Rittenberg (Bonn, Germany).

The XXZ chain at  $\Delta=-1/2$ : Bethe roots, symmetric functions and determinants by J. de GIER and M.T. Batchelor with B. Nienhuis and S. Mitra (Amsterdam, The Netherlands).

Spectropolarimetry of magnetic degenerate stars by L. FERRARIO with G. Schmidt (Arizona, USA).

Finite element approximations and geometric variational problems by J.E. HUTCHINSON with G. Dziuk (Freiburg, Germany).

Geometric variational problems by J.E. HUTCHINSON with L. Ambrosio (Pisa, Italy) and N. Fusco (Naples, Italy).

Unsaturated soil water flow through heterogeneous systems by J. KNIGHT with A.W. Warrick (Arizona, USA) and P.A. Ferre (Arizona, USA).

The theory of the time domain reflectometry method for measuring soil water content and salinity by J. KNIGHT with P.A. Ferre (Arizona, USA).

Soil water flow in sloping systems by J. KNIGHT with F.J. Cook (CSIRO, Brisbane).

Time scales for discharge of water and salt in catchments by J. KNIGHT with M. Gilfedder (CSIRO, Canberra) and G. Walker (CSIRO, Adelaide).

Generalised notions of amenability by R.J. LOY with F. Ghahramani (Manitoba, Canada).

Weight sequences and compact multiplication by R.J. LOY with G.A. Willis (Newcastle).

Theoretical rheology by R.J. LOY with R.S. Anderssen (CSIRO, Canberra).

Weighted convolution algebras by R.J. LOY with H.G. Dales (Leeds, UK).

Numerical modelling of rapidly varying flood flow by S.G. ROBERTS with C. Zoppou (ACTEWAGL - AGSO).

Geophysical computational methods by S.G. ROBERTS with S. Matthäi (Imperial College, London, UK) and S. Geiger (ETH, Switzerland).

Properties of hot white dwarfs in EUV/soft X-ray surveys by S. VENNES with J. Dupuis (Berkeley & John Hopkins USA).

Far ultraviolet spectroscopic explorer observations of hot white dwarfs by S. VENNES with P. Chayer and D. Christian (John Hopkins, USA).

The dwarf novae of shortest period by S. VENNES with J.R. Thorstensen (Dartmouth, USA).

Thermal X-ray emission from classical novae by S. VENNES with J. MacDonald (Delaware, USA).

Spectropolarimetric survey of hydrogen-rich white dwarf stars, by S. VENNES with G. Schmidt (Arizona, USA).

The progenitors of Type Ia supernovae by D.T. WICKRAMASINGHE with C. Tout (Cambridge, UK).

Type Ia supernovae and remnant neutron stars by D.T. WICKRAMASINGHE with A. King (Leicester, UK) and J. Pringle (Cambridge, UK).

Cross-linked hetero aromatic polymers in interstellar space by D.T. WICKRAMASINGHE with C. Wickramasinghe and F. Hoyle (Cardiff, UK).

## **The Graduate School**

Tobacco control policy in the Liberal state, funded by the Robert Wood Johnson Foundation by Dr John Ballard with Prof. Ronald Bayer (Columbia University), Prof. Eric Feldman (University of Pennsylvania) and others.





# Principal Grants and Donations

The University is indebted to those organisations and individuals who make grants, research contracts, consultancies and donations for use in research and other activities. Such funds play an important role in the ongoing activities of the University. The following list includes grants and donation reported to Council during 2001.

## Grants

Donor	Fund Purpose	Amount
Aboriginal & Torres Strait Islander Commission	Reforms to Welfare at Mutitjulu Community	48,182
	Centre for Aboriginal Economic Policy Research	320,465
ACIL Australia Pty Ltd	China Capacity Building Program	73,930
	<i>Consultancy — China Capacity Building Program: Labour Market Issues Phase II</i>	649,427
ACT Cancer Society Inc	Molecular Basis of Morphine Tolerance in Gz Deficient Mice	43,410
ACT Chief Minister's Department	<i>ACT Research and Development Grants Scheme</i> Progressing 24-Hour Solar Power Technology toward Commercialisation	148,426
	Developing Technology Prototype Products and Markets for Semiconductor Lasers	350,000
	Conversations Biannual Literary Magazine	6,600
ACT Department of Health, Housing and Community Care	Are There Benefits of Improving the Mental Health Literacy of Depressed People?	39,660
ACT Department of Justice and Community Safety	Domestic Violence Prevention Council Secretariat	32,062
ACT Health Promotion Fund	Parent Work Conditions and the Transmission of Health Inequalities to Children	27,562
ADARDS Nursing Home Inc	Evaluate outcomes at the ADARDS Nursing Home, Warrane, Tasmania	110,759
Aerosene Robotics Aircraft	<i>2001 Strategic Partnerships with Industry — Research and Training</i> Robust Flight Control of Autonomous Small-Scale Aircraft	31,000
Al-Maktoum Foundation	Arab and Islamic Studies Centre	2,000,000
Alzheimer's Association of Australia	Early Stage Dementia Support and Respite Project Evaluation	70,841
Anglo-Australian Observatory	<i>2001 Research Infrastructure Equipment and Facilities</i> Fast Link to SSO — Australia's Major Optical Astronomical Observatory	82,000
Australia and Pacific Science Foundation	Towards Publication of 'Nine Thousand Years of Gardening in PNG'	5,500
	The Reproductive And Nutritional Ecology Of The Palm Cockatoo In The Southern Watershed Of Papua New Guinea	25,498
Australia Council for the Arts	Publishing Subsidy for Pandanus Books	6,000
	Art on a String: Touring Exhibition of Indigenous Neckpieces	25,000
Australia New Zealand Food Authority	National Safe Food Program	36,363
Australia-China Council	Conference on Constitutions and Human Rights in a Global Age	6,000
Australia-India Council Secretariat	2001 K.R. Narayanan Oratation	10,000
Australia-Indonesia Institute	Ethnicity and Religious Conflict: Interfaith Dialogue	7,381
Australian Agency for International Development	State, Society and Governance in Melanesia Project	72,546
	<i>International Seminars Support Scheme</i> Constitutions and Human Rights in a Global Age: An Asia-Pacific Perspective	8,411
	The New Economy: Challenges for East Asia and the Pacific (PAFTAD 27)	14,691
	Preparation of Issue Paper for Indonesia Country Strategy Development Process	5,750
	Professional Services Consultancy — Monitoring and Evaluation Specialist	21,306
	Serial Publications and Outreach Activities for PNG and the Pacific Region	18,934
	Vietnam Updates Conferences	53,000
	Global Distance Education Initiative	167,500
	Serial Publications and Outreach Activities for PNG and the Pacific Region	86,349
	State, Society and Governance in Melanesia Project	22,546
	<i>Small Activities Scheme</i> Thailand — Australia Social Protection Facility Mahidol University — (The Trust Account)	2,097,000
	Thailand-Australia Social Protection Facility	2,893,454
	Australian Arsenic Mitigation Program: Health & Social Research Project	1,437,680
	Festschrift to mark Professor Ron Duncan's Retirement	41,000

Australian Agency for International Development (cont'd)	ISSS: Resource Tenure, Forest Management, and Conflict Resolution: Perspectives from Borneo and PNG	21,306
	<i>International Seminars Support Scheme</i>	16,504
	Sixth Women in Asia Conference	
	PNG Non-Government Organisation — Management and Leadership Training Program	89,276
	Workshop: The Future Role of the Multilateral Development Banks in the Asia-Pacific Region	91,000
	ASEAN-Australia Social Safety Net Project	607,440
	Seminar Series on PNG	10,968
	Information for Rural Development and Planning in Papua New Guinea	1,166,756
	Study on Future Financial Arrangement to support Development in East Asia	200,000
	Post Doctoral Fellowships for Research on Economic and Governance Issues in the Pacific	300,000
Australian Antarctic Division	Desk study of Provincial Government Structures in Solomon Islands	9,000
	Investigation of Virus Biodiversity in Antarctic Terrestrial Plants	7,000
	<i>Australian Antarctic Science Grant</i> Crustal Rebound in the Lambert Glacier Area	15,400
	Conservation of Plant Biodiversity in Antarctica — A Genetic Approach Crustal Rebound in the Lambert Glacier Area	17,100 15,400
Australian Biological Resources Study	<i>Participatory Program Grant</i> Biogeography and revision of Setanodosa (Collembola: Brachystimellidae)	5,250
	Australian Centre for International Agricultural Research	
Australian Centre for International Agricultural Research	Integrated Water Resources Assessment and Management Framework: A Case Study of the Upper Chao Phraya Headwaters, Northern Thailand	149,631
	Improving Productivity of the Small Holder Oil Palm Sector in PNG	149,849
	International Food Safety Regulation	546,150
Australian Competition & Consumer Commission	Indigenous Consumer Protection and Competition Matters	98,880
Australian CRC for Renewable Energy Ltd	A Novel Louvre Concentrator	240,000
	The Solar Energy System Controller	200,000
Australian Customs Service	Consultancy Services for an Integrity Facilitators Workshop	9,860
Australian Defence Force Academy	Wedge Contract — ADFA	13,750
Australian Federal Police	<i>Research Infrastructure Equipment and Facilities</i> An Electron Microprobe for High-Accuracy Chemical Microanalysis	10,000
	CSCAP Working Group on Transnational Crime	10,000
	Australian Flora Foundation	Pollination and Fruit Production of Native Species in Fragmented Remnant Vegetation
Australian Geological Survey Organisation	An Electron Microprobe for High-Accuracy Chemical Microanalysis	200,000
Australian Greenhouse Office	Stage 1, Stage 2 and Stage 3 Technical Assessment of Round I Proposals for Greenhouse Gases	7,000
Australian Health Management Group	Evaluating Biological Measures that Reflect Social Disadvantage	37,500
Australian Institute of Aboriginal & Torres Strait Islander Studies	The Return of the Noble Savage by Popular Demand	10,326
	Missionary attitudes towards Aboriginal people in South Australia 1900–1950	5,000
	Interpreting the Aboriginal Tasmanian material collected by Ernest Westlake, 1908–1910	6,222
	We are strong women: Looking to the past, making a future, Wurumungu women of Tennant Creek	13,611
	1840 Wiradjuri Grammar: New Found Key Manuscript	10,096
Australian Institute of Health and Welfare	The expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998–1999 Project	20,790
Australian Institute of Nuclear Science and Engineering	A Study of Dynamically Disordered Materials Using Diffuse Neutron Scattering	6,790
Australian Nuclear Science & Technology Organisation	<i>Access to Major Research Facilities Program</i> International travel support for EXAFS Measurements of Implantation-Induced Disorder in III-V Compound Semiconductors, Stanford USA, 6/11/00	7,020
	Visit Institute Laue-Langevin, France, October 2000 — Mechanism and Structural Outcome of Hydrophobic/Hydrophilic Latex Polymerisation	6,585
	Visit ISIS Facility, Rutherford Appleton Laboratory, UK, July 2001 — Structure of Sponge Phases at Solid and Air Interfaces	9,150
	Visit ISIS Facility, Rutherford Appleton Laboratory UK August 2001 — Neutron Scattering from Protein Assemblies	12,000

Australian Nuclear Science & Technology Organisation (cont'd)	Visit to Taiwan ROC, 28/8/01 for 7 days, Selective Photo-desorption of Hydrogen from hydrogentatedGaAs surfaces	5,120	
	EXAFS Characterisation of Implantation-Induced Disorder in Compound Semiconductors	10,300	
	Mixed Deuterated Surfactants in Concentrated Emulsions Modification of PIBSA Monolayers by Additives Competition in Mixed Sorbitan Surfactants	9,400	
	Hubble Space Telescope Planning Meeting — May 2001 — Measuring Cosmic Deceleration and Global Expansion of the Universe with type Ia Supernovae and Gamma Ray bursts: The Largest Bangs in the Universe after the Big One	9,820	
	Changes in the Molecular Structure of Hair in Breast Cancer	11,220	
	Visit ESRF, France — April 2001 — Probing the Active Site of E.coli Polymerase III with Synchrotron Radiation	6,448	
	Speciation of ore-metal ions in synthetic fluid inclusions as a function of temperature	10,249	
	Visit to Stanford, USA EXAFS Characterisation of Implantation-Induced Disorder in Compound Semiconductors, April 2001	7,470	
	Liquid-vapour partitioning and speciation of copper measured in fluid inclusions at elevated temperatures	7,020	
	The Cr <sup>2+/3+</sup> /Fe <sup>2+/3+</sup> redox reaction as a function of Temperature	6,870	
	Visit ISIS Facility, RAL, UK — May 2001 — Additive control of viscosity in concentrated emulsions. Concentrated emulsions at low droplet size. Surface structure of concentrated emulsions. Temperature and pH induced protein unfolding at interfaces	12,000	
	Australian Photonics Pty Ltd	Polymer Waveguides and Integrated Optics (Redfern Polymer Optics) Project	485,100
		Real Time Optoelectronic Spectrum Analyser System	36,000
	Australian Research Council	<i>Australian Postdoctoral Research Fellowship</i>	171,957
Linguistic Prehistory in Southeast Asia: 2000 Years of Contact Between Austroasiatic and Austronesian Speakers			
Austronesian Expansion and the Colonisation of Western Micronesia		168,702	
Defect Engineering of Quantum Well Interdiffusion for Optoelectronic Device Applications		168,702	
Mechanism Governing Regulation of Ryanodine Receptor Function		368,955	
Modeling Digestive Strategies of Fossil Hominids		168,702	
Development of a useful Theory of ion Channel Conductance		166,131	
Molecular and Biochemical Mechanisms of Photosynthetic Acclimation to Very High Light		183,702	
Lovers and Fighters: Does Opposing Sexual Selection Maintain Genetic Variation in Sexual Traits in Rainbow Fish		339,940	
The Environmental Context of Megafungal Extinction in Australia		357,590	
Consequences of Animal Dispersal in Fragmented Landscapes: an Experimental Approach		180,702	
Photodissociation Dynamics of Diatomic Sulphur, S <sub>2</sub> , and its Role in Environmentally Friendly Energy Efficient Lamps		195,261	
The Nature and Evolution of the Blue Compact Galaxies		61,773	
International Law in China's Foreign Policy: Culture, Power and Globalisation		350,745	
A Feminist Approach to Interpreting the Material Culture Remains of Roman Houses, Military Forts and Public Spaces		363,590	
In Situ Electrochemical NMR Spectroscopy		357,590	
Chemoenzymatic Routes to Spinosyns — A New and Environmentally Benign Class of Insecticide		179,766	
The Response of Ocean Models to Variable Wind Forcing		168,702	
Recycling of Fluid Mobile Elements in Subduction Zones: Constraints from Lithium and Boron Isotopes		168,702	
Growth, Characterisation and Fabrication of GaInNAs Lasers and Intermixing in GaInNAs Quantum Wells for Photonic Device Integration		357,590	
Non-Monotonic Mapping for Mobile Robots in Dynamic Environments	191,766		
Ultrafast Laser Ablation and Deposition of Thin Films	62,991		
Causes and Consequences of the Differences in Leaf Biochemistry and Structure Between NAD-ME and NADP-ME C <sub>4</sub> Grasses	185,766		
<i>Strategic Partnership with Industry, Research and Training</i>	66,876		
Recharge of Artesian Groundwaters in the Coonamble Embayment of the Great Artesian Basin, Midwestern NSW			
Robust Flight Control of Autonomous Small-Scale Aircraft	66,876		
Development of Y Chromosome Comparative DNA Chip	66,876		
Insect Resistance Traits of Eucalyptus for the NSW Forest Plantation Industry	66,876		

Australian Research Council (cont'd)	Application of New DNA Tools to Quantify Animal Dispersal in Fragmented Landscapes: Practical Implications for Biodiversity Conservation and Landscape Restoration	307,860
	Mapping ore-fluid pathways around mesothermal gold deposits in the Laberton region, WA using alkali elements and stable isotopes	63,240
	e-Tucker: Evaluating Strategies For e-Commerce In Agribusiness	86,000
	<i>Linkage Infrastructure Equipment and Facilities</i>	270,000
	The Atom Laser Facility	
	GPS Receivers and Support Equipment for Geophysical Observatories in Antarctica	190,000
	Fast Link to SSO — Australia's Major Optical Astronomical Observatory	150,000
	Focused Ion Beam System for Multidisciplinary Applications	320,000
	Renewed Great Melbourne Telescope: Opening a Window on the Universe	210,000
	Hydrogen Isotope Mass Spectrometer Facility for Global Change Research	140,000
	High Resolution Mass Spectrometer for MS(n) Chemical Characterisations	900,000
	Automated, High Sensitivity ESR Spectrometer for Quaternary Dating	190,000
	An Electron Microprobe for High-Accuracy Chemical Microanalysis	500,000
	Hyperfine Interactions Spectrometer for Probing Dynamic and Static Atomic Environments	200,000
	Development of Novel Systems for Wireless Data Communications and Radar	150,000
	<i>Discovery Project (formerly Large Grants)</i>	
	3D and 4D Architecture of Fluid Flow in Fault and Shear Zone Networks During Crustal Deformation	189,381
	Robust Control of Nonlinear Systems	194,000
	The Biosynthesis and Function of the Zanthophyll Class of Carotenoids in Plants	181,350
	Structure and Function of Sulphate Transporters From Plants	170,281
	Structural and Biochemical Analysis of Soluble Extracellular Domains on the Nicotinic Acetylcholine	168,707
	Copper Solubility in Supercritical Hydrothermal Brines Measured in Synthetic Fluid Inclusions	150,200
	Periodic and Redox-induced Trends in Metal-Metal Bonding	140,000
	Quantum Information and Communication with Continuous Wave Optics	275,000
	Advanced Organometallic Materials	173,000
	A Social History of Australian English	166,082
	Nanocavities in Si: Structural Evolution and Metal Gettering	183,000
	Evolution of Sex-specific Control Systems in Mammals	181,350
	Safety on the Farm: the Potential for Regulatory Reform	149,905
	Legislative, Judicial and Popular Participation in the Protection of Human Rights in Australia	138,400
	Yolngu Music: Anthropological and Indigenous Perspectives	58,000
	Nonlinear Elliptic Partial Differential Equations and Applications	210,000
	Asymptotics of Semigroup Kernels; Lie Groups of Polynomial Growth and Almost-periodic Operators	176,000
	Theory and Application of Computer-Intensive Statistical Methods	570,000
	A Multilevel Investigation of Leaf Shape Diversification in Pelargonium	111,000
	Consequences of Animal Dispersal in Fragmented Landscapes: An Experimental Approach	109,000
	Sexual Selection and Complex Signals	463,000
	Evolution of Resistance to Cardiotoxic Alkaloids	214,000
	Lovers and Fighters: Does the Opposing Sexual Selection maintain Genetic Variation in Sexual Traits in Rainbow Fish?	134,000
	The Environment Context of Megafaunal Extinction in Australia	120,200
	Formation Mechanism of Boron Nitride Nanotubes Produced by Reactive Ball Mining	210,563
	Ecological and Evolutionary Dynamics of Colicinogeny	159,000
	Low Cost 25% Efficient Silicon Concentrator Solar Cells	150,000
	Focal Stimulation of Single Visualised Terminals: A Powerful New Technique for Investigating Synaptic Mechanisms	215,094
	Output Optics for LIGOH	312,000
	Theoretical and Computational Investigations into Nonlinear Geometric and Physical Variational Problems	180,000
	Argon Thermochronometers and the Effects of Recrystallization	235,246

