

# Annual Report 2002



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14 April 2003

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 2002 to 31 December 2002

We have the honour to transmit the report of the Council of The Australian National University for the period 1 January 2002 to 31 December 2002 furnished in compliance with Section 9 of the *Commonwealth Authorities and Companies Act 1977.* 

Yours sincerely

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 2002, 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

Director

Student and Academic Services The Australian National University CANBERRA ACT 0200 Telephone 02 6125 3339; Fax 02 6125 0751

#### For general information, contact

Director Marketing and Communications Division The Australian National University CANBERRA ACT 0200 Telephone 02 6125 2229; Fax 02 6125 5568

# Audit Report

# The Council and University Officers

# The Council

2002

#### Chancellor

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

#### Pro-Chancellor

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

Vice-Chancellor

Professor I W Chubb, AO MSc DPhil Oxon, Hon DSc Flinders (to 31/12/2007)

Deputy Vice-Chancellor (Research)

Chair, Research Committee

Professor J Hearn, BSc MSc *Dub*, PhD *ANU* (to 01/10/2008)

Deputy Vice-Chancellor (Education)

Chair, Education Committee

Professor M Gillies, BA ANU, MA Camb, MMus PhD Lond, DipEd Qld, LMusA, LTCL, FLCM, FAHA (to 01/ 01/2009)

President, ANU Students' Association

Ms J Yin (01/12/2001 to 30/11/2002)

Mr S Michelson (01/12/2002 to 30/11/2003)

President, Postgraduate and Research Students' Association

Ms S Grey, MA (Hons) *Auck* (17/05/2001 to 01/12/2002)

Mr M K Alexander (02/12/2002 to 01/12/2003)

Four persons appointed by the Governor-General

Ms G Carnegie, BEc *Monash*, MPA *Harv*, MAIIA, FAI-CD (06/02/2001 to 05/02/2005)

Mr I F Grigg, AM BA ANU (13/12/2000 to 12/12/2004)

Dr M S Keating, AC AO BCom (Hons) *Melb*, PhD *ANU*, FRAIPA, FASSA (13/12/2000 to 12/12/2004)

Ms E Nosworthy, BA LLB LLM (06/02/2001 to 27/08/ 2002)

(1 position vacant from 28/07/2002)

One Member of Parliament appointed by the Governor-General on the nomination of the Prime Minister

Senator B Mason, BA LLB(Hons) ANU, MPhil Cantab (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

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

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

Ms T Kyprianou, BA LLB ANU (30/10/2002 to 29/10/2006)

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

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 D Evans, BSc Syd, PhD ANU, FRACI, FAA (30/09/02 to 29/09/04)

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

Dr I Morgan, BSc *Melb*, PhD *Monash* (30/09/2002 to 29/09/2004)

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 A Hyslop, BA *Adel/LaT*, PhD *LaT* (30/09/2002 to 29/09/2004)

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 (30/09/02 to 29/09/05)

Dr P McCullagh, MD Melb, DPhil Oxon (30/09/02 to 29/09/05)

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

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

Ms K Hill (26/05/2002 to 27 May 2004)

Mr K J Lonsdale, AssocDipMechEng DDIAE, BTech USQ, PGCertCnflctMgt Macq (26/05/2000 to 25/05/ 2002)

A co-opted member

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

# **University Officers**

#### 2002

#### Chancellor

The Hon Emeritus Professor Peter Erne Baume, AO, MB BS MD *Syd*, HonDLitt *USQ*, FRACP, FAFPHM, FRACGP (Hon) (to 30/11/2003)

#### Pro-Chancellor

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

#### Vice-Chancellor

Professor Ian William Chubb, AO MSc DPhil Oxon, Hon DSc Flinders

Deputy Vice-Chancellor

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

Deputy Vice-Chancellor (Research)

Chair, Research Committee

Professor John Hearn, BSc MSc Dub, PhD ANU

Deputy Vice-Chancellor (Education)

Chair, Education Committee

Professor Malcolm Gillies, BA ANU, MA Camb, MMus PhD Lond, DipEd Qld, LMusA, LTCL, FLCM, FAHA

Pro Vice-Chancellor (Academic Development and Information Services)

Chair, Information Strategy Committee

Professor Robin Barrington Stanton, BE PhD NSW

Chair, Board of the Institute of Advanced Studies

Professor Brian L N Kennett, PhD ScD Camb

Chair, Board of The Faculties

Dr Ann L Kumar, BA (Oriental Studies), PhD ANU, FAHA

Dean, Faculty of Arts

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

Dean, Faculty of Asian Studies

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

Dean, Faculty of Economics and Commerce

Professor Timothy Brailsford, MEc PhD Monash, FCPA, AAIBF (Snr), FAIM (to 14 June 2002)

Professor Terence John O'Neill, BSc *Adel*, MS PhD *Stanford*, AStat (interim from 15 June to 31 July 2002)

Professor Gary Monroe, BSc *NMU* PhD *UMass*, FCPA (interim from 1 August to 30 November 2002)

Professor Keith A Houghton, BCom *Melb*, MSc (Econ) *Lond*, PhD *WAust*, FCPA (from November 2002)

# 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

Professor Don G Byrne, BA PhD *Adel*, FASSA, FAPS, FICPM (interim to 2 April 2002)

Professor Timothy Carlisle Brown, BSc Monash, PhD Camb. (from 3 April 2002)