Australian Research Council (cont'd)	Generation and Exploitation of Fermentation Products in the Chemical Synthesis of Biologically Active Compounds with Therapeutic Potential	315,000
	The Shape of Plants: Discovering Factors That Control Morphology by Organising the Cytoskeleton	421,000
	Interstellar Physics at the Epoch of Galaxy Formation	400,000
	Linguistic Typology and the Demise of Morphological Case: The Development of the Genitive in the Germanic Languages	95,000
	Values and Ethics in a Global World: A Semantic Perspective	181,000
	Dynamics of Multi-Component Matter Waves	50,000
	The Making of a Radical Romantic Counterculture in Britain, 1776–1850	150,000
	Yolngu Music: Anthropological and Indigenous Perspectives	203,767
	Structure and Function of Heterodimeric Amino Acid Transporters	141,000
	The Sir Edward Pellew Group of Islands, Gulf of Carpentaria Archaeological Project	242,700
	Perceived Influences Upon Australian Family Formation Decisions	54,361
	Understanding the Early Phases of Neolithic Dispersal in the Western Pacific	345,550
	New Molecular Approaches to Comparative Phylogeography	141,000
	Data Adaptive Geophysical Inversion	208,000
	Evolution and Role of Genomic Imprinting in Mammals	87,936
	Rates of Metamorphic Processes: Correlating U-Pb Ages with the Pressure-Temperature Conditions of Mineral Growth	202,118
	Ecology and Phylogeography of Bird Migration Between Australia and New Guinea: Paradise Kingfishers as a Model Species	217,000
	The Hydrothermal Solubility of Mo: A LA-ICPMS Study of Synthetic and Natural Fluid Inclusions	202,118
	Comparative Biophysical Studies on Photosystem II of Higher Plants and Cyanobacteria	231,000
	Theoretical Studies on the KcsA Potassium Channel and the L-type Calcium Channel	231,000
	Practical and Theoretical Aspects of Structure Enumeration	515,667
	Why Do Females Mate With Multiple Partners? Tests of Key Hypotheses in the Wild	272,000
	Surface Adsorption, Repulsion and Attraction: A New Experimental Approach to Surface Forces	573,782
	Proteome Analysis of Plant Response Pathways to Microbial Signals in the Model Legume, <i>Medicago truncatula</i>	229,000
	Face Recognition: Properties and Origins of Whole-Face Processing	173,000
	Harmonic Analysis, Boundary Value Problems, and Maxwell's Equations in Lipschitz Domains	313,000
	Organometallic Materials for Photonics	528,782
	Seismic Wavespeeds and Attenuation in Upper-Mantle Rocks: A Laboratory Study of the Effect of Partial Melting	184,000
	Hydrogen Abstraction in Chemical, Biochemical and Polymerisation Processes	187,118
	Molecular and Cellular Characterisations of the Cortical Actin Cytoskeleton in the Plant <i>Arabidopsis thaliana</i>	465,000
	Evolution of the Mammalian Y Chromosome	215,278
	Advanced Physics and Characterisation of Silicon Materials and Devices	247,000
	Cellular and Network Basis of Information Processing in the Mammalian Visual System	229,000
	Nature and Nation: Science, Environment and National Identity in Australia	103,746
	Australian Concert Music for the Piano: A Critical Study of Twentieth Century Compositions	90,300
	A History of Women's Electoral Lobby	125,000
	Feminist Perspectives on Australia in Asia	80,754
	Political Economy and Culture of Indigenous Peoples: A Central Indian Case Study	146,000
	Endangering Roman Spaces: A Feminist Approach to the Material Culture of Occupants of Roman Houses and Military Forts	149,400
	Gender, Sexuality and Class as Represented in the Literature Associated with Adultery Trials in Britain c 1760–1830	150,359
	Yolngu Music: Anthropological and Indigenous Perspectives	58,000
	Nonparametric Statistics	1,023,650
	Gender Ideology, Racial Mythology and the Cultural Politics of Child Removal in Colonial Burma, Cambodia and Western Australia, 1886–1947	203,000
	Democratic Audit of Australia	450,000
	Understanding the World: Domei Tsushin (United News Agency), the Japanese State and International Politics 1936–52	115,970

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Australian Research Council (cont'd)	Ion Implantation Processing in Silicon Carbide for Microelectronic Applications	619,411
Australian Rotary Health Research Fund	Are There Benefits of Improving the Mental Health Literacy of Depressed People?	40,950
Australian Surveying and Land Information Group (AUSLIG)	History of Remote Sensing	9,432
Australian Synchrotron Research Program	The Oxidation State of U, Cr, and Fe in Silicate Glasses and Melts and the Coordination Geometry of Ti in Olivine	6,870
	Visit to Japan, 17–20 November, 2001, EXAFS Measurements of Amorphised Compound Semiconductors and Nanocrystals in SiO <sub>2</sub>	6,690
	Visit to Biocars to access the Advanced Photon Source — December 00 — Structure Determination of Two Exonucleases	6,300
	Visit the Australian National Beamline Facility, Photon Factory, Japan — April 2001 — A Study of Structure of Hair in Melanoma and Basal Cell Carcinoma to Verify Specificity of Changes in the Diffraction Patterns of Hair in Breast Cancer	6,510
	Visit to Japan, 9–13 May 2001, Diffraction and EXAFS Measurements of Metal-Decorated Nanocavities in Si	6,870
Australian Taxation Office	<i>Miscellaneous Grants</i> Centre for Tax System Integrity.	1,500,000
Beyondblue	National Evaluation of Beyondblue's Community Education Activities	71,050
	Scoping Study: Prevention of Depression in Older Australians	58,597
Bristol-Myers Squibb Pharmaceutical Research Institute	Use and cost of medical care services in patients with chronic Hepatitis B Virus (HBV)	76,804
Bureau of Rural Sciences	Participation in Technical Advisory Group for the Regional Private Native Forest Inventory Project	12,000
	Student Scholarship Program — Summer 2001	15,000
	Experimental Development of Java Interface for the GROWEST Program and Demonstration of its Performance	27,000
Canadian Institute for Health Research	Public and Private Financing: Analytics, Dynamics and Decision Making (Collaborative effort)	54,750
Canberra East Rotary Club	Rotary — Alf Gillespie Scholarship	25,000
Capgrains Cooperative Association	e-tucker: Evaluating strategies for e-commerce in agribusiness	10,000
Charles Sturt University	Hydrogen Isotope Mass Spectrometer Facility for Global Change Research	11,200
Chiang Ching-kuo Foundation for International Scholarly Exchange	Communal Diasporic Voluntary Public Cultures: Hmong Transnationalism in Asia and Overseas	32,040
	Atlas of Population Dynamics in China from 1600–1850 Subdivided by Period, and Country or Prefecture	60,000
	Migrating Identities and Ethnic Minorities in Chinese Diaspora — Centre for the Study of the Chinese Southern Diaspora (CSCSD) International Conference	10,130
Clive & Vera Ramaciotti Foundations	Mumed Duel Chanel Mice Recording Systems of Lung Function	12,000
	Analysis of Transcription Complexes in T Cells Using Functional Proteomics	15,000
	Glucocorticoid-Induced Hypertension in the Mouse	15,000
Commission of the European Communities	National Europe Centre — Pilot Phase	743,237
Commonwealth Department of Health & Aged Care	Food-Borne Disease Surveillance Project	345,950
	Master of Applied Epidemiology (Indigenous Health) 2001–2004	1,250,000
	Expert Advice on the Evaluation of the GPESCL and MBS Item Components of the EPC Package	18,182
Commonwealth Scientific Industrial Research Organisation (CSIRO)	Pathology Explorer	49,000
	Agreement to Carry Out Research in Relation to AGO Calibration of FullCam Model	36,000
	Phylogenetic Structure, Biogeography and Evolution of the Myoporaceae	7,400
CRC for Functional Communication Surfaces	PhD Support for Ms Fleur Visser	14,750
	Programme 6: Education, Scholarships	525,000
CRC for Greenhouse Accounting	Programme 1: Fundamental Surface Measurements and Liquid Penetration Sciences	2,864,000
	Greenhouse Gas Abatement: Review of Research and Development of the Social Implications of Land-use Change	23,410
	Postgraduate Research Grant	7,500
CRC for Intelligent Manufacturing Systems and Technologies Limited	Carbon Sequestration and Decomposition Dynamics of Course Woody Debris in Different Forest Types of Eastern Australia	10,000
	Autonomous Ship Hull Cleaning Vehicle	82,500

CRC for Water Quality and Treatment	An Intervention Trial to Assess the Contribution of Food Chain to Total Arsenic Exposure	39,505
Cultural Survival Inc	Gateway to Ethnosphere Project	10,000
Defence Science and Technology Organisation	Two Colour Radiometer for Special Discrimination of Various Sources of Infrared Emissions	90,000
	Development of Novel Systems for Wireless Data Communications and Radar	30,000
Department of Education, Training & Youth Affairs	<i>Small Grants Scheme</i>	1,056,228
	Summit — Australian Humanities & Social Sciences in the Twenty-first Century	140,241
	<i>Higher Education Innovation Programme</i>	25,000
	Higher Performance Computing Asia Conference	
	Master of Applied Epidemiology (Indigenous Health)	80,000
	Provision of Services Under the Aboriginal Tutorial Assistance Scheme (ATAS)	99,025
	<i>University Mobility in Asia and the Pacific (UMAP) Geography Student Exchange Scheme</i>	6,000
	The Impact of Age and Change on the Academic Workforce	45,000
	Year-in-Asia (Japan)	5,000
	Master of Applied Epidemiology (Indigenous Health)	20,000
	Towards Unified Credit Transfer Scheme (Korea)	17,000
	Isolation of bioactive compounds from endophytic fungi associated with Australian native plants	16,469
	A fundamental investigation of the synthetic potential of methylene-pi-allylpalladium complexes	12,249
	<i>Systemic Infrastructure Initiative</i>	5,579,000
	Upgrade Facilities at Siding Springs Observatory	
Department of Agriculture, Fisheries & Forestry	Innovation in the Food Sector	104,000
	National Safe Food Program	82,300
	Regional Impact Statement Booklet Consultation Stocktake Project	20,000
Department of Communications, Information Technology and the Arts	Peter Purves Smith Touring Exhibition	40,000
Department of Defence	Senior Defence Fellowship	294,762
	Study of Medical Causes for Unsuccessful Recruiting Applications	40,909
Department of Family and Community Services	Consultancy — Provision of Social Policy Research	1,152,000
Department of Foreign Affairs and Trade	Identifying Ways to Strengthen Aust-Japan Economic Relations	198,275
	Health, Insurance and Health Care Financing Arrangements in Australia and Korea	17,000
	AUSPECC/DFAT/APEC Business Advisory Council (ABAC) Consultancy	67,500
	World Politics Course	22,500
	The Degree to which APEC Markets have Zero or very Low Tariffs	29,919
Department of Health & Aged Care	National Safe Food Program	76,090
	Acting on Health Inequalities, Models of Intersectoral Collaboration between Health and Community Service Sectors	23,960
	<i>National Health Priority Area</i>	43,636
	Preparation of Reviews and Protocols Relating to Respiratory Infections	
	<i>Rural Health</i>	196,408
	Medical School Interim Funding	
	Phase 1: Establishment of Australian National Research and Development Collaboration between researchers, practitioners and decision-makers on issues related to Socio-economic Status and Health	50,000
	Phase 2: Establishment of Health Inequalities Research	
	Proposal to Establish an Australian Depression Resources Site	14,514
	<i>National Continence Management Strategy</i>	57,593
	Use of Cues to Minimise Incontinence in Elderly Persons in Cognitive Impairment	
	<i>National Health Priorities Research Initiative</i>	88,500
	Infant Bedding and Childhood Asthma	
	Fellowship — Aboriginal and Torres Strait Islander Substance Abuse Matters	145,020
Department of Immigration and Multi-cultural Affairs	Consultancy — Temporary Migration and Population Projections for Australia	24,800
	Contract Services for Training and Technical Advice for the Business Skills Centre	20,000
	Consultancy — Indicators and Benchmarks of Settlement Success	29,375

Department of Industry Science Resources	<i>Technology Diffusion Program</i> Australia-Germany Workshop on Plant Sciences Research and Development	7,450
Department of Industry, Science and Resources Invest Australia Division	Winning Investment for Australia	251,900
Department of Innovation and Information Economy	<i>Endangered Species Program</i> Evaluating strategies for e-commerce in agribusiness	10,000
Department of Land and Water Conservation, (NSW)	Application of New DNA Tools to Quantify Animal Dispersal in Fragmented Landscapes: Practical Implications for Biodiversity Conservation and Landscape Restoration	143,000
Department of Natural Resources	PRISE — Various Collaborative Research Projects	9,020
Department of the Environment and Heritage	Complete Genetic Profiling of Shy Albatross Populations	10,000
	<i>Bushcare Program</i> Farm Forestry: Linking biodiversity to business solutions	30,000
Earthwatch	Earthwatch Volunteer Field Project Assistance (Leadbeater's Possum)	18,905
Earthwatch Institute	Australia's Forest Marsupials	36,860
Ecowise Environmental Pty Ltd	Consultancy — Catchment Analysis Toolkit	32,666
Edward Corbould Charitable Distributions	Isolation and identification of estrogenic compounds in NSW rivers	10,000
Employment, Workplace Relations and Small Business, Department of	APEC Labour Market Information Database and Website	34,774
Environment ACT	Mitigation of the Impact of Common Mynas on Biodiversity of Avifauna	13,200
	Groundwater Yield Assessment in the Jerrabomberra Catchment	20,000
Environment Australia	<i>Natural Heritage Trust of Australia</i> Leadbeater's Possum Recovery Plan — Implementation of Recovery Action No.6	43,800
	Preparation of 'Flora of Australia' Treatments of Parts of the Lichen Families Lecanoraceae and Porpidiaceae	25,300
	<i>Participatory Program Grants</i> Taxonomic revision and phylogenetic analysis of Aotus, Phyllota, Otion ined, Urodon, Eutaxia, Euchilopsis and Latrobea (Legumibosae, Mirbelieae)	16,500
	<i>Natural Heritage Trust of Australia</i> National Graduate Program in Farm Forestry: Managing for Biodiversity and Production	45,000
Environment Protection Authority	Catchment Modelling Workshop	9,156
	Presentation of the Natural Heritage Significance of Cape York Peninsula Report.	7,920
Environmental Trust	<i>Environment Research Program Grant</i> Management of diffuse source pollution in the Ben Chifley Catchment, NSW	296,015
Estate of Late Winifred Violet Scott	<i>Grants for the Protection and Preservation of Wildlife</i> Conservation Biology and Genetics of Shy and White-Capped Albatrosses	20,000
Fildes, Ms Joyce E	Joyce Fildes Honours Scholarship	5,000
Flinders University of South Australia	<i>2001 Research Infrastructure Equipment and Facilities</i> Automated, High Sensitivity ESR Spectrometer for Quaternary Dating	38,500
Ford Foundation	Regional Disparities, Resource taxation & Inter-Provincial Transfers	100,000
Forest & Wood Products Research & Development Corporation	Forest, Wood Products and Environmental Issues: Perceptions and Attitudes	74,964
	<i>Human Resource (Capacity Development) Program</i> Postgraduate Scholarship — Improved Wood Production from, and Sustainable Management of, Plantation (David Forrester)	82,500
	Forest Resource Management Systems and International Environmental Law	12,500
FORTECH (Forestry Technical Services Pty Ltd)	Nepal Community Resource Management Project Feasibility and Design Study	20,900
Fox Television Stations, Inc.	Research Programme For Improving DTV Receivers	535,000
Fraser, Ron	Anne Fraser Prize for American Studies	5,500
Friends of the Royal Botanic Gardens Sydney Trust Fund	A New and Extended Search for Genetic Variation in the Wollemi Pine	18,000
Fujitsu European Centre for Information Technology Limited	COSMO software project	75,000
Genescan Australia Pty Ltd	<i>2001 Strategic Partnership with Industry — Research &amp; Training</i> Development of Y Chromosome Comparative DNA Chip	20,000
Glenn Dickins	The Glenn Dickins Engineering Scholarship	15,000
Gold Fields Exploration Inc	Predictive Guides to Cu & Au Mineralization at Circum-Pacific Convergent Plate Margins	38,500
Goldfields Land Council Aboriginal Corporation	Central West Native Title Claim WC99-001	14,091
Government of Pakistan	Post-Doctoral Fellowship Bench Fee	15,000



Grape & Wine Research & Development Corporation	Assessment Of The Frequency And Impacts Of Severe Advective Frosts In The Canberra Viticulture Region	6,100
Griffith University	<i>1998 CUTSD (HEIP) Staff Development Grant</i> Writing Workshop for Postgraduate Students in History	5,000
Hassall & Associates Pty Ltd	China's Insurance Services Industry	39,600
HEDRA Limited	Funding Arrangements for Pathology in Australia	14,495
Hermon Slade Foundation	Research into Knowledge Transfers in Large Organisations	8,160
Human Frontier Science Program Organization	Plant Life at Extremes — Evolution for Survival in Antarctica	111,925
Ian Potter Foundation	Physiological Functions of Genetically Distinct Classes of Ventral Spinal Interneurons	150,000
IDP Education Australia Limited	Master of Applied Epidemiology Indigenous Health 2001, 2002	80,000
	Design, Delivery and Evaluation of Management and Organisational Change in Thailand Under the Thailand Short Courses Program	69,240
	Australia-Indonesia Development Scholarship Program — 2000	6,571
Illawarra Technology Corporation Limited	Consultancy — Short Study Tour for the East Timor Inspector General	22,372
International Development Research Centre (IRDC)	Pacific Trade and Development (PAFTAD) Conference — PAFTAD27	153,600
International Finance Corporation	SME Development Seminar	33,750
International Institute for Environment and Development	Mining, Minerals and sustainable Development	10,000
James Cook University	Hydrogen Isotope Mass Spectrometer Facility for Global Change Research	18,000
Japan Atomic Energy Research Institute	Designs of Virtual Environment Systems for the Earth Simulator	2,000,000
Kimberley Land Council	Wanjina Wunggurr Wilinggin Land Claim	31,364
Kluwer Academic Publishers	Social Psychology of Education: An International Journal	23,100
Korea Foundation	Chair in Korean Studies	1,200,000
Land & Water Resources Research & Development Corporation	Improving Deliberative Forms of Public Participation for Decision-making on Sustainability — Scholarship.	84,000
	PhD Scholarship for S.J Niemeyer	6,250
	Consultancy — Implications for Australian Natural Resource Management	150,000
	Wheat/Sheep Landscapes: Perceiving the Past, Present and Future — Scholarship Mr George Main.	84,000
	Improving Deliberative Forms of Public Participation for Decision-making on Sustainability — Scholarship Ms Carolyn Hendriks.	84,000
	<i>Travelling Fellowship Scheme</i>	7,000
	Learning from US Volunteer Monitoring Practices and Protocols	
Land and Water Australia	<i>Research &amp; Development Grant</i> Vegetation Restoration and Landscape Design for Enhanced Biodiversity Conservation	314,370
Land and Water Conservation, Department of (NSW)	Tools to Achieve Landscape Redesign Giving Environmental/ Economic Targets	814,000
Lindbergh Foundation, The Charles A. and Anne Morrow	Measuring Key Components of Koala Habitat by Spectroscopy — A Key to Sustainable Forestry	10,560
Long Bow Group	China Web Encyclopaedia	16,000
Meat and Livestock Australia Ltd	National Livestock Reporting Service Research Study	26,730
Melbourne Enterprises International Ltd	Consultancy — Study Tour for the Office of the National Assembly of Vietnam	30,629
	Word Trade Organisation: Resolution of Trade Disputes Course; Integration of Vietnam into International and Regional Economic Organisations; International Commercial Arbitration; and Integration of International Treaties to which Vietnam is a Party	130,992
	Indonesian Australia Specialised Training Project: Accountability in the Public Sector	53,012
	Indonesia Australia Specialised Training Project Phase II: District & Provincial Financial Planning	89,570
Ministry of Finance, Japan	Study on Future Financial Arrangements to Support Financial Development in East Asia	250,000
Monash University	Regulation of Nuclear Import of Viral Oncoproteins and Transcription Factors by Protein-Protein Interactions	135,000
Motor Neurone Disease Research Institute of Australia Inc	Persistent Sodium Channels in SOD-1 Mice: A New Target for ALS Treatment	24,350
Motorola Inc (USA)	Application of Plasma Switches to Mobile Personal Communication Systems	27,413
National Alliance for Research on Schizophrenia and Depression	<i>Young Investigator Award</i> Roles of D1 Dopaminergic receptors in Cerebral Cortical Development	40,000
National Geographic Society	Grants for Scientific Field Research and Exploration The Genesis of Austronesian dispersal in Taiwan and the Philippines	14,700