ANU Medical School

Professor Paul A Gatenby, MBBS Tas, PhD Syd, FRACP, FRCPA, MRACMA

Director, School of Art

Professor David Williams, TACTC 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 ANU (interim to 21 July 2002)

Professor Penny D Sackett, BS UNO, MS PhD UPIT (from 22 July 2002)

Director, Research School of Biological Sciences

Professor John Gibson, BSc (Hons) PhD Sheff, MA ScD Camb (Interim)

Dean, Research School of Chemistry

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

Director, Research School of Earth Sciences

Professor T Mark Harrison, BSc Univ of Brit.Col, PhD ANU

Director, Research School of Information Sciences and Engineering

Professor Brian Anderson, AO PhD *Stan*, DHC *Louvain*, Hon Dr sc.tech. *ETH Zurich*, Hon DEng *Syd*, Hon DEng *Melb*, Hon DSc *NSW*, FAA, FRS, FTSE, FIEEE, FIEAust (to September 2002)

Professor Robin Stanton, BE PhD *NSW* (interim from September 2002)

Director, Research School of Pacific and Asian Studies

Professor James Fox, AB Harv, BLitt DPhil Oxon, KNAW, FASSA

Director, Research School of Physical Sciences and Engineering

Professor Erich Weigold, BSc *Adel*, PhD, FAA, FTSE, FAPS, FAIP (to October 2002)

Professor Jim Williams, BSc PhD, NSW, FAIP, FIEAust, FTSE (from October 2002)

Director, Research School of Social Sciences

Professor Ian McAllister, BA CNAA, MSc PhD Strath, FASSA

Director, Centre for Resource and Environmental Studies

Professor Robert Wasson, BA (Hons) Syd, PhD Macq

Dean, Mathematical Sciences Institute

Professor Peter Hall, BSc(Hons) *Syd*, MSc *ANU*, DPhil *Oxf*, DHC *Louvain*, FAA, FRS (to 20 January 2002)

Professor Alan Carey, BSc Syd, MSc Adel, DPhil Oxf (from 21 January 2002)

Director, Asia Pacific School of Economics and Management

Professor Ron Duncan, BAgEc MAgEc *UNE*, PhD *ANU* (to September 2002)

Professor Andrew MacIntyre, BA (Hons) MA, PhD ANU (from September 2002)

Director, Centre for Aboriginal Economic Policy Research

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

Director, Centre for Cross Cultural Research

Professor Howard Morphy, 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

Director, National Graduate School of Management

Professor Bruce Stening, CA Well, PhD NSW, FAIM

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 GU

Dean, The Graduate School

Dr John Hooper, BA (Hons) Syd, PhD Oxon

Dean of Students

Mr Selwyn Harcourt Cornish, BEc WAust.

Director, Scholarly Information Services

Mr Colin Robert Steele, MA *Liv,* GradDipLib *Lond,* ALA, AALIA, KtCrossSpain (to March 2002)

Ms Sue Kosse, BA UQ, AALIA (interim)

Director, Information Infrastructure Services

Dr Robin Erskine, BSc PhD Glas (to October 2002)

Head, Supercomputer Facility, Information Infrastructure Services

Dr Bob Gingold, BSc(HonsI) Monash, PhD ANU

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 Anne Cavanagh, BA Grad Dip (Public Law) ANU (interim to April 2002)

Mr Mark Clisby, BA (Hons) *Adel,* Grad.Dip (Adult & Further) Ed *SACAE,* M.Ed. (Human Resources Studies), *UniSA* 

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, Facilities and Services

Mr Warwick Raymond Williams, BSc NSW

Director, Finance and Business Services

Mr Alan Raymond Bunsell, BAppSc CCAE, FCPA

Director, Public Affairs Division

Mr James Scott Mahoney, BA ANU, FPRIA (to March 2002)

Ms Peggy Daroesman, BA Grad Dip Legal Studies *ANU* (interim from March to May 2002)

Mr Bruno Yvanovich, BSc *Flind*, MPubAdmin, *Canb* (interim from May to July 2002)

Director, Marketing and Communications Division

Ms Lee-ann Norris, BA (Comm) *CSU*, MBA *RMIT*, BBus (Marketing) *Monash* (from July 2002)

Director, Planning and Quality Assurance Unit

Mr Robert Arthur, BA ANU (to March 2002)

Manager, Statistical and Planning Services Office

Ms Wendy Marchment, BSc *UNE*, GradDip Admin *NTU*, MBA *SCU* 

Director, Development Office

Mr Bruno Yvanovich, BSc Flind., MPubAdmin Canb

The Australian National University Annual Report 2002

#### Legal Officer

Mr Kenneth Grime, Barrister & Solicitor

Master, University House

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

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, BSc(Hons) MSc Dhaka, PhD ANU

# **Overview of the Australian National University**

The Australian National University was established by Federal Parliament in 1946 with a mission to bring credit to the nation and be one of the world's great universities.

The University is distinguished by its relentless pursuit of excellence, resulting in outstanding teaching and profound achievements in research.

To this end, 2002 was an outstanding year for ANU, achieving international recognition for research achievements and receiving a lion's share of Australian Research Council and National Health and Medical research Council competitive grants awarded through the year. Among many individual staff members recognised for excellence, ANU scientific pioneer Professor Frank Fenner was awarded the Prime Minister's Award for Science, making 2002 a particularly memorable year

# Goals

Through the relentless pursuit of excellence, the ANU will be one of the world's top universities.