National Health and Medical Research Council	Function of an essential Histone Variant During Early Development	435,000
	Activation of Persistent Na <sup>+</sup> Current During Hypoxia: Oxygen Sensors, Na <sup>+</sup> Channel Subunits and Drugs	337,500
	Factors Affecting the Conductance of GABA (A) Channels	405,000
	Research Fellowship: New Appointment at Senior Research Fellow Level 5	387,720
	Research Fellowship: Reappointment to Senior Research Fellow Level 5	386,505
	Mechanisms Underlying the Biochemical Activity of Scabrosin Esters and other Epipolythiodioxopiperazine Toxins	255,000
	<i>Peter Doherty Fellowship 2001</i>	223,268
	Roles of Respiratory Viral Infections on the Exacerbation of Inflamed Airways	
	Research Fellowship: Reappointment at Senior Principal Research Fellow	529,790
	Burnet Award	2,000,000
	Mechanisms Underlying the Biochemical Activity of Scabrosin Esters and other Epipolythiodioxopiperazine Toxins	255,000
	The Functional Basis of Direction Selectivity in the Retina	375,000
	Statistical Methods to Assist the Control of Communicable Diseases, and their Application	210,000
	<i>CJ Martin Fellowship</i>	245,533
	The Role of Integrins in Inner Ear Hair Cell Differentiation	
	<i>National Illicit Drug Strategy Research Program</i>	240,905
	An analysis of needs of Indigenous Illegal Drug users in the ACT and region for treatment and other services	
	Predictors of Cognitive Performance in Old Age	18,540
	<i>Program Grant</i>	2,500,000
	Vascular Biology (via University of NSW)	
	<i>Peter Doherty Fellowship</i>	216,256
	Vasodilator Mechanisms: Anatomical and Functional Variability Amongst Different Vascular Beds, Disease States and Species	
	Investigation of Biological Ion Channels: Theoretical Formulation, Computer Simulation and Experimental Verification	1,005,463
	Pathophysiological Significance of Reverse Signalling through Membrane TNF	360,000
	iNOS, Paediatric Falciparum Malaria and Aspirin	529,835
	Epidemiology of High Prevalence Mental Disorders: Aetiology, Cause and Public Health Intervention	7,750,000
	Control of Influenza A Virus Infection by Gamma Interferon Inducible Mediators	187,690
	Receptors and Ligands Regulating Human NK Cell Proliferation	540,000
	Host Response to Viral Infection: Understanding Immunity and Immunopathology.	525,000
	Receptors and Ligands Regulating Human NK Cell Proliferation	304,060
	<i>Special Program in Diabetes</i>	3,348,000
	Molecular Analysis of Pathways in Diabetes	
	Amplifier (Multi-Clamp) For Electrophysiology	19,018
	Cortical Spreading Depressions: Effects on Intracellular Ca <sup>2+</sup> Concentration and Mechanisms of Propagation	185,000
	Ultra Low Temperature Facility for Cell Storage	17,129
	<i>Population Health Career Development Award</i>	450,000
	Antecedents and Consequences of Cognitive Decline and Depression in Later Life	
	A Functional Proteomics Approach to the Study of Inducible Gene Transcription in a Chromatin Context	450,000
	Allegra 6R Centrifuge and Accessories	19,854
	Multi Channel Neuronal Data Acquisition Interface	18,000
	iNOS, Paediatric Falciparum Malaria and Aspirin	400,000
	Role of Nitric Oxide in Influenza A Virus-Induced Pneumonia	67,327
	The Role of Zeta and Omega Class Glutathione Transferases in Endobiotic and Xenobiotic Metabolism	480,000
	Investigation into the Immunogenicity of Dendritic Cell-Derived Exosomes	255,000
	<i>Grant-In-Aid Research</i>	68,400
	The Persistent Na <sup>+</sup> Current During Hypoxia: the Influence of Subunits, Associated Proteins and Drugs	
	Anatomical and Functional Variation in the Mesenteric and Iris Arterial vasculature; Correlation of Myoendothelial Communication and Mechanisms of Endothelium Dependent Relaxation	89,100
National Institutes of Health (USA)	Clinicopathological Correlates Of Fatal Cerebral Malaria (via Michigan State University)	28,013

National Maritime Museum	Maritime Art Greenwich	11,000
National Museum of Australia	Consultancy — Yirrkala Module, First Australians Gallery	22,950
	Design and Production of K Space Exhibit Mural	5,000
Natural Resources and Environment, Dept of (VIC)	Expert Data Reference Group Services	26,400
Network Economics Consulting Group P/L	Rangarajan Lecture Series	5,000
Northern Land Council	Additional Support — Indigenous Marine Tenure and Resource Use at Blue Mud Bay	63,636
NSW Bureau of Crime Statistics and Research	ATSI Over-Representation in the Criminal Justice System	26,000
NSW National Parks and Wildlife Serv- ice	Forest and Woodland Structure as an Index of Biodiversity — a review	5,500
	Luminescence Dating Laboratory — Human Occupation & Environmental change in the Willandra Lakes Region	11,000
Parks Victoria	Consultancy — Central Highlands Monitoring Project	25,000
Pfizer Pty Ltd	Molecular and Physiological Identification of a Novel Gaba Receptor in the Amygdala	610,000
Placer (Granny Smith) Pty Ltd	<i>Strategic Partnerships with Industry</i> Mapping ore-fluid pathways around mesothermal gold deposits in the Laberton region, WA using alkali elements and stable isotopes	77,600
Preparatory Commission for the Com- prehensive Nuclear-Test-Ban Treaty Organization	Testing and Evaluation of the Seismic Station Array Station (PS2) and Infrasound Array Station (IS07) in Warramunga, Australia	595,861
Professor & Mrs Baume	The Baume Fund	5,000
Professor Anthony Reid	The Anthony Reid Prize in Southeast Asian Studies	5,000
Redfern Polymer Optics	Electro-optic chromophores for ORMOSIL Hosts	90,000
Reserve Bank of Australia	Workshop: The Future Role of the Multilateral Development Banks in the Asia-Pacific Region	10,000
Resource Planning and Development Commission	Protection and Management of Aboriginal Heritage in the Arthur-Pieman Conservation Area	11,952
Rio Tinto Services Ltd	Indigenous Population Projections	15,015
Rural Industries Research and Develop- ment Corporation	Global Demographic and Income Trends: their Impact on Food Consumption	176,679
	Predicting the Productivity of Honey Bees from the Nutritional Value of Pollen	101,051
	Next Stage of Developing a Competitive Rice Inoculant Strain	18,000
	<i>Joint Venture Agroforestry Program</i> Identification of Pest-resistant Eucalyptus globulus	151,737
	ANU Forestry Market Report	115,000
	Indigenous Participation in Rural Learning for Rangeland Sustainability	36,020
	Implications for Australian Industry of Japanese Related Agri-food Investment	79,836
	Marketing Successfully: Effective Strategies for Marketing Farm Forestry Products	35,700
	<i>Joint Venture Agroforestry Program</i> The potential of bioactive constituents of eucalyptus foliage as non-wood products from plantations	22,000
Sea World Research and Rescue Foun- dation Inc	The Reproductive Ecology of Pipefishes in the Genus Stigmatopora	11,760
Smart Internet Technology CRC	Knowledge Acquisition and Machine Learning Project	49,654
	PELICAN Project	100,000
SMEC International Pty Ltd	Consultancy — Social Safety Net Restructuring Project — Tajikistan Part A: Social Pro- tection	101,882
Software Improvements Pty Ltd	Electronic Voting and Vote Counting System to be Developed by Software Improve- ments for the ACT Electoral Commission	8,000
Southern Area Health Services	Are There Benefits of Improving the Mental Health Literacy of Depressed People?	20,000
State Forests of New South Wales	Insect Resistance Traits of Eucalyptus for the NSW Forest Plantation Industry	15,000
Taipei Economic and Cultural Office	Civil Service Development Program	118,962
Talpa Country Estate Pty Ltd	The Hans Mol Endowment Fund	50,000
The Asia Foundation	Training of Students from North Korea in Australia	10,000
	The 27th PAFTAD Conference	5,000
The Financial Markets Foundation for Children	Upper Bedding as a Prevention Measure in Childhood Asthma: A Randomised Control- led trial	144,545
The Ford Foundation	Gender and Sexual Health in Four Countries of Southeast Asia	200,000
The James N. Kirby Foundation	Captain Cook and the Birth of the GPS	9,000
The Japan Foundation	Women in Asia Conference	13,066

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The Japan Foundation (cont'd)	Constitutions and Human Rights in a Global Age: An Asia-Pacific Perspective	34,025
The John D & Catherine T MacArthur Foundation	Asia Region Perspective on Global Environmental Management	15,074
The Myer Foundation	Trilateral Commission Project	15,000
	Human Rights and Constitutions in a Global Age	10,000
The Philanthropic Collaborative, Inc	Earth Charter Research	65,000
The Sasakawa Peace Foundation	Distance Education in the South-West Pacific Cultural Heritage Training Program	47,000
The United Nations University	Project on Population Growth, Land Transformation and Environmental Change (PLEC)	116,803
The University of New South Wales	<i>Research Infrastructure Equipment and Facilities</i> Hyperfine Interactions Spectrometer for Probing Dynamic and Static Atomic Environments	20,000
The Wellcome Trust	The Impact of the Birth Interval on Childhood Mortality in Zambia (Scholarship Mr Namuunda Mutombo)	60,407
	<i>Travelling Research Fellowship</i> Genes, T1-2 Antibody Responses and Autoimmunity (Dr C G de Vinuesa)	115,768
	An Analysis of Zambia's Censuses of Population and Housing: 1969-2000 (Scholarship Mr Chibwe Lwamba)	72,984
	Factors Influencing Children's Work Participation in Metro Cebu, The Philippines (Scholarship Ms Delia B Carba)	57,425
	<i>Equipment Grant</i> An Integrated Microarray System for the Analysis of Gene Expression and Mutation	634,183
	<i>Grants and Support for Biomedical Research</i> Programme of ENU Mutagenesis to Identify Immune Responses Genes (Through Oxford University)	1,693,372
United Nations Development Programme	State, Society and Governance in Melanesia	7,324
United Nations Office for Project Services	Vanuatu Legislative Needs Assessment	7,853
	Tonga and Solomon Islands Legislative Needs Assessment	14,512
United Nations Population Fund	Population and Development Strategies: Population and Development Policy — Cambodia	1,871,050
	Population and Development Strategies: Improving Data in the NIS — Cambodia	704,200
United States Department of Agriculture Forest Service	Evaluation of an Australian and American Landscape Fire Model to a Northern Rocky Mountain Landscape	10,000
United States Institute of Peace	Cosmopolitan Militaries	35,000
University of Adelaide	<i>Australian-German Joint Research Co-operation Scheme</i> Generation, Dynamics and Interaction of Solitary Waves in Photo refractive Crystals and Magnetic Films	14,948
	Experimental and Theoretical Study of Atomic Double Ionization by Electron and Heavy Ion Impact: Complete Pictures of the Four-body Break up Dynamics	9,000
	Sub-Picosecond Laser Deposition of Optical Films	18,000
	Application of the Perturbed Angular Correlation Technique for the Microstructural Identification of Implantation-Induced Disorder in Compound Semiconductors	10,920
	Diode-laser absorption spectroscopy for supersonic combustion studies	23,000
	Maku'a and its Setting: The Documentation of a Dying Language of East Timor	5,700
	Investigations into Atomic Collisions Through the Development of Advanced Technologies	19,380
	Honeybee Navigation: Perception and Communication of Flight Distance	7,200
	Glutamine Transporters as Drug Targets	11,400
	Numerical Algorithms for Investigating Physical and Geometric Processes	12,890
University of Canberra	<i>2001 Research Infrastructure Equipment and Facilities</i> Development of Novel Systems for Wireless Data Communications and Radar	120,000
	Development of Novel Systems for Wireless Data Communications and Radar	10,000
	An Electron Microprobe for High-Accuracy Chemical Microanalysis	15,000
University of Melbourne	Hyperfine Interactions Spectrometer for Probing Dynamic and Static Atomic Environments	108,490
	The Atom Laser Facility	69,000
University of Minnesota	NSF/Australian Cooperative Research: Regulation of the Ryanodine-Receptor by the DHP-Receptor	20,615
University of New South Wales	An Electron Microprobe for High-Accuracy Chemical Microanalysis	10,000
	<i>ARC Linkage — Infrastructure, Equipment &amp; Facilities</i> Focused Ion Beam System for Multidisciplinary Applications	10,000

University of New South Wales (cont'd)	<i>2001 Research Infrastructure Equipment and Facilities</i> The Atom Laser Facility	20,000
	Fast Link to SSO — Australia's Major Optical Astronomical Observatory	30,000
University of Queensland	Advanced Hypersonic Facilities for International Collaborative Research Projects	83,387
University of Rochester	Metabolism and Toxicity of Halogenated Hydrocarbons	57,000
University of Sheffield	Review of Papers for Sheffield University	12,760
University of Tasmania	<i>ARC Linkage — Infrastructure, Equipment &amp; Facilities</i> GPS Receivers and Support Equipment for Geophysical Observatories in Antarctica	20,000
University of Washington	Marsupial X Inactivation	100,000
University of Western Australia	National Facility for Electron Spin-Correlations and Spintronics	86,539
University of Wollongong	Automated, High Sensitivity ESR Spectrometer for Quaternary Dating	64,000
	Universal High Speed Internet Access Test-Base	50,000
US Army Research Office, Far East	Four wave mixing in Dispersion Managed Optical Fiber Links	20,000
US Department of the Navy	Insect Vision Based Seekers and Controllers for Guided Weapons	696,646
Water Research Foundation of Australia	Recharge of Artesian Groundwaters in the Coonamble Embayment of the Great Artesian Basin, Midwestern NSW	21,000
Wenner-Gren Foundation for Anthropological Research	Community and Society in Southern Germany	15,500
	<i>Individual Research Grants Program</i> New Maladies of Self and Society in a Changing Javanese Social and Economic Order	19,450
Wissenschaftskolleg zu Berlin	Institute for Advanced Study Berlin Fellowship	208,000
World Health Organisation	Towards the Elimination of Measles in the Western Pacific Region of WHO — Phase 2	58,984
	Towards the Elimination of Measles in the WPR: A Project Proposal for Assessing Feasibility	58,984
	<i>Special Programme for Research and Training in Tropical Diseases</i> Reverse Genetics of <i>Caenorhabditis Elegans</i> to validate New Anifilarial Drug Targets	52,286
<b>Sub-total</b>	<b>GRANTS \$5,000 and above</b>	<b>106,419,198</b>

## Donations

Donor	Purpose	Amount
Allen, D C K	Cambridge Commonwealth Fellowship	10,000
Al-Maktoun Foundation	Al-Maktoun Endowment in Arab & Islamic Studies	1,000,000
Anonymous	Drama Fund	38,000
	RSPHysSE Endowment Fund	55,000
Atkinson, W J	Centre for Resource and Environment Studies	10,000
Australian Academy of The Humanities, The	Building refurbishment 3 Liversidge Street	18,340
Australian Fulbright Association, The	W G Walker Scholarship	14,670
Australian National Training Authority	Fulbright Scholarship Fund	20,000
Australian National University Union	Joseph & Lindsay Scholarship	5,000
Australian Skeptics Science Foundation	Mount Stromlo Exploratory	10,000
Baume, P & J	Baume Fund, National Centre Epidemiology & Population Health	5,000
BHP Finance Ltd	Fulbright Scholarship Fund	20,000
Boeing Company, The	Research School of Pacific & Asian Studies General Fund	10,000
Borrie W	RSSS Building Fund	5,000
Bridgestar P/L	Oxford Australia Fund	10,000
Brown, D A	David Brown Award in Geology	10,000
Cadbury Schweppes Finance P/L	Cambridge Commonwealth Fellowship	36,000
Cadbury Schweppes Pty Ltd	Vice-Chancellors Welfare Fund	18,000
Clarke, D S	Robert Gordon Menzies Scholarship Fund	10,000
Corrs Chambers Westgarth	LPP 2000 Publications And Proceedings	8,432
Croft, B L	Joseph and Lindsay Croft Scholarship	10,000
CSIRO	Cambridge Commonwealth Fellowship	15,000
Department of Foreign Affairs and Trade	Economics Department Conference	5,500
Fenner, F J	Fenner Conference	52,000
	John Curtin School of Medical Research	40,000
Fildes, J	Joyce Fildes Scholarship	50,000
Forge, O	The Forge Fund	10,000
Fraser, R G & S A	Anne Fraser Prize for American Studies	5,500
Freilich, H & V D	Herbert & Valmae Freilich Foundation	107,000
Friends Of Opera	School Of Music Opera Production	5,000
Griffin, P M	Fenner Hall Endowment Fund	5,000
Harvard Club Of Australia	Robert Gordon Menzies Scholarship Fund	11,730
Hopkins, Andrew	School of Social Sciences	14,000
Kornfeld, F	Kornfeld Scholarship Fund	20,000
Lenart, A	National Mathematics Summer School	5,000
Miller, W G	Bates Prizes	20,000
Nathan, V & L	Angeli Nathan Scholarships	57,000
National Australia Bank	School of Art and Scholarships	10,000
Pharmexa	Leukocyte Signalling and Regulation	9,275
Pratt Foundation	Fulbright Scholarship Fund	20,000
Reserve Bank Of Australia	Neil Vousden Memorial Scholarship Award	5,000
Rio Tinto Services Limited	CAEPR Indigenous Visiting Fellowship Scheme	125,000
Rotary Club Of Canberra East Inc.	Rotary — Alf Gillespie Scholarship	25,000
Senden, T	Applied Maths — Contributions To Research	6,859
Sheu, J H and L L	Bruce Hall Cindy Sheu Scholarship	10,000
Singh, B	Strategic & Defence Studies Centre Fund	5,000
Sjoquist, S & K	Scandinavian Cultural Fund	10,000
Talpa Country Estate Pty Ltd	Hans No 1 Endowment Fund	100,000
Tattersall's Holdings	Science On The Move	5,000

## Principal Grants and Donations

Terrell, R D	Terrell Scholarship Fund	70,155
Thomas, D & B	Stephen Procter Memorial Fund	10,000
Thomas, J	John Curtin School of Medical Research	10,000
Thorpe, Joan Estate	Institute of the Arts	13,454
Victorian Workcover Authority	Fulbright Scholarship Fund	96,376
<b>Sub-total</b>	<b>DONATIONS \$5,000 and above</b>	<b>\$2,477,291</b>
<b>Sub-total</b>	<b>GRANTS and DONATIONS \$5,000 and above</b>	<b>\$108,896,489</b>
<b>Other</b>	<b>GRANTS and DONATIONS \$5,000 and under</b>	<b>\$704,595</b>
<b>TOTAL</b>	<b>GRANTS and DONATIONS</b>	<b>\$109,601,084</b>





# 2001 University Public Lectures

17 January

*Biological Physics in the 21<sup>st</sup> Century*  
Professor Robert Austin (120)

22 February

*Why are the Ark Volcanoes where they are?*  
Professor Philip England (180)

8 March

*Positively Powerful Worldly Wise Women*  
Lisa Bellear (300)

18 April

*Very Elementary Particle Physics*  
Professor Martinus Veltman (170)

19 April

*Sovereignty, Democracy and Constitutions — Finding the Right Formula*  
The Rt. Hon. Chris Patten (160)

4 May

*Scary Monsters and Bright Ideas*  
Robyn Williams (550)

9 May

*The Origin of Our Species*  
Professor Chris Stringer (500)

10 May

*Big Science Little Science at Synchrotron Light Sources in the Twenty-First Century*  
Professor Keith A Moffat (150)

31 May

*The Evolution of the Tribe: The Challenge for an Old Culture in a New Country*  
Sir Tipene O'Regan (100)

5 June

*Recent Events in Bosnia and Herzegovina*  
Mr Ivan Mistic (50)

7 June

*East Timor Today — Challenges and Opportunities*  
Dr Jose Ramos Horta (500)

3 July

*Risks and Benefits from GM Crops*  
Professor Adrienne Clarke (250)

5 July

*The China–Japan–US Triangle*  
Professor Ezra Vogel (450)

*The Politics of Land Rights Negotiations*  
Christa Scholtz, Michael Ryan & Tig Pocock (50)

9 July

*Globalisation in the Developing World*  
Carlos Monsivais (80)

18 July

*One Hundred Years On: Strengths and Strains in the Constitution*  
The Hon Sir Gerard Brennan (250)

31 July

*Sukarno in Retrospect*  
Emeritus Professor J D Legge (100)

9 August

*Guidelines of Argentine Foreign Policy*  
Dr Adalberto Rodriguez Giavarini (150)

*On the evil of tolerance and the virtue of intolerance*  
Dr Evelyn Scott (250)

15 August

*People, Planet and Debt: New Economics - Challenging Globalisation and Creating a Sustainable Future*  
Michael Rowbotham (300)

23 August

*Knowing What to Do: Can there be a Knowledge of Oughts?*  
Professor Allan Gibbard (140)

24 September

*Darwin, Virginia Woolf and Curved Space: The Story of William and Lucy Clifford, 1945–1929*  
Roy and Monty Chisholm (260)

3 October

*King, Hero and God: With Alexander the Great in Asia*  
Professor Andrew Stuart (80)

*Freilich Lecture: The Idea of Prejudice in Social Psychology*  
Professor John C. Turner (80)

10 October

*Freilich Lecture: The Prejudiced Personality and Social Change*  
Professor John C. Turner (60)

18 October

*People, Water and Landscape. Directions in Natural Resource Management*

Dr Andrew Campbell (120)

24 October

*Freilich Lecture: Prejudice in a Social Vacuum*

Professor John C. Turner (60)

*The Role of Art Museums*

Dr Gerard Vaughan (100)

*A Re-examination of Museum Ethics*

Peter Gathercole (80)

6 November

*Islam and the West: Conflict or Cooperation?*

Professor Amin Saikal (270)

8 November

*The Bible as History?*

Professor Jonathan Tubb (80)

14 November

*Art, Ritual and the Crafting of Illusion*

Professor Donald Tuzin (170)

16 November

*Marshall McLuhan, Northrop Frye and Glenn Gould: Three Canadian Legacies to the World of Ideas*

Dr Timothy Maloney (50)

29 November

*Australian/Indonesian Relations: Present and Future*

Dr Hassan Wirajuda, Foreign Minister of Indonesia (250)

6 December

*Out of Darkness: the Evolutionary Journey to Human Color Vision*

Dr Jerry Jacobs

*An Irish Joke: A Dublin Caravaggio*

Dr Brian Kennedy (120)

7 December

*Interpreting Aboriginal Religion: From the 19<sup>th</sup> Century Evolutionism to Durkheimian Sociology* Professor Henrika Kuklick (120)

11 December

DA Brown Lecture

*A Journey Towards Sustainable Development*

Dr Ian B. Lambert (50)

# Freedom of Information Act 1982 Statement

This statement has been prepared in compliance with section 8 of the Freedom of Information Act 1982 and is correct to 31 December 2001

## 1. Functions of the University's decision-making Council and Boards are as follows:

### Council

In accordance with section 8 of the Australian National University Act 1991(Cth), the Council is the governing authority of the University. Section 9 of the Act provides that, subject to this Act and the Statutes, the Council has the entire control and management of the University and is to act in all matters concerning the University in such manner as appears to be best calculated to promote the interests of the University.