In research, ANU will position itself as one of the world's top universities in its selected fields.

In education, ANU will equip graduates with the attributes and skills that will enable them to take their place among their peers from the world's top universities; ANU degrees and diplomas will thus draw from, and be based on, high internationally-benchmarked levels of scholarship.

# A unique University

The ANU was established in 1946 by an Act of the Commonwealth Parliament. The Parliament looks to the ANU to lead the nation and the ANU looks to Parliament to give substance to its support for the role of the ANU.

The ANU was established as a unique research-focused institution, funded by the nation to drive research for the social, and cultural, intellectual and economic betterment of the nation. It is one of a number of national institutions directly established by the Parliament to underpin 'nation building' in country that is a federation of sovereign states: others include the National Library, the National Museum, the National Archives, the National Gallery, the War Memorial.

Throughout its history, the ANU has embraced change and in a period of substantial change and intense competition in the higher education sector, the ANU has maintained a strong position at the forefront of Australian university research.

# The University's reputation

The strength of the ANU lies in its formidable reputation for high quality academic work.

The extent of that reputation can be assessed by the judgements made by others of the University's research and teaching prowess and the important linkages it has established with other prestigious institutions around the world.

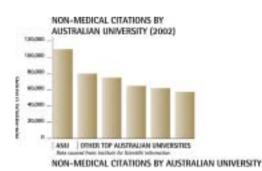
## Some of the highlights are listed below:

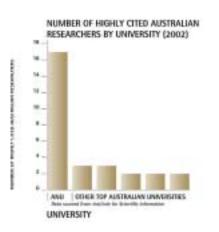
The US-based Institute of Scientific Information consistently ranks ANU within the top 100 universities worldwide, based on the quality of the University's research output. Worldwide ranking by subject included Space Science (16), Geosciences (17), Mathematics (40), Plant & Animal Science (46), Social Sciences General (70), Environment Ecology (71), Chemistry (90), Economics and Business (96), Physics (96) and Immunology (97).

Other indicators place ANU Asia-Pacific studies as the world's best, Applied Statistics fourth in the world in publications output, 51st in the world in best-performing Economics Departments (62) and Political Science in 56th place in the world.

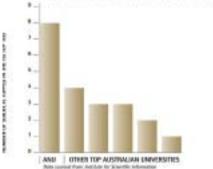
The ANU Philosophy program was again recognised externally and ranked first in Australia and in the top 14 philosophy programs in the English-speaking world. The quality of the program was underscored by the even higher ratings the ANU program received in each of its four areas of specialisation.

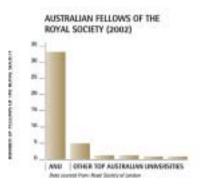
Examples of the University's achievements are listed below





NUMBER OF SUBJECTS TOPPED IN THE INSTITUTE FOR SCIENTIFIC INFORMATION (JSI) TOP 100 (2002)





The Research School of Information Sciences and Engineering established numerous linkages with international research groups, conducting the inaugural workshop of the Japan-Australia Project in Advanced Reasoning Systems on campus; contributing to the 15th Australian Joint Conference on Artificial Intelligence; and collaborating with the Istituto per la Ricerca Scientifica e Tecnologica (IRST), Trento, Italy solving realistic problems of power supply restoration in real time for the first time ever.

The University signed an agreement to locate the \$10 million Faulkes telescope, the third largest optical telescope in Australia, at its Siding Spring Observatory in northern New South Wales.

ANU researchers were awarded a \$9 million grant by the US Government to establish a unique library of mice in order to identify genes that regulate immunity and tolerance of disease. Professor Chris Goodnow is leading the new project, which is based on pioneering research techniques developed at ANU.

The year 2002 marked the first full year of operation for the Archives Program, comprising the University Archives and the Noel Butlin Archives Centre. It represented a period of consolidation for the Program and an opportunity to engage in long term planning for the preservation of the University's substantial archival resources.

During 2002 agreement was reached with Tsinghua University in China to collaborate in offering the National Graduate School of Management's Master of Management (Innovation Management) degree.

The Centre for Aboriginal Economic Policy Research collaborated with Rio Tinto, the Committee for Economic Development of Australia and a number of Indigenous organisations on the ARC Linkage project, 'Indigenous community organisations and miners: Partnering sustainable regional development?'

The Centre also collaborated with Maningrida Arts and Culture and other groups on the ARC Linkage Project 'Timber harvest management for the Aboriginal arts industry: Socioeconomic, cultural and ecological determinants of sustainability in a remote community context'.

The National Institute of the Arts has reached agreement with the ACT Government to restore funding to a total of \$1.6 million, to allow a range of education programs to be delivered in and to primary, secondary and college level students; expert assistance from School of Music staff to community music groups; scholarships for students that provide performance opportunities with the Canberra Symphony Orchestra; subsidies for community arts access programs and public art projects.

#### **Structure and Governance**

The ANU was established immediately after the World War II to help build a new scientific and cultural base for the nation. Many of the leading Australians of the day were recruited to establish the new University and to ensure it pursued cutting-edge research, achieving the highest international standards.

From these high expectations, the University campus was created amidst bushland on the Acton Peninsula in the heart of the nation's capital, Canberra. As a research university, the ANU was to undertake "*postgraduate research and study both generally and in relation to subjects of major importance.*" In 1960, undergraduate courses were introduced, following amalgamation with Canberra University College. In 1992, the University amalgamated with the then Canberra Institute of the Arts. In 2001, 12 National Institutes were established to expose the diverse research conducted in the University's centres, faculties and research schools, offering new opportunities by uniting researchers from different disciplines with common interests.