The membership of the Council is set out in section 10 of the Act. It is chaired by the Chancellor and comprises 22 members which include elected officers of the University and other ex-officio members, representatives of both Houses of Parliament, persons appointed by the Governor-General, persons appointed by the Chief Minister of the ACT, representatives of various groups of the University's academic staff, representatives of the general staff, graduate and undergraduate students as well as Convocation, and one other person at the discretion of Council.

### Committees of the Council

Council is assisted by the following committees:

- The Standing Committee considers any matter relating to the University referred to it by the Council or, if Council is not sitting, transacts the business of the University except for matters solely within the competence of the Council.
- The Finance Committee makes recommendations and decisions concerning financial and accounting matters of the University.
- Other continuing committees of Council are the Audit Committee, Honorary Degrees Committee, Campus Planning and Development Committee, Committee on Conditions and Appointment of the Vice-Chancellor and Deputy Vice-Chancellors, Emergency Appointment (Vice-Chancellor) Committee and the General Services Fee Committee.

### Academic Board

The Academic Board must report to or advise the Council, as the Council determines, on aspects of the strategic academic direction of the University, including the development of teaching, learning, scholarship, research and research training in all parts of the University

and may advise the Council on all aspects of the academic policy of the University.

The Board comprises the Vice-Chancellor, as Chair, the Deputy Vice-Chancellor, five Heads of Research Schools, four persons chosen from the Deans of The Faculties, two Directors of University Centres, three members of general staff, the Chairperson of Board of the Institute of Advanced Studies and two other members of the academic staff elected from the members of that Board, the Chairperson of the Board of The Faculties and two other members of the academic staff elected from the members of that Board, the President of the Postgraduate and Research Students' Association Inc., and the President of the Australian National University Students' Association.

The Academic Board is assisted by the following committees:

- Education Committee
- Research Committee
- Information Strategy Committee

### Board of the Institute of Advanced Studies

The Board may advise the Council on any matter relating to education, learning or research or the academic work of the University.

The Board of the Institute of Advanced Studies comprises a chairperson appointed by the Council from among the professors in the Institute (who is also Director of the Institute of Advanced Studies), the Vice-Chancellor, the Deputy Vice-Chancellor, the Pro Vice-Chancellor (Academic), the head of each research school and centre in the IAS, three members of academic staff from each research school chosen by the respective faculty or faculty board, the Chairperson of the Board of The Faculties, the President, Postgraduate and Research Students' Association Inc., one other post-graduate graduate, and such other persons as the Council appoints. The Institute of Advanced Studies comprises The John Curtin School of Medical Research and the Research Schools of Astronomy and Astrophysics, Biological Sciences, Chemistry, Earth Sciences, Information Sciences and Engineering, Pacific and Asian Studies, Physical Sciences and Engineering, and Social Sciences. It incorporates the Centre for Resource and Environmental Studies and the School of Mathematical Sciences (IAS component) and a number of mainly multidisciplinary academic centres.

### Board of The Faculties

The Board, subject to the Statutes, may advise the Council on any matter relating to education, learning or research or the academic work of the University.

The Board of The Faculties comprises a chairperson appointed by the Council from among the professors in The Faculties, the Vice-Chancellor, the Deputy Vice-Chancellor, the Pro Vice-Chancellor (Academic), the Dean of each faculty, the Dean of Students, the President of The Australian National University Students' Association, the Chairperson of the Board of the Institute of Advanced Studies and one other member of the IAS, the Chairperson of the Board of the Institute of the Arts, the Director, School of Art, the Director, School of Music, the heads of departments and divisions, the heads of centres in the Faculty of Asian Studies, three professors of law, other representatives of academic staff and students, and such other persons as the Council appoints from time to time. The Faculties offer undergraduate and graduate courses in arts, Asian studies, economics and commerce, engineering and information technology, law, science, art and music.

### **University Schools and Centres**

The University has established a number of schools or other academic organisational structures which include bodies, or members of staff, from the IAS and The Faculties, or, in some other way, draw their resources from the IAS and The Faculties. These comprise the Asia Pacific School of Economics and Management (APSEM), School of Mathematical Sciences (SMS), Centre for Cross Cultural Research (CCCR), Humanities Research Centre (HRC), National Centre for Epidemiology and Population Health (NCEPH), Centre for Educational Development and Academic Methods (CEDAM), Centre for Mental Health Research (CMHR) and the Centre for Aboriginal Economic Policy Research (CAEPR). Each is represented on one or other of the Academic Board, the Board of the Institute of Advanced Studies and/or the Board of The Faculties.

## **2. The functions of the University's Statutory Officers are as follows:**

### **Chancellor**

The Chancellor presides at all meetings of Council and on all ceremonial occasions when available to do so. The Chancellor and the Vice-Chancellor sign the Annual Report of the University to the Parliament.

### **Pro-Chancellor**

The Pro-Chancellor chairs meetings of the Standing Committee and, in the absence of the Chancellor, presides at meetings of the Council and on ceremonial occasions.

### **Vice-Chancellor**

The Vice-Chancellor is the Chief Executive Officer of the University and has such powers and duties as the Statutes prescribe or, subject to the Statutes as the

Council determines. The Vice-Chancellor's role is to control and manage the affairs and concerns of the University including the control and management of real and personal property vested in or acquired by the University. The Vice-Chancellor has, and may exercise, such powers as are necessary or desirable to discharge those duties. The Vice-Chancellor also represents and acts for the University in its relations with the Commonwealth Government and other bodies.

### **Deputy Vice-Chancellor**

The Deputy Vice-Chancellor generally assists in all aspects of the Vice-Chancellor's work, but in particular leads the management of the University's research, teaching and outreach activities and oversees the resource (financial and staffing) management and control of the University and deputises for the Vice-Chancellor in that officer's absence.

## **3. Powers of the University**

The University's powers are based on the Australian National University Act 1991. Under this legislation the University has made statutes, rules and orders.

### **Statutes**

Council has made [32] statutes under section 27(1) which are valid at present —

- Academic Board Statute
- Board of The Faculties Statute
- Board of the Institute of Advanced Studies Statute
- Chancellorship Statute
- Convocation Statute
- Courses and Degrees Statute
- Default Certificate Statute
- Deputy Vice-Chancellorship Statute
- Discipline Statute
- Faculties and Faculty Boards (Institute of Advanced Studies) Statute
- Faculties (The Faculties) Statute
- Fees Statute
- Halls of Residence Statute
- Information Technology Services Statute
- Institute of the Arts Statute
- Institute of the Arts Liquor Statute
- Interpretation Statute
- Library Statute
- Liquor (Affiliated Colleges) Statute
- Liquor (Halls of Residence and University Union) Statute
- Liquor (University Arts Centre) Statute
- Liquor (University House) Statute
- Membership of the Council Statute
- Parking and Traffic Statute
- Pro-Chancellorship Statute
- Residential Colleges (Affiliation) Statute
- Staff Superannuation Statute

- Superannuation Funds (Investment and Management) Statute
- The Australian National University Endowment for Excellence Statute
- University House Statute
- University Seal Statute
- Vice-Chancellorship Statute

### Rules

Rules have been made under the above statutes relating to admission, committees, examinations, fees, discipline, courses and degrees, courses of study, student academic performance, University House, halls of residence, affiliated colleges, membership of Council, the Library, and faculties and faculty boards.

### Orders

Orders have been made under the above statutes relating to research schools, the Library, liquor, and Fee paying overseas students fees.

### Documents available for purchase by the public or otherwise accessible in terms of the Freedom of Information Act 1982 are —

- Council statutes, rules and orders
- Annual Report of the ANU to Parliament
- Annual reports of schools, faculties, centres and units to the Council
- Undergraduate Handbook
- Graduate School Handbook
- Institute of the Arts Handbook
- Purchasing Policy and Procedures
- Finance and Business Manual (electronic version only)
- Occupational Health and Safety Unit Information

Documents which are customarily made available to the public otherwise than under the Freedom of Information Act 1982, free of charge upon request, are the ANU Reporter, National Graduate, information pamphlets and booklets on courses and academic requirements in various disciplines, information on external scholarships, leaflets on academic appointments in the Institute of Advanced Studies and in The Faculties, Library Guides, and an accommodation brochure.

Internal working documents include internal user manuals, Financial Authorisations, Personnel and Payroll (General) Manuals and other policy and procedural documents.

### Facilities for access

Limited facilities for the perusal of documents applicable to individual areas are available at the Staffing Services Branch of the Human Resources Division and/or Student Administration and Support Services.

## FOI procedures and initial contact points

Applications for access to documents under the Freedom of Information Act 1982 (Cth) should be lodged in writing to the Manager, University Records. The written application should include details of the documents or information sought, the application fee (currently \$30.00) or a request for its remission, an address to which notices may be sent and, to facilitate contact with the applicant, a telephone number effective during normal business hours. Lodged applications for access to documents will be acknowledged and a decision notified to the applicant as quickly as possible in accordance with the statute.

Enquiries regarding freedom of information and access to documents may be made at —

University Records  
Lower Ground Floor  
Chancelry, Building No. 10a  
The Australian National University  
CANBERRA ACT 0200

Tel: (02) 6125 4237



# Auditor-General's Report

F2001/366

9 April 2002

Professor I W Chubb AO  
Vice-Chancellor  
Australian National University  
Canberra ACT 0200

Dear Professor Chubb

**AUSTRALIAN NATIONAL UNIVERSITY  
FINANCIAL STATEMENTS 2001**

Returned herewith please find a copy of the University's signed financial statements for the year ended 31 December 2001 together with a copy of the unqualified audit report issued thereon. The audit report and a copy of the signed financial statements were forwarded today to the Minister for Education, Science and Training.

Yours sincerely

Allan M Thompson  
Executive Director

GPO Box 707 CANBERRA ACT 2601  
Centenary House 19 National Circuit  
BARTON ACT  
Phone (02) 6203 7300 Fax (02) 6203 7777



**INDEPENDENT AUDIT REPORT**

To the Minister for Education, Science and Training

**Scope**

I have audited the financial statements of the Australian National University for the year ended 31 December 2001. The financial statements include the consolidated financial statements of the economic entity comprising the Australian National University and the entities it controlled at the year's end or from time to time during the year. The statements comprise:

- Statement by Directors
- Statement of Financial Performance
- Statement of Financial Position
- Statement of Cash Flows
- Schedule of Commitments
- Schedule of Contingencies, and
- Notes to and forming part of the Accounts.

The members of the Council of the University are responsible for the preparation and presentation of the financial statements and the information they contain. I have conducted an independent audit of the financial statements in order to express an opinion on them to you.

The audit has been conducted in accordance with Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards, to provide reasonable assurance as to whether the financial statements are free of material misstatement. Audit procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial statements are presented fairly in accordance with Australian Accounting Standards, other mandatory professional reporting requirements and statutory requirements in Australia so as to present a view which is consistent with my understanding of the Australian National University and the economic entity's financial position, the results of their operations and their cash flows.

The audit opinion expressed in this report has been formed on the above basis.

## **Audit Opinion**

In my opinion,

- (a) the financial statements have been prepared in accordance with Schedule 1 of the Commonwealth Authorities and Companies (Financial Statements 2000-2001) Orders; and
- (b) the financial statements give a true and fair view, in accordance with applicable Accounting Standards, other mandatory professional reporting requirements and Schedule I of the Commonwealth Authorities and Companies (Financial Statements 2000-2001) Orders, of the financial position of the Australian National University and the economic entity as at 31 December 2001 and the results of their operations and their cash flows for the year then ended.

Australian National Audit Office

Allan M. Thompson  
Executive Director

Delegate of the Auditor-General

Canberra  
8 April 2002

# Financial Statements

**THE AUSTRALIAN NATIONAL UNIVERSITY**

**CONSOLIDATED FINANCIAL STATEMENTS FOR YEAR ENDED  
31 DECEMBER 2001**

**STATEMENT BY DIRECTORS**

In the opinion of the Council the Financial Statements for the University and the consolidated Financial Statements for the Economic Entity give a true and fair view of the matters required by Schedule 1 of the Commonwealth Authorities and Companies (Financial Statements 2000-2001) Orders made under the Commonwealth Authorities and Companies Act 1997 (FMO's) and the Guidelines for the Preparation of Annual Financial Reports for the 2001 Reporting Period by Australian Higher Education Institutions issued by the Department of Education, Science and Training.

P E BAUME

Chancellor

I W CHUBB

Vice-Chancellor

4 April 2002

**STATEMENT OF FINANCIAL PERFORMANCE  
FOR THE YEAR ENDED 31 DECEMBER 2001**

	Notes	Consolidated		University	
		2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>REVENUES FROM ORDINARY ACTIVITIES</b>					
Commonwealth Government financial assistance	2	275,274	256,684	275,274	256,726
Higher Education Contribution Scheme					
Commonwealth payments	3	20,282	19,485	20,282	19,485
Student contributions	3	4,496	4,103	4,496	4,103
State Government financial assistance	4	882	971	882	971
Fees and charges	5	23,130	21,051	23,130	17,543
Interest	6	33,409	23,316	21,784	23,312
Dividends	6	16,799	17,949	16,799	17,949
Other investment revenue	6	10,650	24,921	10,650	10,580
Consultancy and contract research		50,098	38,325	30,595	24,927
Sales of goods and services	7	22,535	25,119	22,401	20,951
Gain on disposal of assets	14	544	1,169	526	1,169
Other revenue	8	23,249	17,694	20,922	19,065
Increase from initial land valuation *	1	32,077		32,077	
<b>Total revenues from ordinary activities</b>		<b>513,425</b>	<b>450,787</b>	<b>479,818</b>	<b>416,781</b>
<b>EXPENSES FROM ORDINARY ACTIVITIES</b>					
Employees	9	222,083	211,382	219,910	208,501
Suppliers	10	143,724	122,616	124,691	104,358
Grants	11	27,237	22,935	27,274	22,958
Depreciation and amortisation	12	34,815	27,010	34,300	26,666
Write-down of assets	13	162	124	162	124
Losses from sales of assets	14	3,573	243	3,573	243
Interest	15	20	3	20	3
Other	16	12,011	44,865	11,981	44,955
<b>Total expenses from ordinary activities</b>	17	<b>443,625</b>	<b>429,178</b>	<b>421,911</b>	<b>407,808</b>
Borrowing cost expense		11,600	14,420		
<b>Net operating surplus from ordinary activities</b>		<b>58,200</b>	<b>7,189</b>	<b>57,907</b>	<b>8,973</b>
Net (credit) debit to asset revaluation reserve		7,973	5,518	7,973	5,518
Other net (credit) debit direct to equity		(973)	(3,315)	(973)	(3,515)
<b>TOTAL CHANGES IN EQUITY OTHER THAN THOSE RESULTING FROM TRANSACTIONS WITH OWNERS AS OWNERS</b>		<b>\$ 65,200</b>	<b>\$ 9,392</b>	<b>\$ 64,907</b>	<b>\$ 10,976</b>

\* The University has valued its major holdings of land which are occupied on Perpetual Lease. This first valuation, which is not a cash inflow, is required by Accounting Standards to be shown in this Statement.

The above statement should be read in conjunction with the accompanying notes.

STATEMENT OF FINANCIAL POSITION  
AS AT 31 DECEMBER 2001

	Notes	Consolidated		University	
		2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>ASSETS</b>					
<b>FINANCIAL ASSETS</b>					
Cash	19	115,735	157,490	114,814	157,118
Receivables	20	43,884	25,875	38,979	19,643
Investments	21	635,799	589,466	642,984	596,447
Other	22		122,048		
<b>TOTAL FINANCIAL ASSETS</b>		<b>795,418</b>	<b>894,879</b>	<b>796,777</b>	<b>773,208</b>
<b>NON-FINANCIAL ASSETS</b>					
Land, buildings and infrastructure	23	626,470	584,389	620,375	577,489
Plant and equipment	23	124,519	118,668	124,262	118,276
Inventories	24	2,041	3,395	1,109	1,122
Intangibles	25	131	140		
Other	26	9,717	9,594	8,669	8,590
<b>TOTAL NON-FINANCIAL ASSETS</b>		<b>762,878</b>	<b>716,186</b>	<b>754,415</b>	<b>705,477</b>
<b>TOTAL ASSETS</b>		<b>1,558,296</b>	<b>1,611,065</b>	<b>1,551,192</b>	<b>1,478,685</b>
<b>LIABILITIES</b>					
<b>PROVISIONS AND PAYABLES</b>					
Employees	27	428,938	431,173	428,412	430,581
Suppliers	28	11,484	10,199	9,552	6,637
Other	29	72,348	196,491	67,067	67,916
<b>TOTAL LIABILITIES</b>		<b>512,770</b>	<b>637,863</b>	<b>505,031</b>	<b>505,134</b>
<b>TOTAL ASSETS AND LIABILITIES</b>		<b>\$1,045,526</b>	<b>\$973,202</b>	<b>\$1,046,161</b>	<b>\$973,551</b>
<b>EQUITY</b>					
<b>PARENT ENTITY INTEREST</b>					
Reserves	18	607,580	600,456	606,039	598,336
Accumulated surpluses		437,946	372,746	440,122	375,215
<b>TOTAL EQUITY</b>		<b>\$1,045,526</b>	<b>\$973,202</b>	<b>\$1,046,161</b>	<b>\$973,551</b>
<b>CURRENT LIABILITIES</b>		<b>121,356</b>	<b>118,502</b>	<b>114,346</b>	<b>108,590</b>
<b>NON-CURRENT LIABILITIES</b>		<b>391,414</b>	<b>519,361</b>	<b>390,685</b>	<b>396,544</b>
<b>CURRENT ASSETS</b>		<b>208,826</b>	<b>208,387</b>	<b>199,866</b>	<b>198,366</b>
<b>NON-CURRENT ASSETS</b>		<b>1,349,470</b>	<b>1,402,678</b>	<b>1,351,326</b>	<b>1,280,319</b>

The above statement should be read in conjunction with the accompanying notes.

**STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED 31 DECEMBER 2001**

	Notes	Consolidated		University	
		2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>OPERATING ACTIVITIES</b>					
<b>Cash received</b>					
Revenues from Government:					
		252,764	240,013	252,764	240,013
		13,950	15,886	13,975	15,927
		692	896	692	896
Higher Education Contribution Scheme:					
		3,419	4,090	3,419	4,090
		19,763	19,511	19,763	19,511
		27,946	36,300	30,885	21,664
		40,406	50,246	28,758	35,901
		16,982	5,633	16,982	5,633
		110,540	59,536	83,985	58,221
		<b>486,462</b>	<b>432,111</b>	<b>451,223</b>	<b>401,856</b>
<b>Cash used</b>					
		(234,641)	(219,499)	(232,468)	(216,618)
		(2,759)	(2,053)	(2,724)	(2,053)
		(191,197)	(148,019)	(169,189)	(130,996)
		<b>(428,597)</b>	<b>(369,571)</b>	<b>(404,381)</b>	<b>(349,667)</b>
<b>NET CASH FROM OPERATING ACTIVITIES</b>	31	<b>57,865</b>	<b>62,540</b>	<b>46,842</b>	<b>52,189</b>
<b>INVESTING ACTIVITIES</b>					
<b>Cash received</b>					
		2,414	5,121	2,396	5,121
		15	263	15	263
		169,516	119,862	169,516	114,862
		<b>171,945</b>	<b>125,246</b>	<b>171,927</b>	<b>120,246</b>
<b>Cash used</b>					
		(6,012)		(6,012)	
		(49,519)	(38,986)	(49,487)	(38,867)
		(215,939)	(128,385)	(205,574)	(114,042)
		<b>(271,470)</b>	<b>(167,371)</b>	<b>(261,073)</b>	<b>(152,909)</b>
<b>NET CASH FROM INVESTING ACTIVITIES</b>		<b>(99,525)</b>	<b>(42,125)</b>	<b>(89,146)</b>	<b>(32,663)</b>
<b>NET INCREASE (DECREASE) IN CASH HELD</b>		<b>(41,660)</b>	<b>20,415</b>	<b>(42,304)</b>	<b>19,526</b>
Cash at 1 January	19	157,395	136,980	157,118	137,592
<b>CASH AT 31 DECEMBER</b>	19	<b>\$115,735</b>	<b>\$157,395</b>	<b>\$114,814</b>	<b>\$157,118</b>

The above statement should be read in conjunction with the accompanying notes.

**SCHEDULE OF COMMITMENTS  
AS AT 31 DECEMBER 2001**

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>BY TYPE</b>				
<b>CAPITAL COMMITMENTS</b>				
Property, plant and equipment	5,855	27,904	5,855	27,904
<b>TOTAL CAPITAL COMMITMENTS</b>	<b>5,855</b>	<b>27,904</b>	<b>5,855</b>	<b>27,904</b>
<b>OTHER COMMITMENTS</b>				
Operating leases	822	332	4	332
Other commitments	9,401	600	9,401	600
<b>TOTAL OTHER COMMITMENTS</b>	<b>10,223</b>	<b>932</b>	<b>9,405</b>	<b>932</b>
<b>COMMITMENTS RECEIVABLE</b>	<b>(1,462)</b>	<b>(2,621)</b>	<b>(1,387)</b>	<b>(2,621)</b>
<b>NET COMMITMENTS PAYABLE</b>	<b>\$14,616</b>	<b>\$26,215</b>	<b>\$13,873</b>	<b>\$26,215</b>
<b>BY MATURITY</b>				
<b>All net commitments</b>				
One year or less	13,962	23,536	13,872	23,536
From one to five years	220	2,579	1	2,579
Greater than five years	434	100		100
<b>NET COMMITMENTS PAYABLE</b>	<b>\$14,616</b>	<b>\$26,215</b>	<b>\$13,873</b>	<b>\$26,215</b>
<b>Operating lease commitments</b>				
One year or less	822	332	4	332
From one to five years				
Greater than five years				
<b>NET OPERATING LEASE COMMITMENTS PAYABLE</b>	<b>\$822</b>	<b>\$332</b>	<b>\$4</b>	<b>\$332</b>

NB: Commitments are GST inclusive where relevant

<i>Nature of lease</i>	<i>General description of leasing arrangement</i>
Leases for Office Equipment	* lease payments are not subject to annual increases. * the lease agreements are for 4 years, ending during 2002. * the lease agreements contain options for renewal, for unspecified periods

**SCHEDULE OF CONTINGENCIES AS AT 31 DECEMBER 2001**

Notes	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>CONTINGENT LOSSES</b>				
Guarantees	2,951	2,237	2,951	2,237
Claims for damages/costs	515	110	515	110
<b>TOTAL CONTINGENT LOSSES</b>	<b>\$3,466</b>	<b>\$2,347</b>	<b>\$3,466</b>	<b>\$2,347</b>
<b>CONTINGENT GAINS</b>				
Claims for damages/costs	750		750	
<b>TOTAL CONTINGENT GAINS</b>	<b>\$750</b>		<b>\$750</b>	

The above schedule should be read in conjunction with the accompanying notes.



**NOTES TO AND FORMING PART OF THE ACCOUNTS****1. SIGNIFICANT ACCOUNTING POLICIES****1.1 Basis of Accounting**

The financial statements are a general purpose financial report and have been prepared in accordance with:

- *Schedule 1 of the Commonwealth Authorities and Companies (Financial Statements 2000-2001) Orders* made under the *Commonwealth Authorities and Companies Act 1997* (FMOs) which require that the financial statements are prepared in compliance with Australian Accounting Standards and Accounting Guidance Releases issued by the Australian Accounting Research Foundation, and having regard to Statements of Accounting Concepts;

- the Consensus Views of the Urgent Issues Group; and

- the *Guidelines for the Preparation of Annual Financial Reports for the 2001 Reporting Period by Australian Higher Education Institutions* (the Guidelines) issued by the Department of Education, Science and Training (DEST) (formerly known as the Department of Education, Training and Youth Affairs (DETYA)).

The financial statements have been prepared on an accrual basis and are in accordance with historical cost convention, except for certain assets which, as noted, are at valuation as indicated in Notes 1.4 and 1.6.

The financial report is presented on an economic entity basis. The statements include consolidated reporting for The Australian National University and its wholly and beneficially owned subsidiary company Anutech Pty Limited incorporated in the Australian Capital Territory.

**1.2 Change in Accounting Policy***1.2.1 AASB1018 'Statement of Financial Performance'*

In accordance with AASB1018, the format of the financial statements has been changed. Abnormal items reported in 2000 have been restated.

*1.2.2 AASB1034 'Financial Report Presentation and Disclosures'*

In accordance with AASB1034, additional information has been disclosed on the face of the financial statements and in the accompanying notes.

**1.3 Cash Flows**

Cash for the purposes of the Statement of Cash Flows, includes cash on hand, deposits at call with banks and money market investments readily convertible to cash.

NOTES continued

1. SIGNIFICANT ACCOUNTING POLICIES continued

1.4 Investments

University Funds are invested using guidelines approved by the Council of the University in the following categories:

Bank accepted bills  
 Convertible notes  
 Corporate bonds  
 Debentures  
 Exchanging instalment notes  
 Floating rate notes  
 Government and semi-government stocks and bonds  
 Managed investment funds  
 Negotiable certificates of deposit  
 Overseas managed investment funds  
 Promissory notes  
 Properties  
 Property trusts  
 Shares and share options  
 Short term money market deposits  
 Stapled securities  
 Term deposits  
 Transferable certificates of deposit

Investment assets of the University are stated at market value. Market value in relation to investments has been determined as:

Land and buildings - all valuations are based on the deprival methodology which values investment land and buildings at its current market buying price. The University revalued investment land and buildings as at 31 December 2001;

Shares in public companies, stapled securities and convertible notes - the official market quotation price as listed by the Australian Stock Exchange at the close of business on 31 December 2001;

Fixed interest securities, such as semi government bonds - gross valuation provided by ABN Amro as at 31 December 2001; and

Managed investment funds and Overseas managed investment funds - unit valuation supplied by the fund management groups as at 31 December 2001.

1.5 Inventories

Inventories held for sale are valued at the lower of cost or net realisable value. Costs are assigned to inventories using last purchase cost including costs incurred in bringing each product to its present location and condition. Consumables in store are valued at weighted average unit cost.

1.6 Property, Plant and Equipment

1.6.1 Depreciation and Amortisation

Depreciable property, plant and equipment assets are written off to their estimated residual value over their estimated remaining useful lives to the University using, in all cases, the straight line method of depreciation.

Depreciation and amortisation rates are based on remaining useful lives determined by valuation or as per the following schedule:

	Years
Dwelling and Campus Buildings	40
Plant and equipment	
Motor vehicles	7
Computing equipment	5
Research / teaching equipment	7
Other	10

The aggregate amount of depreciation allocated for each class of assets during the reporting period is disclosed in Note 12.

## NOTES continued

**1. SIGNIFICANT ACCOUNTING POLICIES continued***1.6.2 Valuation*

Plant and equipment were revalued in 1999. This initial independent valuation was performed by the Australian Valuation Office. Non-electronic musical instruments were also included in this revaluation process. Plant and equipment purchased subsequent to the valuation are disclosed at cost. These assets are revalued every three years.

Rare library materials were revalued in 2001. The valuation was completed by independent qualified valuers, The Antique Bookshop and Curios.

Land except for holdings in Fiji as identified in Note 32, has been brought to account. Substantially all of the land in the Australian Capital Territory and the Northern Territory was revalued in 2001. The valuation was completed by an independent valuer, The Australian Valuation Office. The valuation was on the basis of market value for existing use which is consistent with the establishment of the concept of Deprival Value for financial reporting purposes. These sites are provided free of charge by lease in perpetuity and the resultant valuation increment has been credited directly to the asset revaluation reserve.

The initial value of land valued for the first time in 2001 has been taken directly to the Statement of Financial Performance in accordance with AASB1018 '*Statement of Financial Performance*'.

All land and buildings gifted to the University are assessed by independent qualified valuers and revalued in the University's books of account. The last independent valuation was performed in December 1998 by Egan National Valuers.

Substantially all of the campus buildings were revalued in 2000. The valuation was completed by an independent valuer, International Valuation Consultants Pty Ltd. The Depreciated Replacement Cost approach was used to establish the Market Value for the Existing Use of the properties. The net revaluation decrement was debited directly to the asset revaluation reserve. Campus buildings completed subsequent to the valuation are disclosed at cost. These assets are revalued every three years.

Land and dwellings managed by University Accommodation Services were valued independently during 1999 at current market prices by Egan National Valuers. All valuations were estimates of the amounts for which the assets could be exchanged between a knowledgeable willing buyer and a knowledgeable willing seller in an arm's length transaction at the valuation date. These assets are revalued every three years.

*Intangible assets*

The costs of developing major administrative systems are currently being captured and recognised within plant and equipment and amortised.

Intellectual property developed internally has not been brought to account because it cannot be reliably measured.

**1.7 Employee Entitlements**

The liability for long service leave is recognised and measured at the present value of the estimated future cash flows to be made in respect of all employees at 31 December 2001. In determining the present value of the liability, probabilities of taking long service leave, and attrition rates and pay increases through promotion and inflation have been taken into account. The long service leave liability for employees with seven years of service or greater as at 31 December 2001 is \$30,312,694. This additional disclosure increases the long service leave liability by \$4,807,526.

The provision for annual leave reflects the value of total annual leave entitlements of all employees at 31 December 2001 and is recognised at its nominal value.

No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken by employees is less than the annual entitlement for sick leave.

Provision is also made for separation and redundancy payments in circumstances where the University has formally identified positions as excess to requirements and a reliable estimate of the amount of the payments can be determined.

NOTES continued

**1. SIGNIFICANT ACCOUNTING POLICIES continued**

**1.8 Foreign Currency Transactions**

Transactions denominated in a foreign currency are converted at the rate of exchange prevailing at the date of the transaction. At balance date, amounts receivable and payable in a foreign currency are translated at the exchange rate prevailing at that date and any exchange differences are brought to account in the Statement of Financial Performance.

**1.9 Comparative figures**

Where necessary, comparative figures have been adjusted to conform with changes in presentation in these financial statements.

**1.10 Deferred Research and Development Costs**

Anutech Pty Limited's research and development costs are charged against income as incurred, except to the extent that such costs, together with unamortised deferred costs in relation to a project, are expected, beyond any reasonable doubt, to be recoverable.

The deferred costs are amortised over the period in which the corresponding benefits are expected to arise, commencing with the commercial production of the product. The period over which benefits are expected to arise is reviewed regularly to recognise the effects of potential emerging technology and competitive products.

The unamortised balance of research and development costs deferred in previous periods is reviewed regularly and at each reporting date, to ensure the criterion for deferral continues to be met. Where such costs are no longer considered recoverable, they are charged to the profit and loss statement in the financial year.

## NOTES continued

## 2. COMMONWEALTH GOVERNMENT GRANTS

The information provided in this note is only relevant to the University - consolidated figures are not provided.

	University	
	2001 \$'000	2000 \$'000
<b>2.1 COMMONWEALTH GOVERNMENT FINANCIAL ASSISTANCE (excl HECS)</b>		
<b>Grants pursuant to the <i>Higher Education Funding Act 1988</i> , excluding HECS:</b>		
TEACHING AND LEARNING		
Operating purposes excluding HECS	227,665	217,047
AUSTRALIAN RESEARCH COUNCIL		
Large research	4,386	3,857
Strategic partnerships with industry	1,881	1,256
Research fellowships	4,476	4,482
International researcher exchange	163	98
Research centres	479	756
Research infrastructure equipment & facilities	2,357	1,196
Indigenous researchers' development	7	31
Special research initiatives	10	32
International projects	0	0
High performance computer centres (Australian Partnership for Advanced Computing (APAC))	8,857	412
DEST		
Small research	1,460	1,301
Infrastructure block	2,858	2,563
Australian postgraduate awards	4,534	4,533
International postgraduate research scholarships	1,283	1,113
Sub-total pursuant to the <i>Higher Education Funding Act 1988</i>	260,416	238,677
<b>Other Commonwealth Government Grants:</b>		
Health and Aged Care	6,479	6,681
Industry, Science and Resources	3,036	4,029
Foreign Affairs and Trade	1,935	3,860
Agriculture, Fisheries and Forestry	1,279	1,493
Environment and Heritage	498	633
Communications, Information Technology & the Arts	462	82
Defence	340	260
Education, Training and Youth Affairs	41	183
Prime Minister and Cabinet	11	126
Transport and Regional Services	(3)	80
Other	780	622
Total Other Commonwealth Government Grants	14,858	18,049
<b>TOTAL COMMONWEALTH GOVERNMENT FINANCIAL ASSISTANCE</b>	<b>\$275,274</b>	<b>\$256,726</b>

1. The University is the administering institution for an Australian Partnership for Advanced Computing funded in part by DEST under the High Performance Computing and Communications (HPCC) Centres of Expertise programme. A grant of \$19,500,000 was received in December 1998 representing funding for four years for the project. The \$9,761,773 income in advance carried forward shown in Note 2.3 ("High performance computer centres") is committed in future years under the project.

NOTES continued

University  
2001      2000  
\$'000      \$'000

**2.2 ACQUITTAL OF COMMONWEALTH GOVERNMENT GRANTS - AMOUNTS RECEIVED AND EXPENDED PURSUANT TO THE HIGHER EDUCATION FUNDING ACT 1988 EXCLUDING HECS**

**TEACHING AND LEARNING**

**Operating grant, excluding HECS**

Grants in advance (paid in the previous reporting period for the current reporting period including Commonwealth superannuation supplementation)	17,723	17,325
<i>Plus</i> Grants received during reporting period (including Commonwealth superannuation supplementation)	228,276	217,571
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)	(18,132)	(17,723)
Accrual adjustments		
Prior year adjustments		(37)
Income in advance brought forward	437	348
Income in advance carried forward	(639)	(437)
<b>Revenue attributed to the reporting period</b>	<b>227,665</b>	<b>217,047</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>227,665</b>	<b>217,047</b>
<i>Less</i> Expenses for the current period	(227,665)	(217,047)
<b>Surplus/deficit for reporting period</b>		

**AUSTRALIAN RESEARCH COUNCIL**

**Large research**

Grants in advance (paid in the previous reporting period for the current reporting period)		244
<i>Plus</i> Grants received during reporting period	5,289	4,329
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Prior year adjustments	(136)	(4)
Income in advance brought forward	2,214	1,502
Income in advance carried forward	(2,981)	(2,214)
<b>Revenue attributed to the reporting period</b>	<b>4,386</b>	<b>3,857</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>4,386</b>	<b>3,857</b>
<i>Less</i> Expenses for the current period	(4,386)	(3,857)
<b>Surplus/deficit for reporting period</b>		

**Strategic partnerships with industry**

Grants in advance (paid in the previous reporting period for the current reporting period)		68
<i>Plus</i> Grants received during reporting period	1,443	1,560
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Prior year adjustments	(16)	(13)
Income in advance brought forward	1,243	884
Income in advance carried forward	(789)	(1,243)
<b>Revenue attributed to the reporting period</b>	<b>1,881</b>	<b>1,256</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>1,881</b>	<b>1,256</b>
<i>Less</i> Expenses for the current period	(1,881)	(1,256)
<b>Surplus/deficit for reporting period</b>		

NOTES continued

	University	
	2001	2000
	\$'000	\$'000
<b>2.2 ACQUITTAL OF COMMONWEALTH GOVERNMENT GRANTS - AMOUNTS RECEIVED AND EXPENDED PURSUANT TO THE HIGHER EDUCATION FUNDING ACT 1988 EXCLUDING HECS continued</b>		
<b>AUSTRALIAN RESEARCH COUNCIL continued</b>		
<b>Research fellowships</b>		
Grants in advance (paid in the previous reporting period for the current reporting period)		301
<i>Plus</i> Grants received during reporting period	4,711	4,241
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Prior year adjustments	(99)	(204)
Income in advance brought forward	1,359	1,503
Income in advance carried forward	(1,495)	(1,359)
<b>Revenue attributed to the reporting period</b>	<b>4,476</b>	<b>4,482</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>4,476</b>	<b>4,482</b>
<i>Less</i> Expenses for the current period	(4,476)	(4,482)
<b>Surplus/deficit for reporting period</b>		
<b>International researcher exchange</b>		
Grants in advance (paid in the previous reporting period for the current reporting period)		21
<i>Plus</i> Grants received during reporting period	222	144
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Prior year adjustments		(67)
Income in advance carried forward	(59)	
<b>Revenue attributed to the reporting period</b>	<b>163</b>	<b>98</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>163</b>	<b>98</b>
<i>Less</i> Expenses for the current period	(163)	(98)
<b>Surplus/deficit for reporting period</b>		
<b>Research centres</b>		
Grants in advance (paid in the previous reporting period for the current reporting period)		69
<i>Plus</i> Grants received during reporting period	884	797
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Income in advance brought forward	201	91
Income in advance carried forward	(606)	(201)
<b>Revenue attributed to the reporting period</b>	<b>479</b>	<b>756</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>479</b>	<b>756</b>
<i>Less</i> Expenses for the current period	(479)	(756)
<b>Surplus/deficit for reporting period</b>		

NOTES continued

		University	
		2001	2000
		\$'000	\$'000

**2.2 ACQUITTAL OF COMMONWEALTH GOVERNMENT GRANTS - AMOUNTS RECEIVED AND EXPENDED PURSUANT TO THE HIGHER EDUCATION FUNDING ACT 1988 EXCLUDING HECS continued**

**AUSTRALIAN RESEARCH COUNCIL continued**

**Research infrastructure equipment & facilities**

Grants in advance (paid in the previous reporting period for the current reporting period)		
<i>Plus</i> Grants received during reporting period	2,535	914
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)	(900)	
Accrual adjustments		
Income in advance brought forward	2,242	2,524
Income in advance carried forward	(1,520)	(2,242)
<b>Revenue attributed to the reporting period</b>	<b>2,357</b>	<b>1,196</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>2,357</b>	<b>1,196</b>
<i>Less</i> Expenses for the current period	(2,357)	(1,196)
<b>Surplus/deficit for reporting period</b>		

**Indigenous researchers' development**

Grants in advance (paid in the previous reporting period for the current reporting period)		1
<i>Plus</i> Grants received during reporting period	17	26
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		
Accrual adjustments		
Income in advance brought forward	2	6
Income in advance carried forward	(12)	(2)
<b>Revenue attributed to the reporting period</b>	<b>7</b>	<b>31</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>7</b>	<b>31</b>
<i>Less</i> Expenses for the current period	(7)	(31)
<b>Surplus/deficit for reporting period</b>		

**Special research initiatives**

Grants in advance (paid in the previous reporting period for the current reporting period)		
<i>Plus</i> Grants received during reporting period		23
Accrual adjustments		
Income in advance brought forward	13	22
Income in advance carried forward	(3)	(13)
<b>Revenue attributed to the reporting period</b>	<b>10</b>	<b>32</b>
<b>Funds available for the reporting period</b>	<b>10</b>	<b>32</b>
<i>Less</i> Expenses for the current period	(10)	(32)
<b>Surplus/deficit for reporting period</b>		



## NOTES continued

	University	
	2001	2000
	\$'000	\$'000

**2.2 ACQUITTAL OF COMMONWEALTH GOVERNMENT GRANTS - AMOUNTS RECEIVED AND EXPENDED  
PURSUANT TO THE HIGHER EDUCATION FUNDING ACT 1988 EXCLUDING HECS continued**
**AUSTRALIAN RESEARCH COUNCIL continued****High performance computer centres**

Accrual adjustments		
Income in advance brought forward	18,619	19,031
Income in advance carried forward	(9,762)	(18,619)
<b>Revenue attributed to the reporting period</b>	<b>8,857</b>	<b>412</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>8,857</b>	<b>412</b>
<i>Less</i> Expenses for the current period	(8,857)	(412)
<b>Surplus/deficit for reporting period</b>		

**DEST RESEARCH GRANTS****Small research**

Grants in advance (paid in the previous reporting period for the current reporting period)	112	
<i>Plus</i> Grants received during reporting period	1,286	1,449
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)		(112)
Accrual adjustments		
Income in advance brought forward	476	440
Income in advance carried forward	(414)	(476)
<b>Revenue attributed to the reporting period</b>	<b>1,460</b>	<b>1,301</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>1,460</b>	<b>1,301</b>
<i>Less</i> Expenses for the current period	(1,460)	(1,301)
<b>Surplus/deficit for reporting period</b>		

**Infrastructure block**

Grants in advance (paid in the previous reporting period for the current reporting period)	213	
<i>Plus</i> Grants received during reporting period	2,794	2,948
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)	(341)	(213)
Accrual adjustments		
Income in advance brought forward	192	20
Income in advance carried forward		(192)
<b>Revenue attributed to the reporting period</b>	<b>2,858</b>	<b>2,563</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>2,858</b>	<b>2,563</b>
<i>Less</i> Expenses for the current period	(2,858)	(2,563)
<b>Surplus/deficit for reporting period</b>		

NOTES continued

	University	
	2001	2000
	\$'000	\$'000

2.2 ACQUITTAL OF COMMONWEALTH GOVERNMENT GRANTS - AMOUNTS RECEIVED AND EXPENDED PURSUANT TO THE HIGHER EDUCATION FUNDING ACT 1988 EXCLUDING HECS continued

DEST RESEARCH GRANTS continued

Australian postgraduate awards

Grants in advance (paid in the previous reporting period for the current reporting period)		
<i>Plus</i> Grants received during reporting period	4,506	4,620
Accrual adjustments		
Income in advance brought forward	28	(59)
Income in advance carried forward		(28)
<b>Revenue attributed to the reporting period</b>	<b>4,534</b>	<b>4,533</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>4,534</b>	<b>4,533</b>
<i>Less</i> Expenses for the current period	(4,534)	(4,533)
<b>Surplus/deficit for reporting period</b>		

International postgraduate research scholarships

Grants in advance (paid in the previous reporting period for the current reporting period)		
<i>Plus</i> Grants received during reporting period	1,188	1,284
Accrual adjustments		
Income in advance brought forward	529	358
Income in advance carried forward	(434)	(529)
<b>Revenue attributed to the reporting period</b>	<b>1,283</b>	<b>1,113</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>1,283</b>	<b>1,113</b>
<i>Less</i> Expenses for the current period	(1,283)	(1,113)
<b>Surplus/deficit for reporting period</b>		

Universities Systemic Research Infrastructure

Grants in advance (paid in the previous reporting period for the current reporting period)		
<i>Plus</i> Grants received during reporting period	106	
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)	(106)	
Accrual adjustments		
Income in advance brought forward		
Income in advance carried forward		
<b>Revenue attributed to the reporting period</b>		
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>		
<i>Less</i> Expenses for the current period		
<b>Surplus/deficit for reporting period</b>		

NOTES continued

2.3 SUMMARY OF UNSPENT GRANTS

Category of grant	University 2001 \$'000	University 2001 \$'000	University 2001 \$'000
	Unspent grant	Unspent grant for carry forward <sup>1</sup>	Unspent grant to be recovered <sup>2</sup>
Operating purpose, excluding HECS	639	639	
Large research	2,981	2,881	100
Strategic partnerships with industry	789	703	86
Research fellowships	1,495	1,343	152
International researcher exchange	59	59	
Research centres	606	606	
Research infrastructure equipment & facilities	1,520	1,520	
Indigenous researchers' development	12	12	
Special research initiatives	3	3	
High performance computer centres	9,762	9,762	
Small research	414	414	
International postgraduate research scholarships	434	434	
<b>Total unspent grants</b>	<b>\$18,714</b>	<b>\$18,376</b>	<b>\$338</b>

1. Amount of unspent grant that it is more likely will be approved by the Commonwealth for carry forward.
2. Amount of unspent grant that it is more likely will be recovered by the Commonwealth.

3. HIGHER EDUCATION CONTRIBUTION SCHEME (HECS)

	University	
	2001 \$'000	2000 \$'000
Grants in advance (paid in the previous reporting period for the current reporting period)	1,588	1,561
<i>Plus</i> Grants received during reporting period	20,311	19,512
<i>Less</i> Grants in advance (received in the reporting period for the next reporting period)	(1,617)	(1,588)
Commonwealth payments	20,282	19,485
<i>Plus</i> Contributions actually received from students	4,496	4,103
<b>Revenue attributed to the reporting period</b>	<b>24,778</b>	<b>23,588</b>
<i>Plus</i> Surplus/deficit prior year		
<b>Funds available for the reporting period</b>	<b>24,778</b>	<b>23,588</b>
<i>Less</i> Expenses for the current period	(24,778)	(23,588)
<b>Surplus/deficit for reporting period</b>		

4. STATE GOVERNMENT FINANCIAL ASSISTANCE

ACT Government grants for the following purposes were received by the University during the reporting period :

	2001 \$'000	2000 \$'000
Contributions for operating purposes	413	826
Contributions to research projects	469	81
Other contributions		64
<b>Total state government grants</b>	<b>\$882</b>	<b>\$971</b>

5. FEES AND CHARGES

Fees and charges collected during the reporting period were:

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
Continuing education	4,464	2,694	4,464	2,723
Full fee paying overseas students	15,044	11,393	15,044	11,393
Fees-approved post graduate award students	3,253	3,037	3,253	3,037
Other fees and charges	1,836	5,846	1,836	2,309
less disbursement of fees to student bodies and refunds	(1,467)	(1,919)	(1,467)	(1,919)
<b>Total fees and charges</b>	<b>\$23,130</b>	<b>\$21,051</b>	<b>\$23,130</b>	<b>\$17,543</b>

NOTES continued

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>6. INVESTMENT INCOME</b>				
Interest	33,409	23,316	21,784	23,312
Dividends	16,799	17,949	16,799	17,949
<b>Other investment revenue</b>				
Income on technology licences funds		14,341		
Rentals from investment properties	5,481	4,509	5,481	4,509
<i>Investments unrealised during the period</i>				
Overseas managed investment funds	4,663		4,663	
<i>Investments realised during the period</i>				
Corporate bonds	175	338	175	338
Debentures	(5)	(16)	(5)	(16)
Government and semi-government securities	155	169	155	169
Overseas managed investment funds	(4,992)	1,365	(4,992)	1,365
Shares and share options	7,897	6,297	7,897	6,297
Transferable certificate of deposits		(33)		(33)
	13,374	26,970	13,374	12,629
Direct investment expenditure	(2,724)	(2,049)	(2,724)	(2,049)
Total other investment income less direct investment expenditure	10,650	24,921	10,650	10,580
Total investment income	\$60,858	\$66,186	\$49,233	\$51,841
<b>7. SALE OF GOODS AND SERVICES</b>				
Parking permits	1,077	908	1,077	916
Rentals and hire facilities	3,469	2,769	3,356	2,743
Sales	7,932	12,134	7,911	7,984
Tariffs	10,057	9,308	10,057	9,308
Total sale of goods and services	\$22,535	\$25,119	\$22,401	\$20,951
<b>8. OTHER REVENUE</b>				
Sundry income	6,503	3,834	4,176	4,115
Recovery of direct expenditure from outside bodies	12,653	9,535	12,653	10,625
Workers compensation reimbursements	333	471	333	471
Scholarships and prizes	55	184	55	184
Donations and bequests	3,705	3,670	3,705	3,670
Total other revenue	\$23,249	\$17,694	\$20,922	\$19,065
<b>9. EMPLOYEES</b>				
Academic staff salaries	79,185	75,514	79,185	75,514
Academic staff salary related costs <sup>1</sup>	20,458	20,281	20,458	20,281
Non-academic staff salaries <sup>2</sup>	90,255	86,492	88,638	84,221
Non-academic staff salary related costs <sup>3</sup>	32,185	29,095	31,629	28,485
Total cost of employees	\$222,083	\$211,382	\$219,910	\$208,501
1. Salary related expenses during the reporting period (including costs for staff separation and redundancy payments) comprise				
Contributions to superannuation and pension schemes	24,730	22,909	24,510	22,585
Payroll tax	13,922	13,264	13,761	13,008
Workers compensation	1,478	2,268	1,453	2,233
Long service leave expense	4,519	4,218	4,516	4,204
Annual leave expense	7,994	6,717	7,847	6,736
Total salary related expenses	\$52,643	\$49,376	\$52,087	\$48,766
2. Non academic staff salaries comprise:				
Administrative staff	50,823	47,476	48,888	45,205
Technical staff	20,367	19,272	20,606	19,272
Research officers	10,849	10,503	10,928	10,503
Service staff including security	4,435	4,832	4,435	4,832
Librarians	2,029	2,365	2,029	2,365
Trade staff	1,752	2,044	1,752	2,044
Total non academic staff salaries	\$90,255	\$86,492	\$88,638	\$84,221

## NOTES continued

	Consolidated		University	
	2001 S'000	2000 S'000	2001 S'000	2000 S'000
<b>10. SUPPLIERS</b>				
Site maintenance and servicing <sup>1</sup>	34,491	26,169	34,491	26,169
Consumables <sup>2</sup>	61,120	49,963	61,274	50,937
Travel, conferences and fieldwork	15,720	15,414	15,651	15,284
Miscellaneous operating expenses <sup>3</sup>	32,393	31,070	13,275	11,968
Total supplies of goods and services	<u>\$143,724</u>	<u>\$122,616</u>	<u>\$124,691</u>	<u>\$104,358</u>
1. Site maintenance and servicing includes:				
Building repairs and maintenance	19,286	12,794	19,286	12,794
Electricity and gas	6,211	5,401	6,211	5,401
Cleaning expenses	3,620	3,260	3,620	3,260
Municipality charges	1,425	1,193	1,425	1,193
Grounds maintenance	1,964	768	1,964	768
2. Includes research and teaching materials				
3. Miscellaneous operating expenses includes:				
Project expenditure		12,797		
Research and development interest expense		14,341		
Cost of goods sold	1,353	4,169		
Advertising	1,903	1,674	1,903	1,605
Appointment expenses	1,575	1,101	1,575	1,101
Management fees	651	830	651	830
Membership - professional bodies	547	925	547	920
Staff development	1,114	811	1,114	794
Audit expenses, internal and external	676	847	626	759
Visiting fellows	844	703	844	703
Patent applications	1,632	453	1,632	440
Legal expenses, settlements	584	425	584	425
<b>11. GRANTS</b>				
Subsidies/grants	5,265	2,205	5,265	2,205
Scholarships	21,972	20,730	22,009	20,753
	<u>\$27,237</u>	<u>\$22,935</u>	<u>\$27,274</u>	<u>\$22,958</u>
<b>12. DEPRECIATION AND AMORTISATION</b>				
Property at cost	915	716	915	681
Property at valuation	11,493	13,759	11,262	13,614
Plant, equipment and motor vehicles at cost	3,256	5,409	2,972	5,409
Plant, equipment and motor vehicles at valuation	19,151	7,126	19,151	6,962
Total depreciation and amortisation	<u>\$34,815</u>	<u>\$27,010</u>	<u>\$34,300</u>	<u>\$26,666</u>
<b>13. WRITE-DOWN OF ASSETS</b>				
Financial assets				
Receivables for goods and services - bad debts expense	162	124	162	124
Total write-down of assets	<u>\$162</u>	<u>\$124</u>	<u>\$162</u>	<u>\$124</u>

NOTES continued

Notes	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>14. LOSSES FROM SALES OF ASSETS</b>				
Gain on disposal of property, plant, equipment and motor vehicles	544	1,169	526	1,169
Loss on disposal of property, plant, equipment and motor vehicle	3,573	243	3,573	243
Net losses from sales of assets	\$3,029	(\$926)	\$3,047	(\$926)

**15. INTEREST**

Finance charges on lease liabilities	20	3	20	3
Total interest expense	\$20	\$3	\$20	\$3

**16. OTHER EXPENSES**

Doubtful debts expense	408	52	378	142
<i>Commonwealth Superannuation Account</i>				
General administrative expenses		45		45
Pension payments	15,654	14,768	15,654	14,768
Employee superannuation entitlements expense	(4,051)	30,000	(4,051)	30,000
Total other expenses	\$12,011	\$44,865	\$11,981	\$44,955

**17. EXPENSES ATTRIBUTED TO FUNCTIONS**

**17.1 SUMMARY OF EXPENSES ATTRIBUTED TO FUNCTIONS**

Academic activities	17.2	280,038	262,417	260,590	243,254
Libraries	17.3	18,928	15,607	18,928	15,607
Academic support services	17.4	10,753	12,073	8,704	9,726
Student services	17.5	43,489	33,093	43,526	33,155
Public services	17.6	4,167	3,233	4,167	3,235
Buildings and grounds	17.7	28,834	24,667	28,834	24,667
Administration and other general institutional services	17.8	41,650	32,853	41,426	32,839
Other expenses	17.9	15,766	45,235	15,736	45,325
Total expenses from ordinary activities		\$443,625	\$429,178	\$421,911	\$407,808

**17.2 ACADEMIC ACTIVITIES**

*Salary and related expenses*

Academic staff salaries	78,845	75,239	78,845	75,239
Academic staff salary related costs	20,402	20,242	20,402	20,242
Non-academic staff salaries	51,511	49,430	51,511	49,908
Non-academic staff salary related costs	18,629	17,226	18,629	17,226

*Depreciation expense*

Property at cost	234	167	234	167
Property at valuation	7,719	9,426	7,719	9,426
Plant, equipment and motor vehicles	14,184	7,726	14,184	7,726

*Other expenses*

Site maintenance and servicing	7,830	6,344	7,830	6,344
Consumables <sup>1</sup>	39,182	35,415	39,182	35,897
Travel, conferences and fieldwork	14,006	13,832	14,006	13,832
Miscellaneous operating expenses	27,496	27,370	8,048	7,247
Total academic activities expenses	\$280,038	\$262,417	\$260,590	\$243,254

1. Includes research and teaching materials.

## NOTES continued

Notes	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>17.3 LIBRARIES</b>				
<i>Salary and related expenses</i>				
Non-academic staff salaries	5,753	5,462	5,753	5,462
Non-academic staff salary related costs	1,966	2,024	1,966	2,024
<i>Depreciation expense</i>				
Property at cost	170		170	
Property at valuation	693	817	693	817
Plant, equipment and motor vehicles	96	211	96	211
<i>Other expenses</i>				
Site maintenance and servicing	1,023	503	1,023	503
Consumables, including library materials <sup>1</sup>	9,031	6,404	9,031	6,404
Travel, conferences and fieldwork	92	77	92	77
Miscellaneous operating expenses	104	109	104	109
Total libraries expenses	<u>\$18,928</u>	<u>\$15,607</u>	<u>\$18,928</u>	<u>\$15,607</u>

1. Includes research and teaching materials.

**17.4 ACADEMIC SUPPORT SERVICES**

<i>Salary and related expenses</i>				
Non-academic staff salaries	4,484	4,907	3,383	2,912
Non-academic staff salary related costs	1,854	1,598	1,363	1,071
<i>Depreciation expense</i>				
Property at cost	2	2	2	2
Property at valuation	377	562	377	562
Plant, equipment and motor vehicles	766	1,508	766	1,508
<i>Other expenses</i>				
Site maintenance and servicing	579	83	579	83
Consumables <sup>1</sup>	1,802	1,471	1,802	1,492
Travel, conferences and fieldwork	239	352	239	232
Miscellaneous operating expenses	650	1,590	193	1,864
Total academic support services expenses	<u>\$10,753</u>	<u>\$12,073</u>	<u>\$8,704</u>	<u>\$9,726</u>

1. Includes research and teaching materials.

**17.5 STUDENT SERVICES**

<i>Salary and related expenses</i>				
Non-academic staff salaries	4,754	4,172	4,754	4,172
Non-academic staff salary related costs	1,499	1,101	1,499	1,101
<i>Depreciation expense</i>				
Property at cost	152	227	152	227
Property at valuation	1,184	1,437	1,184	1,437
Plant, equipment and motor vehicles	1,638	210	1,638	210
<i>Other expenses</i>				
Site maintenance and servicing	2,647	1,278	2,647	1,278
Consumables <sup>1</sup>	3,241	2,760	3,241	2,763
Travel, conferences and fieldwork	655	701	655	701
Scholarships	27,237	20,730	27,274	20,753
Miscellaneous operating expenses	482	477	482	513
Total student services expenses	<u>\$43,489</u>	<u>\$33,093</u>	<u>\$43,526</u>	<u>\$33,155</u>

1. Includes research and teaching materials.

NOTES continued

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>17.6 PUBLIC SERVICES</b>				
<i>Salary and related expenses</i>				
Academic staff salaries	340	275	340	275
Academic staff salary related costs	56	39	56	39
Non-academic staff salaries	907	980	907	980
Non-academic staff salary related costs	273	240	273	240
<i>Depreciation expense</i>				
Property at cost	2	26	2	26
Property at valuation	161	148	161	148
Plant, equipment and motor vehicles	91	95	91	95
<i>Other expenses</i>				
Site maintenance and servicing	119	86	119	86
Consumables <sup>1</sup>	1,591	944	1,591	946
Travel, conferences and fieldwork	38	120	38	120
Miscellaneous operating expenses	589	280	589	280
Total public services expenses	<u>\$4,167</u>	<u>\$3,233</u>	<u>\$4,167</u>	<u>\$3,235</u>

1. Includes research and teaching materials.

**17.7 BUILDINGS AND GROUNDS**

<i>Salary and related expenses</i>				
Non-academic staff salaries	5,564	5,187	5,564	5,187
Non-academic staff salary related costs	1,894	1,667	1,894	1,667
<i>Depreciation expense</i>				
Property at cost	354	227	354	227
Property at valuation	271	217	271	217
Plant, equipment and motor vehicles	179	305	179	305
<i>Other expenses</i>				
Site maintenance and servicing	19,095	16,071	19,095	16,071
Consumables <sup>1</sup>	1,442	791	1,442	791
Travel, conferences and fieldwork	30	22	30	22
Miscellaneous operating expenses	5	180	5	180
Total buildings and grounds expenses	<u>\$28,834</u>	<u>\$24,667</u>	<u>\$28,834</u>	<u>\$24,667</u>

1. Includes research and teaching materials.

**17.8 ADMINISTRATION AND OTHER GENERAL INSTITUTIONAL SERVICES**

<i>Salary and related expenses</i>				
Non-academic staff salaries	17,282	16,354	16,766	15,600
Non-academic staff salary related costs	6,070	5,239	6,005	5,156
<i>Depreciation expense</i>				
Property at cost	1	67	1	32
Property at valuation	1,088	1,152	857	1,007
Plant, equipment and motor vehicles	5,453	2,480	5,169	2,316
<i>Other expenses</i>				
Site maintenance and servicing	3,199	1,804	3,199	1,804
Consumables <sup>1</sup>	4,985	2,178	4,985	2,644
Travel, conferences and fieldwork	591	310	591	300
Miscellaneous operating expenses	2,981	3,269	3,853	3,980
Total administration and other general institutional services expenses	<u>\$41,650</u>	<u>\$32,853</u>	<u>\$41,426</u>	<u>\$32,839</u>

1. Includes research and teaching materials.



## NOTES continued

	Consolidated		University	
	2001 S'000	2000 S'000	2001 S'000	2000 S'000
<b>17.9 OTHER</b>				
Bad debts	162	124	162	124
Doubtful debts expense	408	52	378	142
Interest expense	20	3	20	3
Loss on disposal of plant, equipment and motor vehicle:	3,573	243	3,573	243
<i>Commonwealth Superannuation Account</i>				
General administrative expenses		45		45
Pension payments	15,654	14,768	15,654	14,768
Employee superannuation entitlements expense	(4,051)	30,000	(4,051)	30,000
Total other expenses	\$15,766	\$45,235	\$15,736	\$45,325