The University's research and teaching are funded from three principal sources: Commonwealth Government block grants; income generated competitively from public and private sources for research and teaching; and from full-fee paying students. The University's Commonwealth Government operating grant is provided (a) to support the teaching and research responsibilities of The Faculties on the same basis as other Australian universities; (b) as block funding to support the special national and international roles of the Institute of Advanced Studies in research and research training; and (c) for capital works and equipment.

The University is governed by a 22-member Council comprising: the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Chairs of the Education and Research Committees, the presidents of the two student associations, four nominees of the Governor-General, one nominee of the Prime Minister, one nominee of the Leader of the Opposition, and two nominees of the Chief Minister of the ACT; a member elected by Heads of Research Schools and Deans of Faculties; a member elected by the academic staff of the Institute of Advanced Studies; a member elected by the general staff; two members elected by convocation; and a member appointed by Council.

Council receives advice on matters relating to education, learning, research and the academic work of the University from the Academic Board and its sub-committees (Education Committee; Research Committee; Information Strategy Committee) and from Board of the Institute of Advanced Studies and the Board of the Faculties, which both report through the Academic Board.

There is strong student representation on the academic boards.

The Vice-Chancellor and President is the Chief Executive Officer of the University and is responsible for overall University leadership and management of resources.

In 2002 the University Executive included the Vice-Chancellor, the Deputy Vice-Chancellor and Vice-President, the Deputy Vice-Chancellor (Research), the Deputy Vice-Chancellor (Education) and the Pro Vice-Chancellor (Academic Development and Information Strategy).

# **Review of 2002**

In 2002, the hallmark of The ANU was not just the pursuit of excellence, but its attainment.

The University demonstrated excellence in planning and vision as well as in its research and education activities.

Amidst a fundamental review of higher education by the Federal Government, the ANU established a three-year vision — ANU to 2005 — for its development, setting tangible university-wide targets and delivering a blueprint to fortify the foundations of the University.

# **Budget decisions**

Since 2001 the annual University budget process has incorporated a performance-based funding metric. Budgets are adjusted to account for any agreed changes, then consolidated and circulated to all parties involved. Resources are allocated as "one line budgets" to the Dean or Director who has full responsibility for subsequent departmental distributions.

The University's budget strategy focuses on four main objectives:

• To prepare the path for the University through the changes brought about by external influences and recognising the need to be flexible to accommodate future changes in funding models;

• To increase higher degree by research student numbers;

• To position the University for performance-based distribution, and re-distribution, of internal funds against specified criteria; and

To provide incentives to encourage units to take the actions that will enhance their capacity.

The annual budget process involves a series of individual meetings between the Vice-Chancellor and each person responsible for a University budget unit. Budget units are required to submit a written statement outlining their priorities for their area, and their performance against appropriate yardsticks. Underperformance (or unacceptably low performance) requires remedial action to be specified. Having considered all inputs, a budget is constructed by the Vice Chancellor and discussed widely.

The operating grant allocated in the budget has two components: a base grant and 3 per cent distributed competitively between the units. Each year individual budget units can expect 97 per cent of their prior year operating allocation and 3per cent will be at risk. Each unit is invited to secure a share of the aggregate 3 per cent and is judged against specified and transparent criteria.

These include :

• The achievement of educational, research, grant and budget targets.

For example, (i) both undergraduate enrolments and undergraduate and postgraduate completions, (ii) research publications, citations, awards and participation in professional bodies and learned societies, (iii) success at winning contested funding, and (iv) gains in external income.

The extent of cross-University activity.

For example, (i) joint appointment and staff development initiatives, (ii) cross-University supervision of students, (iii) contributions to National Institutes, and (iv) new academic developments that draw from more than one academic unit.

• The scope of relations and collaborations with external groupings.

For example, (i) contributing and linking to education and research activities and national academies/institutes, broadly interpreted, (ii) cooperation with Government and other public institutions, and (iii) cooperation with industry and the professions (as appropriate).

The purpose is to provide incentive and reward for initiative. The line has been kept at 3% in order to keep any loss to a manageable level while allowing some units to grow.

The recently-introduced DEST competitive funding changes have been accommodated within the budget process with 70 per cent of Research Infrastructure Block Grants and Institutional Grants Scheme funding and close to100 per cent of Research Training Scheme income returned to academic units.

The University maintains a Capital Management Plan (CMP), a rolling ten year program designed to (i) provide funding for basic and ongoing commitments, especially for ongoing backlog maintenance, and to meet emerging statutory requirements, (ii) to achieve a balance between those requirements and demands for new major capital works, and (iii) to reflect long-term campus development priorities. CMP applications are received as part of the budget process.

# **Indigenous Initiatives**

In 2002, the University made a major formal commitment to reconciliation with Indigenous Australians, delivering a Reconciliation Statement acknowledging past wrongs and expressing a profound commitment to working towards better outcomes for Indigenous people.

The Statement says in part, "The Australian National University (ANU) expresses its profound regret for the dispossession, inequalities and continuing disadvantage that Aboriginal and Torres Strait Islander people continue to suffer as a consequence of European settlement. The University is sorry for the harmful effects these actions, policies and attitudes have had on the dignity and spirit of Indigenous Australians."