**18. RESERVES**

Asset revaluation - Property	452,814	453,075	451,273	450,955
Asset revaluation - Investments	52,411	54,816	52,411	54,816
Asset revaluation - Plant & Equipment	53,080	53,139	53,080	53,139
Asset revaluation - Crown Lease	960		960	
Asset revaluation - Rare Library Materials	4,582		4,582	
	563,847	561,030	562,306	558,910
<i>Special Reserves:</i>				
Building	11,756	8,133	11,756	8,133
Equipment	10,013	6,059	10,013	6,059
Development and Restructuring	16,401	20,377	16,401	20,377
Self insurance of dwellings and buildings	5,563	4,857	5,563	4,857
Total special reserves	43,733	39,426	43,733	39,426
Total reserves	\$607,580	\$600,456	\$606,039	\$598,336

**Summary of movements in reserves during the year ended 31 December 2001**

Balance at beginning of year	600,456	629,105	598,336	626,853
Transfer from retained surpluses	10,940	9,120	10,940	9,120
Transfer to retained surpluses	(17,940)	(11,323)	(17,940)	(11,123)
Transfer to provisions and payables	3,334	(640)	3,334	
Increments/(decrements) on revaluation	10,790	(25,806)	11,369	(26,514)
Balance at end of year	\$607,580	\$600,456	\$606,039	\$598,336

**Movements in reserves***Asset revaluation - Property*

Balance at beginning of year	453,075	505,633	450,955	504,221
Transfer to retained surpluses				
Increments/(decrements) on revaluation of				
Land	454	(72)	454	(72)
Buildings	(715)	(52,486)	(136)	(53,194)
Balance at end of year	\$452,814	\$453,075	\$451,273	\$450,955

NOTES continued

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>18. RESERVES continued</b>				
<b>Movements in reserves continued</b>				
<i>Asset revaluation - Plant and Equipment</i>				
Balance at beginning of year	53,139	53,139	53,139	53,139
Increments/(decrements) on revaluation	(59)		(59)	
Balance at end of year	\$53,080	\$53,139	\$53,080	\$53,139
<i>Asset revaluation - Investments</i>				
Balance at beginning of year	54,816	33,582	54,816	33,582
Transfer to retained surpluses	(7,973)	(5,518)	(7,973)	(5,518)
Increments on revaluation	5,568	26,752	5,568	26,752
Balance at end of year	\$52,411	\$54,816	\$52,411	\$54,816
<i>Asset revaluation - Crown Lease</i>				
Balance at beginning of year				
Transfer to retained surpluses				
Increments on revaluation	960		960	
Balance at end of year	\$960		\$960	
<i>Asset revaluation - Rare Library Materials</i>				
Balance at beginning of year				
Transfer to retained surpluses				
Increments on revaluation	4,582		4,582	
Balance at end of year	\$4,582	\$0	\$4,582	\$0
<i>Building</i>				
Balance at beginning of year	8,133	4,332	8,133	4,132
Transfer from retained surpluses	3,607	6,689	3,607	6,689
Transfer to retained surpluses	(3,318)	(2,888)	(3,318)	(2,688)
Transfer to provisions and payables	3,334		3,334	
Balance at end of year	\$11,756	\$8,133	\$11,756	\$8,133
<i>Equipment</i>				
Balance at beginning of year	6,059	7,087	6,059	7,087
Transfer from retained surpluses	4,694	607	4,694	607
Transfer to retained surpluses	(740)	(1,635)	(740)	(1,635)
Balance at end of year	\$10,013	\$6,059	\$10,013	\$6,059
<i>Development and Restructuring</i>				
Balance at beginning of year	20,377	20,500	20,377	20,500
Transfer from retained surpluses	1,875	1,082	1,875	1,082
Transfer to retained surpluses	(5,851)	(1,205)	(5,851)	(1,205)
Balance at end of year	\$16,401	\$20,377	\$16,401	\$20,377
<i>Self insurance of dwellings and buildings</i>				
Balance at beginning of year	4,857	4,192	4,857	4,192
Transfer from retained surpluses	764	742	764	742
Transfer to retained surpluses	(58)	(77)	(58)	(77)
Balance at end of year	\$5,563	\$4,857	\$5,563	\$4,857
<i>Research donations</i>				
Balance at beginning of year		640		
Transfer to retained surpluses				
Transfer to provisions and payables		(640)		
Balance at end of year				

## NOTES continued

	Consolidated		University	
	2001 S'000	2000 S'000	2001 S'000	2000 S'000
<b>19. CASH</b>				
Cash on hand	48	52	48	52
Bank	3,295	3,453	2,374	3,081
Deposits at call	112,392	153,985	112,392	153,985
	<u>\$115,735</u>	<u>\$157,490</u>	<u>\$114,814</u>	<u>\$157,118</u>

The total cash available, includes \$43,733,000 (University \$43,733,000) which has been retained for future expenditure as outlined in the Special Reserves (see Note 18).

**20. RECEIVABLES***Current receivables:*

Goods and services	21,553	17,657	18,966	11,425
Less: Provision for doubtful debts	(1,148)	(740)	(1,118)	(740)
	<u>20,405</u>	<u>16,917</u>	<u>17,848</u>	<u>10,685</u>
Income due	12,155	3,395	8,761	3,395
Interest receivable	4,244	4,594	4,267	4,594
GST receivable	2,057	954	2,057	954
	<u>38,861</u>	<u>25,860</u>	<u>32,933</u>	<u>19,628</u>

*Non-current receivables:*

Loans	5,023	15	6,046	15
	<u>5,023</u>	<u>15</u>	<u>6,046</u>	<u>15</u>
Total non-current receivables				
	<u>\$43,884</u>	<u>\$25,875</u>	<u>\$38,979</u>	<u>\$19,643</u>

*Ageing of receivables (gross):*

Not overdue	29,743	20,257	27,302	14,255
Less than 30 days overdue	7,140	2,190	5,547	1,907
30 to 60 days overdue	4,038	764	4,023	982
60 to 90 days overdue	2,440	3,404	1,554	3,239
More than 90 days	1,671		1,671	
	<u>\$45,032</u>	<u>\$26,615</u>	<u>\$40,097</u>	<u>\$20,383</u>

NOTES continued

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>21. INVESTMENTS</b>				
<i>Current investments:</i>				
<i>Investments at valuation (see Note 1.4)</i>				
Corporate bonds	27,194	4,038	27,194	4,038
Debentures	2,523		2,523	
Government and semi-government securities		6,870		6,870
Transferable certificate of deposits	1,000		1,000	
Floating rate notes	11,624	1,000	11,624	1,000
Total current investments	<u>\$42,341</u>	<u>\$11,908</u>	<u>\$42,341</u>	<u>\$11,908</u>
<i>Non-current investments:</i>				
<i>Investments at valuation (see Note 1.4)</i>				
Convertible notes	390	386	390	386
Corporate bonds	128,744	110,955	128,744	110,955
Debentures		1,993		1,993
Exchanging instalment notes		4,188		4,188
Floating rate notes	8,228	21,084	8,228	21,084
Government and semi-government securities	47,332	46,177	47,332	46,177
Managed investment funds	20,404	29,828	20,404	29,828
Overseas managed investment funds	52,994	43,789	52,994	43,789
Properties	56,590	42,800	56,590	42,800
Property trusts	25,015	21,035	25,015	21,035
Shares and share options	251,189	252,787	251,174	252,768
Shares in subsidiary			7,200	7,000
Stapled securities				
Transferable certificate of deposits	2,000	2,000	2,000	2,000
Other	572	536	572	536
Total non-current investments	<u>593,458</u>	<u>577,558</u>	<u>600,643</u>	<u>584,539</u>
Total investments	<u>\$635,799</u>	<u>\$589,466</u>	<u>\$642,984</u>	<u>\$596,447</u>

**22. OTHER FINANCIAL ASSETS**

Technology licence fund accrued income		81,264
Technology licence fund cash investment		40,784
		<u>\$122,048</u>

## NOTES continued

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>23. LAND AND BUILDINGS, AND INFRASTRUCTURE, PLANT AND EQUIPMENT</b>				
Work in progress	2,582	43,264	2,582	43,264
Site infrastructure at cost	13,662	10,016	13,662	10,016
Accumulated depreciation	(5,264)	(4,928)	(5,264)	(4,928)
Campus buildings at cost	38,439		38,439	
Accumulated depreciation	(443)		(443)	
Property at Cost	46,394	5,088	46,394	5,088
Site infrastructure at valuation	1,990	454	1,990	454
Accumulated depreciation	(92)	(14)	(92)	(14)
Land at valuation	38,280	6,048	38,280	6,048
Dwellings at valuation	6,089	6,365	6,089	6,365
Accumulated depreciation	(443)	(288)	(443)	(288)
Campus buildings at valuation	545,697	527,394	539,602	520,494
Accumulated depreciation	(17,027)	(6,098)	(17,027)	(6,098)
Property at Valuation	574,494	533,861	568,399	526,961
Crown Lease	3,000	3,400	3,000	3,400
Accumulated amortisation		(1,224)		(1,224)
Amortised crown lease	3,000	2,176	3,000	2,176
Total land, buildings and infrastructure	\$626,470	\$584,389	\$620,375	\$577,489
Plant, equipment and motor vehicles at cost	35,085	47,915	33,597	46,406
Accumulated depreciation	(6,319)	(8,298)	(5,088)	(7,181)
Plant, equipment and motor vehicles at valuation	231,314	202,381	231,314	202,381
Accumulated depreciation	(147,873)	(131,898)	(147,873)	(131,898)
	112,207	110,100	111,950	109,708
Works of art at cost	532	714	532	714
Works of art at valuation	4,924	5,580	4,924	5,580
	5,456	6,294	5,456	6,294
Rare library materials at cost		2,274		2,274
Rare library materials at valuation	6,856		6,856	
	6,856	2,274	6,856	2,274
Total plant and equipment	124,519	118,668	124,262	118,276
Total land, buildings, infrastructure, plant and equipment	\$750,989	\$703,057	\$744,637	\$695,765

Table A: Movement summary 2001 for all assets irrespective of valuation basis (Consolidated only)

	Land \$'000	Buildings \$'000	Other infrastructure \$'000	Total land and buildings and other infrastructure \$'000	Plant and equipment \$'000	Total \$'000
<b>Gross value</b>						
As at 1 January 2001	6,048	533,759	57,134	596,941	258,864	855,805
Additions	351	59,329	3,646	63,326	20,485	83,811
Initial valuation of land	32,077			32,077		32,077
Revaluations	454	(956)	(400)	(902)	4,582	3,680
Disposals	(650)	(371)		(1,021)	(21,155)	(22,176)
Other movements		(1,536)	(39,146)	(40,682)	15,935	(24,747)
As at 31 December 2001	38,280	590,225	21,234	649,739	278,711	928,450
<b>Accumulated depreciation / amortisation</b>						
As at 1 January 2001		6,386	6,166	12,552	140,196	152,748
Disposals		(117)		(117)	(16,962)	(17,079)
Charge for the reporting period		11,875	533	12,408	22,407	34,815
Revaluations		(231)	(1,360)	(1,591)		(1,591)
Other movements			17	17	8,551	8,568
As at 31 December 2001		17,913	5,356	23,269	154,192	177,461
Net book value as at 31 December 2001	\$38,280	\$572,312	\$15,878	\$626,470	\$124,519	\$750,989
Net book value as at 1 January 2001	\$6,048	\$527,373	\$50,968	\$584,389	\$118,668	\$703,057

NOTES continued

23. LAND AND BUILDINGS, AND INFRASTRUCTURE, PLANT AND EQUIPMENT continued

Table B: Summary of balances of assets at valuation as at 31 December 2001 (Consolidated only)

Item	Land \$'000	Buildings \$'000	Other infrastructure \$'000	Total land and buildings and other infrastructure \$'000	Plant and equipment \$'000	Total \$'000
<b>Gross value</b>						
As at 1 January 2001	6,048	533,759	454	540,261	207,961	748,222
Additions	351	20,890		21,241		21,241
Initial valuation of land	32,077			32,077		32,077
Revaluations	454	(956)	3,000	2,498	6,856	9,354
Disposals	(650)	(371)		(1,021)	(4,885)	(5,906)
Other movements		(1,536)	1,536		33,162	33,162
As at 31 December 2001	38,280	551,786	4,990	595,056	243,094	838,150
<b>Accumulated depreciation / amortisation</b>						
As at 1 January 2001		6,386	14	6,400	131,898	138,298
Disposals		(136)		(136)	(2,609)	(2,745)
Charge for the reporting period		11,236	62	11,298	15,827	27,125
Revaluations						
Other movements		(16)	16		2,757	2,757
As at 31 December 2001		17,470	92	17,562	147,873	165,435
Net book value as at 31 December 2001	\$38,280	\$534,316	\$4,898	\$577,494	\$95,221	\$672,715
Net book value as at 1 January 2001	\$6,048	\$527,373	\$440	\$533,861	\$76,063	\$609,924

The information provided has been prepared for consolidated activity only.

	Consolidated		University	
	2001 \$'000	2000 \$'000	2001 \$'000	2000 \$'000
<b>24. INVENTORIES</b>				
Inventory held for sale	1,119	2,449	187	176
Consumables in store	922	946	922	946
	\$2,041	\$3,395	\$1,109	\$1,122

25. INTANGIBLES

<i>Current assets:</i>				
Goodwill on acquisition	181	181		
Amortisation of goodwill	(50)	(41)		
<i>Total current assets:</i>	\$131	\$140		

26. OTHER NON-FINANCIAL ASSETS

<i>Current assets:</i>				
Advance payments and prepaid expenditure	8,676	8,610	8,669	8,590
<i>Non-current assets:</i>				
Deferred research and development costs	1,041	984		
Total other non-financial assets	\$9,717	\$9,594	\$8,669	\$8,590

## NOTES continued

	Consolidated		University	
	2001 S'000	2000 S'000	2001 S'000	2000 S'000
<b>27. EMPLOYEES</b>				
<i>Current liability:</i>				
Accrued salary and related expenses	6,445	5,785	6,445	5,785
Superannuation levy	853	684	853	684
Payroll tax	460	406	460	406
Workers' compensation	73	52	73	52
Accrued pension payments	1,765	2,069	1,765	2,069
Employee superannuation entitlements	15,297	13,973	15,297	13,973
Annual Leave entitlements	9,212	8,378	8,748	7,895
Long Service Leave entitlements	4,086	3,263	4,086	3,173
	<u>38,191</u>	<u>34,610</u>	<u>37,727</u>	<u>34,037</u>
<i>Non-current liability:</i>				
Employee superannuation entitlements	359,652	365,027	359,652	365,027
Long Service Leave entitlements	31,095	31,536	31,033	31,517
	<u>390,747</u>	<u>396,563</u>	<u>390,685</u>	<u>396,544</u>
Total provisions and payables to employees	<u>\$428,938</u>	<u>\$431,173</u>	<u>\$428,412</u>	<u>\$430,581</u>
<b>28. SUPPLIERS</b>				
Trade creditors	11,484	10,199	9,552	6,637
Total provisions and payables to suppliers	<u>\$11,484</u>	<u>\$10,199</u>	<u>\$9,552</u>	<u>\$6,637</u>
<b>29. OTHER PROVISIONS AND PAYABLES</b>				
<i>Other current provisions and payables:</i>				
Income in advance	65,543	65,509	65,226	65,162
Other creditors	1,841	2,754	1,841	2,754
Bank overdraft		95		
Research account	622	615		
Incomplete project revenue	3,675	4,720		
Total other current provisions and payables	<u>71,681</u>	<u>73,693</u>	<u>67,067</u>	<u>67,916</u>
<i>Other non-current provisions and payables:</i>				
Income in advance	667	750		
Licences and royalties		122,048		
Total other non-current provisions and payables	<u>667</u>	<u>122,798</u>		
Total other provisions and payables	<u>\$72,348</u>	<u>\$196,491</u>	<u>\$67,067</u>	<u>\$67,916</u>

NOTES continued

30. FINANCIAL INSTRUMENTS

30.1 TERMS, CONDITIONS AND ACCOUNTING POLICIES

Financial Instrument	Notes	Accounting Policies and Methods	Nature of underlying instrument
<i>Financial assets</i>		Financial assets are recognised when control over future economic benefits is established and the amount of the benefit can be reliably measured.	
Government and semi-government securities (G&SGS) and corporate bonds	21	Commonwealth and State Government Bonds are recognised at market value. Interest is credited to revenue as it accrues.	G&SGS have terms of up to 15 years. G&SGS are guaranteed by the issuing Government and are traded in active markets. Coupons are usually received on the anniversary of the maturity date and six months from the anniversary date. Investment in corporate bonds is restricted to debt securities issued by authorised banks and companies with an A+ credit rating. Terms up to 10 years.
Debentures	21	The debentures held are recognised at market value. Interest is recognised as it accrues.	Investment in debentures is restricted to companies with an A+ credit rating and affiliated with an authorised bank. Interest is paid quarterly or half yearly.
Transferable certificates of deposits (TCDs)	21	TCDs are recognised at market value. Interest is accrued as it is earned.	TCDs are purchased from authorised banks. Terms are variable but normally less than 5 years.
Overseas managed investment funds and managed investment funds	21	Managed investment funds are carried at the market value of the underlying asset. Converted to AUD at the prevailing spot rate.	Managed funds comprise assets made up of listed companies on world stock markets, foreign cash balances and cash in Australian dollars. Distributions are reinvested in new units.
Convertible notes	21	Convertible notes are quoted on the Australian Stock Exchange and are valued at the last sale price on the day of valuation. Movements in these values between reporting dates are accounted for in accordance with the provisions of AAS 10 "Accounting for the Revaluation of non-Current Assets".	Convertible notes convert to ordinary shares on a predetermined date.
Exchanging instalment notes (EINs)	21	EINs are quoted on the Australian Stock Exchange and are valued at the last sale price on the day of valuation.	EINs are a form of debt security and convert to ordinary shares on a one for one basis at a predetermined date. Interest payments are made half yearly.
Properties	21	Physical properties held in the investment portfolio are carried at market value. Formal independent valuations are obtained every three years and internal valuations based on market research are used for interim years.	Physical property held for investment purposes.
Property trusts	21	Property trusts held by the University are quoted on the Australian Stock Exchange and are valued at the last sale price.	Listed property trusts have underlying assets comprising physical properties and cash balances. Distributions are received in cash.
Shares in listed companies	21	These shares are carried at their quoted last sale price. Movements in these values between reporting dates are accounted for in accordance with the provisions of AAS 10 "Accounting for the Revaluation of non-Current Assets". Dividend income is recognised when dividends are declared.	A mixture of ordinary and preference shares are held.
Cash at bank and deposits at call	19	Cash at bank and deposits are recognised at their nominal amounts. Interest is credited to revenue as it accrues.	Temporarily surplus funds, mainly from fortnightly drawdowns of funding payments and surplus investment funds, are placed on deposit at call with authorised banks. Interest is earned on the daily balance at the prevailing daily rate for money on call and is paid at month end.
Floating rate notes (FRNs)	21	Carried at face value plus accrued interest from last coupon payment date.	Income quarterly. Coupon set quarterly at a premium to 90 day Bank Bill Swap Reference Rate. Fixed term. Investment is restricted to FRNs issued by authorised banks or companies with A+ credit ratings.
Receivables for goods & services	20	Receivables are recognised at the nominal amounts due less any provision for bad and doubtful debts. Provisions are made when collection of the debt is judged to be less rather than more likely.	The University's credit terms are net 30 days. Settlement periods for entities consolidated range from 14-60 days.
Technology Licence Fund	22	The Technology Licence Fund represents long term deposits and accrued interest. Interest is credited annually.	The fund and any accrued interest will be applied in settling the corresponding liability in Licences and Royalties.



## NOTES continued

## 30.1 TERMS, CONDITIONS AND ACCOUNTING POLICIES (continued)

Financial Instrument	Notes	Accounting Policies and Methods	Nature of underlying instrument
<b>Financial liabilities</b>		Financial liabilities are recognised when a present obligation to another party is entered into and the amount of the liability can be reliably measured.	
Bank overdraft	29	The bank overdraft of the subsidiary is recognised at the principal amount. Interest is expensed as it accrues.	The facility is of a variable amount up to a maximum of \$1,500,000. Interest accrues daily at the prevailing market rate.
Trade creditors	28	Creditors and accruals are recognised at their nominal amounts, being the amounts at which the liabilities will be settled. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).	Settlement is usually made net 30 days.
Licences and royalties	29	The licence fees and royalties accrue interest annually.	The liability is matched to the corresponding asset, Technology Licence Fund.