The Statement commits the ANU to increase educational outcomes at both undergraduate and postgraduate levels

for Indigenous Australians, to encourage employment of Indigenous staff and to establish stronger links with a range of institutions to foster greater support for Indigenous people.

The University has also appointed the renowned lawyer, social justice advocate and community leader Professor Michael (Mick) Dodson as the inaugural Indigenous Chair of the ANU Institute for Indigenous Australia, affiliated with the University's Law Faculty.

Professor Dodson will play a leading role in the development and co-ordination of indigenous scholarship and research at the University and in the support of Indigenous students.

Professor Dodson's appointment is one of the outcomes of a major review of indigenous scholarship and student support carried out for the University by Dr Peter Read in 2001.

The University had 49 Indigenous students in Semester 1 of 2002 and 60 Indigenous students in Semester 2.

# **Students**

In 2002, postgraduate load represented 25 per cent of the student load.

Of the student total, 51 per cent were female — 47 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 63 per cent of the total, while 16 per cent were from overseas. At the postgraduate level, the proportion of students from overseas was much higher, at 35 per cent.

83 per cent of undergraduate students were under the age of 25, while 51 per cent of postgraduates were over 30 years old.

Almost 74 per cent of ANU students paid HECS while almost 26 per cent paid Domestic Tuition Fees or International Student Fees. The remainder paid non-award tuition fees.

ANU offers a variety of combined degrees; in 2001, combined degrees represented 42 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 25 per cent.

#### Enrolments

There was strong demand for ANU courses in 2002, with enrolments up 9.4 per cent on 2001.

Summary Total Annual Student Load, 1997-2002

Year	1997	1998	1999	2000	2001	2002
Total Load	8714.7	8318.8	8372.5	8205.0	8425.5	9216

A total of 13 new undergraduate programs were offered in 2002:

Bachelor of Photonics in the Faculty of Science; Bachelor of Arts (International Relations) and Bachelor of Arts (Social Work) in the Faculty of Arts; Bachelor Electronic Commerce and Bachelor of Finance in the Faculty of Economics and Commerce; Bachelor of Engineering (Communication Systems), Bachelor of Engineering (Mechatronic Systems), Bachelor of Engineering (Manufacturing and Mechanical Systems), Bachelor of Engineering (Materials and Mechanical Systems), Bachelor of Engineering (Semiconductor Electronics), Bachelor of Engineering (Sustainable Energy Systems), Bachelor of Engineering (Photonic Systems), Bachelor of Engineering (Environmental Systems) in the Faculty of Engineering and Information Technology.

The Faculty of Science also introduced the new degree of Master of Contemporary Science to update teachers in the exciting science produced since their undergraduate days

In the Faculty of Arts, the Master of Applied Anthropology and Participatory Development program graduated its first students, and enrolments continue to grow, with international student enrolments exceeding original expectations. Flexible learning modes will be developed further during 2003.

The Faculty of Economics and Commerce achieved a 64% increase in International enrolments.

# Staff

The total number of Full-Time Equivalent (FTE) staff at the ANU was 3,318, comprising 1,160 academic staff, 1843 general staff, and 315 casual and part-time teaching staff.

47 per cent of FTEs were located in the Research Schools and Centres with 26 per cent in the National Institute of the Arts and The Faculties. The Central Units, Administration and Trading areas made up the balance.

67 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 54 per cent of general staff and 28 per cent of academic staff.

Research-only staff made up 59 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 16.9.

# Awards and achievements

Many ANU staff and students were recognised in 2002 with national and international awards.

Former Vice-Chancellor, Emeritus Professor Deane Terrell, was awarded the Order of Australia (AO) for his service to education, particularly as a pioneer in establishing international links between Australian and overseas universities, as a leading contributor to organisations bridging the academic and business sectors and as an administrator and educator.

After decades of research at the John Curtin School of Medical Research, 2002 was another remarkable year for Professor Frank Fenner, who received the Ian Clunies Ross Lifetime Achievement Award and the Prime Minister's Science Prize.

Among other staff at the School, Dr Greg Stuart was presented with the German Government endowed Alexander von Humboldt Foundation Sofja Kovalevskaja award; Professor Philip Board was named the Australian Society for Biochemistry and Molecular Biology Lemberg Medallist for 2002; Professor Chris Goodnow was elected as a Fellow of the Australian Academy of Science, and Professor Judith Whitworth was named Telstra ACT Business Woman of the Year.

Dr Mark Hulett won the 2002 Howard Florey Young Investigator's award.

A 2002 Asia-Pacific School of Economics and Management graduate, Dr John Kunkel, was awarded the J.G. Crawford Award. Seung-Kwang Choi won the Sanwa Bank Foundation Award. The Helen Hughes prize was awarded to Renato Hasanover.

At the Mathematical Sciences Institute, Professor Alan McIntosh was recognised widely in the national press and international arena for his part in the solution of a 40-year-old mathematics problem — the Kato square root problem. This was achieved in collaboration with mathematicians from France and the USA. He was awarded 2002 Moyal Medal for excellence in Mathematics.

Dr Xu-Jia Wang received recognition for his solution (with Neil Trudinger) of a 200-year-old mathematical problem and received a medal from the Australian Mathematical Society.

Professors John Hutchinson and Yuri Kivshar were elected Fellows of the Australian Academy of Science, and Alan Welsh was elected to the American Statistical Association.

The Director of the Humanities Research Centre, Professor Iain McCalman, was awarded the British Academy Centenary Medal (on behalf of the Australian Academy of the Humanities) and the Federation Centenary Medal.

The J N Insall Fellowship was awarded to Dr Paul Smith, a Clinical Associate Professor within the Medical School. This is the highest award for young surgeons conferred by the Knee Society.

Professor Gottfried Otting, from the Research School of Chemistry, took up his Federation Fellowship during 2002. This is the most prestigious fellowship awarded by the ARC.

Professor Lew Mander was awarded the David Craig Medal, which is the Australian Academy of Science's most prestigious award for chemistry.

Professor Atholl Anderson from the Research School of Pacific and Asian Studies was awarded a Doctorate of Sci-

ence degree from Cambridge University; Professor Matthew Spriggs was elected a Fellow of the Society of Antiquaries of London; Professor David Marr was appointed a Professorial Fellow at the Nordic Institute of Asian Studies in Copenhagen; Professor Brij Lal was elected Senior Research Fellow at the Institute of Commonwealth Studies of the University of London ; Mr Peter Grimshaw (dec) was awarded a posthumous OBE by the Papua New Guinea Government for services to Papua New Guinea. Professor Rhys Jones was posthumously made an Officer in the General Division of the Order of Australia for 'service to archaeology, particularly in the areas of research and teaching, and as a leader in matters relating to world heritage, conservation and indigenous social justice issues'.

Professor Matthew Spriggs was also awarded the Vanuatu General Service Medal (GSM) presented by the President of Vanuatu, Father John Bani, at the Vanuatu Independence Day Celebrations, 30 July 2002, for service to archaeology in Vanuatu.

Dr Udo Thiel was awarded a prestigious Fellowship at the Duke August Library Research Centre in Wolfenbuettel, Germany.

Dr Peter Brown was honoured by the French government by being made 'Chevalier dans l'ordre des Palmes Academique'.

The Frank Luther Mott Journalism and Mass Communication Award (United States) was awarded to Dr Douglas Craig for his book *Fireside Politics: Radio and Political Culture in the United States, 1920–1940.* 

Dr Heather McDonald, a former PhD student, has been awarded the 2002 AIATSIS Stanner Award for her book, *Blood, Bones and Spirit: Aboriginal Christianity in an East Kimberley Town* (MUP).

Ms Corin Throsby, who graduated with the University Medal in English in 1999, won one of three James Fairfax Oxford Australia scholarships offered in 2002 for Australians to study at Oxford.

Mr Julian Lamb won a 2002 Commonwealth (Cambridge) scholarship to study at Cambridge. Julian graduated with the University Medal in English in 2001 and is undertaking a PhD at Fitzwilliam College, Cambridge, studying Milton and Shakespeare.

Dr Boyd Hunter of the Centre for Aboriginal Economic Policy Research was awarded the Australian Census Analytic Program Fellowship by the Australian Bureau of Statistics for 2002 and 2003.

Dr Rob Heinsohn of the Centre for Resource and Environmental Studies was elected Vice-President of Australasian Society for Study of Animal Behaviour.

Dr David Lindenmayer was nominated for the Tyler Prize in the USA for his book on forest biodiversity conservation.

Professor Robert Wasson was appointed Chair of the ACT Sustainability Expert Reference Group. Dr Colin Butler from National Centre for Epidemiology and Health was awarded the W.D. Borrie Prize, by the Australian Population Association for the best essay on a population-related topic submitted by a postgraduate student. Dr Richard Eckersley was awarded the Public Health Association of Australia's 2002 Damon Laris Prize for public health perspectives on suicide, for his essay, 'Suicide in young people: causal layers and complexities'.

Professor Graham Farquhar of the Research School of Biological Sciences shared, with Drs Richard Richards, Tony Condon and Greg Rebetzke of CSIRO Plant Industry, the CSIRO Collaborative Research award for work building on his discovery relating carbon isotope discrimination to water use efficiency and the use of this phenotype for the selective breeding of drought-tolerant strains of wheat.

Dr Ted Maddess was awarded a Clunies Ross National Science and Technology Award for Innovation for his research, which led to the development of a commercial instrument for the early detection of glaucoma.

An honorary doctorate was conferred on Professor Mandayam Srinivasan by the University of Zurich.

Professor Malcolm McCulloch of the Research School of Earth Sciences was made a Fellow of the American Geophysical Union for major contributions to understanding the origin and evolution of the Earth's continental crust and mantle and environmental science and climate change.

Dr Andrew Kiss was awarded the Australian Meteorological and Oceanographic Society Federation PhD Prize.

Professor Brian Anderson of the the Research School of Information Sciences and Engineering was elected a US National Academy of Engineering Foreign Associate in February 2002. Professor Richard Hartley received the Australian Academy of Science France-Australia Travel Award. Dr Bruce Millar was given an Award of Lifetime Membership of the Australian Speech Science and Technology Association in recognition of 30 years of preparation, implementation and service to the organisation.

Mr Tony Pollock won the CUBIN (Centre for Ultra-Broadband Information Networks) Student Paper Prize at the 3rd 2003 Australian Communications Theory workshop.

Dr Gunnar Räetsch received the prize for best PhD from the University of Potsdam (Germany). He was also nominated for the best computer science PhD in Germany.