## 30.2 INTEREST, CURRENCY, MARKET, CASH FLOW AND CREDIT RISK

	Less than 1 year \$'000	Between 1 and 5 years \$'000	Greater than 5 years \$'000	Total carrying amount \$'000	Fair Value \$'000	Weighted average interest rate %
<b>FINANCIAL ASSETS</b>						
<i>Interest Rate Risk</i>						
Corporate bonds	27,194	113,481	15,263	155,938	155,938	6.82
Debentures	2,523			2,523	2,523	5.96
Government and semi-government bonds		10,174	37,158	47,332	47,332	6.71
Transferable certificates of deposit	1,000	2,000		3,000	3,000	6.50
<i>Currency Risk</i>						
Overseas managed investment funds			52,994	52,994	52,994	
<i>Market Risk</i>						
Convertible notes			390	390	390	7.50
Managed investment funds			20,404	20,404	20,404	
Properties			56,590	56,590	56,590	
Property trusts			25,015	25,015	25,015	
Shares and share options			251,189	251,189	251,189	
<i>Cash Flow Risk</i>						
Cash			115,735	115,735	115,735	4.48
Floating rate notes	11,624	2,499	5,729	19,852	19,852	5.48
Other		572		572	572	
<i>Credit Risk</i>						
Receivables	38,861	5,023		43,884	43,884	
<b>Total Financial Assets</b>	<b>\$81,202</b>	<b>\$133,749</b>	<b>\$580,467</b>	<b>\$795,418</b>	<b>\$795,418</b>	
<b>FINANCIAL LIABILITIES</b>						
<i>Credit Risk</i>						
Trade creditors				11,472	11,472	
<b>Total Financial Liabilities</b>	<b>\$11,472</b>			<b>\$11,472</b>	<b>\$11,472</b>	

The information provided has been prepared for consolidated activity only.

*Interest rate risk* is the risk that the realisable value of a financial instrument will fluctuate due to changes in market interest rates.

*Currency risk* is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.

*Market risk* is the risk that the value of a financial instrument will fluctuate as a result of changes in market prices.

*Cash flow risk* is the risk that realisable future cash flows associated with a monetary financial instrument will fluctuate in amount.

*Credit risk* is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss.

The University's maximum exposures to credit risk at 31 December 2001 in relation to each class of recognised financial assets is the carrying amount of those assets as indicated in the Statements of Financial Position. The University has no significant exposures to any concentration of credit risk. All figures for credit risk referred to do not take into account the value of any collateral or other security.

NOTES continued

Notes	Consolidated		University	
	2001 S'000	2000 S'000	2001 S'000	2000 S'000
<b>31. RECONCILIATION OF OPERATING RESULT TO NET CASH FLOWS FROM OPERATIONS</b>				
Reported net operating surplus from ordinary activities	58,200	8,243	57,907	8,973
Depreciation and amortisation of property, plant and equipment	34,685	27,010	34,300	26,666
Net loss on disposal of assets	3,054	(926)	3,050	(926)
Initial land valuation	(32,077)		(32,077)	
Provision for doubtful debts	162	142	162	142
Provision for Intellectual Property Protection		(37)		
Unrealised gain on investments	(4,662)		(4,662)	
Dividend reinvestment		(12,316)		(12,316)
<i>(Increase)/Decrease in operating assets</i>				
Receivables	(11,542)	(11,402)	(12,051)	(7,477)
Advance payments and prepaid expenditure	(647)	921	(603)	666
Inventories	1,366	665	13	(30)
Other		(225)		
<i>Increase/(Decrease) in operating liabilities</i>				
Provision for employee entitlements	1,216	31,569	1,282	31,543
Employee related liabilities	(3,451)	6,408	(3,451)	6,408
Trade Creditors	(618)	(505)	1,229	(1,592)
Other provisions and payables	(2,000)	132	(849)	132
Other	14,179	12,861	2,592	
Net cash flows from operating activities	\$57,865	\$62,540	\$46,842	\$52,189

**32. LAND**

**Australian Capital Territory**

The major teaching and research facilities of the University are located on the Acton Campus site of 148 hectares and the Mt Stromlo site of 81 hectares. These sites are provided free of charge and held on lease in perpetuity. The use of this land is restricted to Australian National University activities.

The University occupies other sites of 224 hectares within the Australian Capital Territory on varying leasehold terms and conditions. The value of this land has been assessed and brought to account.

**New South Wales**

The University owns 148 hectares of freehold land at Coonabarabran on which is located the Siding Spring Observatory and a further 3 hectares is held by the University at Coonabarabran under permissive occupancy. The value of this land has been brought to account.

The University owns 349 hectares of freehold land at Kioloa. The value of this land has been assessed and brought to account.

**Northern Territory**

The University occupies 26,500 hectares near Tennant Creek held on lease in perpetuity on which is located the Warramunga Seismic Station. The value has been assessed and brought to account.

The University owns 4 hectares of freehold land at Darwin on which is located field research headquarters. The value of this land has been brought to account.

**Fiji**

The University occupies 1 hectare at Suva held on a 75 year lease from November 1965 which is used for field research purposes. The value of this site has not been assessed nor brought to account.

NOTES continued

33. REMUNERATION OF OFFICERS

	Consolidated		University	
	2001 \$	2000 \$	2001 \$	2000 \$
Income received or due and receivable by officers <sup>1</sup>	\$7,958,406	\$26,153,915	\$7,686,606	\$25,674,137

1. Aggregate remuneration disclosed relates only to those officers captured within the \$10,000 bands above \$100,000. An 'officer' is defined as a person who is concerned in, or takes part in, the management of the agency. The figures vary from prior year's because in 2001, the definition of officers has been interpreted to mean only Delegated Officers of the University, as opposed to all staff earning greater than \$100,000, as applied in 2001. The directors of entities consolidated are considered officers of the consolidated entity.

The number of officers included in these figures are shown below in the relevant income bands

	Consolidated		University	
	2001 Number	2000 Number	2001 Number	2000 Number
\$100,000 - \$109,999	2	87	2	86
\$110,000 - \$119,999	3	62	3	62
\$120,000 - \$129,999	4	23	4	23
\$130,000 - \$139,999	7	17	7	16
\$140,000 - \$149,999	9	5	9	5
\$150,000 - \$159,999	6	3	6	3
\$160,000 - \$169,999	3	7	3	7
\$170,000 - \$179,999	4	4	4	4
\$180,000 - \$189,999	2	1	2	1
\$190,000 - \$199,999	3	2	3	2
\$200,000 - \$209,999	2		2	
\$210,000 - \$219,999	1	1	1	1
\$240,000 - \$249,999		1		
\$250,000 - \$259,999		1		1
\$270,000 - \$279,999	1			
\$320,000 - \$329,999		1		1
\$360,000 - \$369,999	1		1	
\$380,000 - \$389,999	1		1	
	<b>49</b>	<b>215</b>	<b>48</b>	<b>212</b>

Fees are not payable to members of Council. Employees of the University who are members of Council do not receive remuneration for Council service other than their salaries.

Members of Council during the year were:

- The Hon Emeritus Professor P E Baume AO
- Dr A C Bennett SC
- Professor I Chubb
- Professor F C Jackson (to 30 September 2001)
- Professor J Hearn (from 2 October 2001)
- Professor R M Pashley (to 31 December 2001)
- Dr M S Keating AC AO
- Mr I F Grigg AM
- Ms G Carnegie (from 6 February 2001)
- Ms E Nosworthy (from 6 February 2001)
- Senator B Mason
- Senator K Carr
- Justice M M Finn
- Mr M Delaney
- Ms B Arndt
- Dr D H Solomon
- Professor A Milner
- Professor J White
- Dr M Green
- Mr K J Lonsdale
- Ms R Ennor (to 2 December 2001)
- Ms S Grey (from 3 December 2001)
- Mr M Wasilewicz (to 30 November 2001)
- Ms J Yin (from 1 December 2001)
- Mr J F Muir AO

34. REMUNERATION OF AUDITORS

	Consolidated		University	
	2001 \$	2000 \$	2001 \$	2000 \$
Remuneration to the Auditor-General for auditing the financial statements for the reporting period <sup>1</sup>	178,254	212,089	178,222	179,089
Other services <sup>1</sup>		3,264		3,264
Total remuneration paid to the Auditor-General	\$178,254	\$215,353	\$178,222	\$182,353

1. Amounts shown exclude GST paid on these services

NOTES continued

### 35. NUMBER OF EMPLOYEES

The number of employees at the end of the reporting period was 3,225 for University and 3,342 for the consolidated entity.

### 36. SUPERANNUATION COMMITMENTS

#### 36.1 Commonwealth Superannuation Account

Since 1949, the University has maintained an account, on conditions approved by the Treasurer of the Commonwealth, to meet the emerging costs of the employer's liability to the Commonwealth Superannuation Scheme. The Commonwealth Government has now closed this Scheme.

Transfers are made to the account each fortnight in accordance with a predetermined formula approved by Council and based on advice from the Commonwealth Actuary. The University's contribution rate in 2001 was 14 per cent of eligible employee superannuable salaries (equivalent to the contribution rate the University is required to make for all employees who are members of UniSuper, formerly known as the Superannuation Scheme for Australian Universities). The University's 2001 contribution was \$2,589,727 (2000 \$2,841,431). Pensions are met on an emerging cost basis and paid to the Commonwealth Superannuation Administration. Pension payments amounted to \$15,654,000 for 2001 (2000 \$14,768,000).

An estimated liability as at 30 June 2001 of \$374,949,000 has been provided by the Commonwealth Actuary. The next actuarial assessment is due to be undertaken as at 30 June 2002.

The financial transactions and balances of the Commonwealth Superannuation Account have been included with the accounts of the University.

#### 36.2 Superannuation Scheme for Australian Universities

New continuing staff members employed by the University since 1 April 1983 have been required to join the Superannuation Scheme for Australian Universities (SSAU) until 30 September 2000. From 1 October 2000, SSAU and the Tertiary Education Superannuation Scheme merged to become a single scheme, UniSuper. This merged scheme continues to have a defined benefits component which is managed independently of the University. The University contributes to the Scheme at the rate equivalent to 14 per cent of members' salaries. The University's contributions in 2001 were \$18,162,284 (2000 \$17,061,000).

UniSuper has advised that as at 30 June 2001, the amount of UniSuper vested and accrued benefits applicable to the University was \$238,626,091 (2000 \$227,480,000). The estimated market value of assets of UniSuper for current members at 30 June 2001 available to pay UniSuper superannuation liabilities of the University was \$263,324,305 (2000 \$248,375,000). Thus the difference between the estimated net market value of UniSuper assets and accrued benefits at 30 June 2001 apportioned to the current members of the University is a surplus of \$24,698,214 (2000 \$20,895,000).

#### 36.3 Public Sector Superannuation Scheme

The University has a small number of employees who are members of the Public Sector Superannuation Scheme to which the University contributes at the rate of 12.4 per cent of members' salaries. During 2001, the University's contributions amounted to \$112,804 (2000 \$133,000). This scheme is closed to new members of the University's staff.

#### 36.4 Employee Non Contributory Productivity Superannuation Schemes

The University's contributions for employees who are contributors to the Commonwealth Superannuation and Public Sector Superannuation Schemes are paid to the Commonwealth Superannuation Administration. The University contributes to the Schemes between 2 to 3 per cent of members' salaries. During 2001, the University's contributions were \$451,596 (2000 \$492,000) and \$24,842 (2000 \$30,000) respectively.

The University paid contributions for eligible employees, other than employees who are contributors to the Commonwealth Superannuation and Public Sector Superannuation Schemes, to the Tertiary Education Superannuation Scheme until 30 September 2000, and since then to the newly established UniSuper. The new scheme continues to offer a cash accumulation component. The University contributes to the Scheme at a rate of 3 per cent of members' salaries for full-time University employees. The University's contributions in 2001 were \$7,123,409 (2000 \$5,159,000).

NOTES continued

**37. COOPERATIVE RESEARCH CENTRES**

The University received Commonwealth Funding under the Cooperative Research Centres Program for the establishment of the following Cooperative Research Centres:

*Australian Photonics* - an unincorporated collaborative venture established in 1992. The current partners include the University, The University of Melbourne, The University of New South Wales, The University of Sydney, RMIT University, TAFE NSW, DSTO and 20 industry partners. The Centre's area of research, development and commercialisation is telecommunications - new and improved hardware components to facilitate more efficient and effective telecommunications services. The objectives of the CRC include to be a centre of excellence in photonics with internationally recognised, commercially relevant research programs; to improve the international competitiveness of Australian industry through transfer of photonic technology; and to provide industry with knowledge and skills in photonics through educational programs with emphasis on high quality postgraduate training. The University's contribution (representing 13.47 per cent of the total of the partners' contributions) in the form of staff and equipment resources and cash from 1992 to 30 June 1999 (latest available annual report) has an approximate value of \$10,482,000. The Centre is administered by Australian Photonics Pty Ltd.

*Biological Control of Pest Animals* - a cooperative research centre which began operations on 1 July 1999 that will continue through to June 2006. The Centre's core participants are CSIRO, the University, Agricultural Protection Board, Western Australia, the Department of Conservation and Land Management, Western Australia, the University of Adelaide, the University of Western Australia and the University of Sydney. The Centre is developing biological control agents that will reduce the birth rate of feral pests. The University's in kind contribution (representing 15 per cent of the total partners' contributions) will be \$5,625,000 over the life of the Centre. The Centre Agent is CSIRO.

*Landscape Evolution and Mineral Exploration* - a cooperative research centre established in 1995 with the core participants being the CSIRO, the University, the Australian Geological Survey Organisation, and the University of Canberra. The Centre is developing a framework to increase the understanding of the evolution of the Australian Landscape to improve the ability to recognise major new mineral deposits. The Centre's agreement was renewed for seven years from 1 July 2001. The University's in-kind contribution (representing 8.2 per cent of the total of the partners' contributions) will be \$11,416,000 over seven years from 2001. The Centre is administered by the CSIRO.

*Australian CRC for Renewable Energy Ltd* - a cooperative research centre with the core participants being the University, Murdoch University, Northern Territory University, Curtin University, University of Technology Sydney, University of Newcastle, University of New South Wales, CSIRO, Electricity Corporation, Centre for Appropriate Technology Inc., Powercorp Pty Ltd, Integrated Technical Services Pty Ltd, PowerSearch Ltd, GP & GF Hill Pty Ltd, ZBB (Australia) Ltd, ANUTECH Pty Ltd, Northern Territory Power and Water Authority, Energy Australia, Silicon Technologies Australia Limited, Queensland University of Technology and Industrial Research Limited (NZ). The centre was established in 1996 to carry out research, training and commercialisation programs in the field of renewable energy and related greenhouse gas abatement technologies. The University's in-kind contribution (representing 14 per cent of the total of the partners' contributions) will be \$5,805,000 over seven years from 1996. The Centre has assumed the role of Centre Agent.

*Greenhouse Accounting* - a cooperative research centre with the core participants being the Australian Greenhouse Office, the University, the Bureau of Rural Sciences, the CSIRO, the Department of Conservation and Land Management (WA), the Departments of Natural Resources and Primary Industries (QLD) and State Forests (NSW). The Centre is developing methods of accounting for carbon emissions and sinks in Australian landscapes and for reducing greenhouse gases through responsible management of Australian ecosystems. The University's in kind contribution (representing 45 per cent of the total of the partners' contributions) will be \$23,878,000 over seven years from 1999. The University acts as the Centre Agent.

*Topical Plant Protection* - a cooperative research centre with the core participants being the University, the Bureau of Sugar Experiment Stations, CSIRO, the Departments of Agriculture, Fisheries and Forestry (Australian Quarantine Inspection Service and the National Office of Animal and Plant Health), Primary Industries (QLD), Primary Industries and Fisheries (NT), the Northern Territory University, RhoBio, the University of Queensland. The centre's objective includes establishing programs for improved plant disease and pest management, with major emphasis on improved disease and pest prevention strategies and the increased utilisation of plant resistance to diseases and pests. The University's in kind contribution (representing 2.13 per cent of the total of core participants' contributions) will be \$1,092,000 over seven years from 1999. The University of Queensland acts as the Centre Agent.

*Innovative Dairy Products* - a cooperative research centre with the core partners being Monash University, CSIRO, Genetics Australia Co-operative Limited, the University of Sydney, Dairy Research and Development Corporation, Australian Dairy Farmers Federation and Bonlac Foods Limited. The mission of the centre is to develop and commercialise new genomic technologies and products to underpin a highly innovative, progressive and internationally competitive Australian Dairy industry. As an associate partner, the University's in kind contribution (representing two per cent of the total of core and supporting participants' contributions) will be \$1,112,000 over seven years from July 2001. The agreement provides for the establishment of a propriety limited company for management purposes.

*Functional Communication Surfaces* - a cooperative research centre with the core partners being the University, Monash University, CSIRO, Amcor Packaging (Australia) Pty Ltd, Carter Holt Harvey Tissues Pty Ltd, Norske Skog Paper Mills (Australia) Ltd, Note Printing Australia Ltd and PaperlinX Ltd. The mission of the centre is to establish a self-funding R&D capability able to fully leverage the market opportunities offered by the rapidly expanding requirements for "smart" print surfaces. The University's in kind contribution (representing 17.1 per cent of the total of core partners' contributions) will be \$5,999,000 over seven years from July 2001. Monash University acts as the Centre Agent.

**NOTES continued**

**37. COOPERATIVE RESEARCH CENTRES (continued)**

*Smart Internet Technology* - a cooperative research centre with the core partners including the University, Adacel, Hewlett Packard, Motorola, NSW GTA, Telstra, the Universities of New South Wales, Sydney and Wollongong. The centre will combine research in artificial intelligence, social interaction and network development to create enabling technologies for smart Internet applications that will allow users and network providers to manage this complexity. The University's in kind contribution (representing 9.5 per cent of the total of core partners' contributions) will be \$4,200,000 over seven years from July 2001. The centre will operate as an incorporated management company (CRCSIT Pty Limited).

Costs for all Cooperative Research Centres are expensed as incurred except where future benefits are expected beyond reasonable doubt to exceed these costs. In 2001 all costs were expensed.

**38. SYNDICATED RESEARCH AND DEVELOPMENT**

In December 1990 Anutech Pty Limited entered into agreements with two syndicated research and development partnerships worth a total of \$50,000,000.

Under the terms of the agreements the partnerships agreed to:  
provide funds for research for three years 1991-1993;  
acquire technology licences from Anutech Pty Limited for \$34,600,000.

Funds received from the sale of the technology licences were placed into a technology sinking fund (Note 22) along with accrued income earned (Note 22) and the profit component from the research and development for the duration of the agreements.

The agreements with each partnership contained a put option which gave each partnership the option of selling the technology licences back to Anutech Pty Limited for a consideration equal to the accumulated balance of the technology sinking fund. A provision to purchase the technology licences was recorded (Note 29).

The partnerships were able to exercise their options during the period 31 January 1998 to 31 January 2003. The options were exercised during 2001 for an amount of \$122,048,000.

**39. RELATED PARTY DISCLOSURES**

The University enters into a number of transactions for the provision of goods and services under normal commercial terms and conditions with student organisations based on campus.

**40. CONTINGENT LIABILITIES**

Guarantees of \$80,000 have been given to The Credit Union of Canberra Ltd for loans made to needy students. Guarantees of \$825,000 have been given to the National Australia Bank for the balances of loans provided pursuant to the Legal Workshop Loan Scheme.

The University is currently involved in a number of legal matters. The total maximum liability of the University in respect of these matters is estimated to be \$515,000.

The University is currently the plaintiff in a legal action. Contingent restitution is estimated to be \$750,000.

The University has given a guarantee of \$1,500,000 for Anutech Pty Limited's overdraft facility.

The University has given a guarantee, on behalf of Anutech Pty Limited, for \$545,000 of funds held in trust by Anutech Pty Limited for prepaid course fees which are subject to the Education Services for Overseas Student Act and the associated Tuition Assurance Scheme regulations. No liability is expected to arise.

Anutech Pty Limited is involved in a legal action arising in 1994, which was within Anutech Pty Limited's normal course of business. Anutech Pty Limited's professional indemnity insurers have denied liability in respect of the transaction. The amount of liability that may become payable cannot be reliably calculated.

**41. SEGMENT INFORMATION**

The Economic Entity operates predominantly in the Australian Capital Territory for the purpose of teaching and research.

**42. ECONOMIC DEPENDENCY**

The University is to a significant extent dependant on monies received pursuant to the Higher Education Funding Act 1988 to fund its operations. In 2001, funding from the Act (\$260,416,000) represented 58 per cent (2000 57 per cent) of the total operating revenues (before abnormal items).

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