The Eureka Prize was awarded to Professor Alex Zelinsky for his work in robotics and driver safety technology. Professor Zelinsky was also elected Fellow of the Academy of Technological Sciences and Engineering, and Seeing Machines received an R&D100 Award from R&D Magazine in Chicago, USA.

Professor Howard Morphy was elected a Fellow of the Australian Academy of the Humanities in recognition of his major contributions to a number of cultural and anthropological fields, especially Australian Aboriginal art. Professor Desley Deacon, head of the Research School of Social Science's History Program, was elected Fellow of the Australian Academy of the Social Sciences.

Dr Diane Langmore, who is currently Acting General Editor of the Australian Dictionary of Biography, was awarded the 2002 Council Medal for General Staff Excellence.

Professor John Ritchie was awarded an Order of Australia (AO) for service in recording the history of the social sciences and the humanities in Australia as General Editor of the *Australian Dictionary of Biography*.

Professor Martin Davies was elected to the Fellowship of the Academy of the Social Sciences in Australia.

ANU computer scientist Dr Alistair Rendell became only the second person in the world to be recognised by a new global education program run by computer network provider Sun Microsystems. Dr Rendell was awarded the title of Sun Lecturer, in recognition of his achievement and global leadership in research in computational science.

Dr Ted Maddess was recognised at the 2002 Clunies Ross National Science and Technology Awards for outstanding achievements in science.

Professor Nicolette Fraillon, Director of the School of Music, was appointed as the new Music Director and Chief Conductor of the Australian Ballet.

Ms Joanne Searle (Ceramics) has been selected for exhibition at the prestigious International Ceramic Competition to be held in Faenza, Italy in 2003.

Mr Gilbert Riedelbauch (Computer Art Studio) and Mr Scott Chaseling (alumni) were invited to be part of the prestigious *Meister der Moderne* (Modern Masters) exhibition at the Munich International Craft Fair. Both Gilbert and Scott won a Bavarian State Prize.

Among the students at the National Institute of the Arts to receive awards: Ms Jordy Hansen received a Land & Water Australia Postgraduate/Masters Scholarship Award valued at \$56,000 over two years; Ms Manisha Gunawardena (Ceramics) and Ms Alison Locke (Painting) were accepted in the 2nd International Digital Sculpture Competition; Ms Cinnamon Lee (Gold & Silversmithing graduate 2001) won the 2002 Object Design Award for Manufacture, and Ms Sally Howes (Ceramics graduate 2001) was selected to exhibit her work in Salzbrand 2002 in Koblenz, Germany, an exhibition held every four years.

Professor Ken Freeman was elected an Associate of the Royal Astronomical Society and Dr Brian Schmidt was awarded the Vainu Bappu Medal of the Astronomical Society of India.

Professor Richard Arculus was elected Fellow of the Mineralogical Society of America.

Dr Mark Humphrey received the David Syme Research Prize.

Dr Kenneth Baldwin and Professor Robert Gregory were appointed members of ARC Expert Advisory Committees. Professor Chennupati Jagadish, Research School of Physical Sciences & Engineering, was elected to the Fellowship of the Institute of Electrical and Electronic Engineers, New York.

## Resources

The *Defining Undergraduate Learning Project* (iLearning) was funded from the University Plan for Growth in 2001 to contribute to the development of a distinctive approach to undergraduate education at the ANU that builds on its strengths as a research university. The Peer Support Program, which was piloted in 2001, was fully implemented in 2002 with the semester 1 program training 90 mentors and 'placing' 700 students.

The Information Literacy Program offered by the Division of Information attracted a total of 16,415 people in 2002, representing an increase of more than 70 per cent on the previous year.

The Information Commons Program achieved its target of integrating more than 1200 workstation based study desks in a Commons, providing students with ready access to the information infrastructure, course-based learning environments and educational materials.

Refurbishment of the J.B. Chifley Building was commissioned and, when complete, will provide a facility of over 80 desks together with Digital Media Suite, and support from a team of student consultants working under the auspices of the Information Literacy Program.

A project to provide 150 teaching support applications across 90 lecture theatres and common rooms, called the Teaching and Learning Space Commons, was largely completed in 2002.

A converged Networks and Communications group was formally created on 1 January 2002, combining the Network Services group of Information Infrastructure Services (IIS) with the PABX group of Facilities & Services.

The APAC National Facility's supercomputer was ranked as the 31st most powerful in the world at the start of 2002 and supported 223 projects during the year, involving 680 researchers across every state in Australia. The Facility plays a vital role in supporting ANU research.

The Division of Information also integrated videoconference facilities into the World Bank's Global Development Learning Network.

The National Graduate School of Management was established as an independent center within the University in 2002 and substantially increased student numbers during the year.

# **Research** performance

The ANU performed remarkably in receiving a large proportion of publicly contested grants made available in 2002.

The major highlights in ANU Research for 2002 were:

• Topping the ARC 2003 Discovery funding awards, and the highest success rate (40 per cent) of any university in the NHMRC 2003 funding round

• Winning six out of 25 ARC Federation Fellowships and five out of 25 ARC Professorial Fellowships

• Bidding successfully for NICTA and being a partner in five out of eight ARC Centres of Excellence

• Ranked in the top 1 per cent for 17 of 22 fields covered by the Essential Science Indicators.

ANU staff received a lion's share of Australian Research Council grants awarded in 2002, with 137 Discovery Project grants, 19 Linkage Project grants and four Linkage Infrastructure, Equipment and Facilities grants with a total value of \$48.5 million.

The National Health and Medical Research Council also awarded \$6.8 million in grants for 21 projects to be conducted by ANU staff.

The excellence of research at ANU was also recognised in the ARC's announcement of funding for research Centres of Excellence. ANU staff will share in five of the eight grants to establish centers, worth a total of more than \$52 million. The grants include a \$10.95 million grant to a consortium of researchers led by ANU Professor Hans Bachor to establish a Quantum-Atom Optics Centre of Excellence on campus.

ANU staff across a range of disciplines were identified as some of the world's leading researchers by the Institute of Scientific Information, in their Highly Cited Researchers list released in 2002, providing further confirmation of the quality of ANU research.

The ANU was confirmed as a major partner in the \$130 million National Information Communication Technology Australia (NICTA) initiative. NICTA will build a core of 300 world-class researchers and create more than 500 new PhD places in the next year through bases in Canberra and Sydney, leading Australia to the forefront of information communication technology research.

The Department of Physics commenced work using the systemic infrastructure grant for a collaborative High Optical Power Test Facility (\$4.83 million over the years 2002–2004).

A \$2.3 million grant was awarded in the Division of Botany and Zoology by the Grains Research and Development Corporation and the Grain Growers Association for control of the take-all fungus.

A \$1 million research grant was awarded by the Australian Centre for International Agricultural Research to develop eucalypts better suited to marginal farmlands. Funding of \$US 1.4 million was awarded to Botany and Zoology staff for a project on forest clearance in Papua New Guinea.

The Department of Chemistry was awarded a \$100,000 US National Science Foundation AWARE grant.

The Faculty of Law won the highly competitive tender to host the National Judicial College of Australia and also earned recognition by Singapore of the ANU law degree for the purposes of admission to practice in Singapore (only 8 out of Australia's 28 law schools so recognised).

The Research School of Astronomy and Astrophysics won a \$6.3 million contract to build a special camera called an Adaptive Optics Imager for the Gemini South Telescope in Chile.

In addition to ARC and NHMRC grants, major grants awarded to members of the John Curtin Medical School were: Professor Chris Goodnow, US\$2million from the US National Institute of Health (NIH) for a project on genes for tolerance and immunity, Professor Ian Ramshaw and Professor Alastair Ramsay US\$400,000 from NIH for vaccine research, Dr Pankaj Sah, \$305,000 from Pfizer Central, Dr Greg Stuart \$850,000 from the Alexander von Humboldt Foundation, Professor David Jans and collaborators \$600,000 from the Wellcome Trust, Dr Robyn Slattery, \$220,000 from the Juvenile Diabetes Research Foundation, Dr Bill Cowden and Dr Brett Charlton \$375,000 from Praxis Pharmaceuticals, Professor Chris Parish and collaborators \$196,000 from the NSW Cancer Council.

Beyondblue: the national depression initiative awarded the Centre for Mental Health Research several grants during 2002, the largest being \$1.6 million to undertake a national trial for the prevention of depression in older people, and one of \$504,000 for the development of an interactive web site designed to prevent depression and anxiety symptoms.

The PATH Through Life Project is a massive 20-year study into the health of 7,500 people living in the Canberra region. It will take a full three years to interview all the participants; the first wave of interviews was completed early in 2002. Participants will be interviewed again every four years for 20 years to monitor changes in their health.

Significant milestones for the Centre for Sustainable Energy Systems included the announcement of the 'Sliver' solar cell, which was developed over the past two years andbeing commercialised by Origin Energy. Other milestones were the commencement of a program to construct a Combined Heat and Power Solar system project for the Bruce Hall extension in collaboration with Rheem/Solahart and with funding from the Australian Greenhouse Office (due for completion in 2004), and the re-commissioning of the "Solar Big Dish".

The Advanced Manufacturing and Production Systems Group (AMPS) implemented the Simpress knowledge capture system at the Ford Motor Company's Geelong Stamping Plant. This was developed out of research activities in the Department under the ongoing STAMP research collaboration. In addition to ARC and NHMRC funding, new Grants for Research School of Biological Sciences staff in 2002 include: Mr Javaan Chahl, Telemetered Control System, US Air Force (\$100,000 Nov 02–Jan 04); Professor Mandayam Srinivasan, Dr Jochen Zeil & Dr Shau-Wu Zhang, Control of Insect Flight: Regulation of Flight Speed and Height above the Ground, US Air Force (\$114,000 2002); Dr Gert Stange, Mr Javaan Chahl, Dr Michael Ibbotson and Dr Sally Stowe, Ocellar Base Stabilisation, US Air Force (\$356,000 June 2002–June 2005); Dr Tom Wydrzysnski, The origin of oxygen on Earth: The innovation and evolution of photosynthetic water oxidation, Human Frontiers Science Project (\$585,165 Nov 02–Nov 05)

At the Research School of Information Sciences and Engineering, Professor John Lloyd was awarded a project grant of \$766,000 through the Smart Internet Technology CRC for 2003–2005 for the "Knowledge Acquisition and Machine Learning Project".

Professor John Lloyd also took up a project grant of \$50,000 through the Smart Internet CRC for the "Knowledge Acquisition and Machine Learning Project". Professor Alexander Zelinsky took up a grant of \$64,000 from Volvo Technological Development Corporation for a project on "Vision for Smart Cars" and a \$37,000 grant from DSTO for a project on "Hand Gesturing for Object Manipulation and Navigation".

The Research School of Social Sciences had a number of successes in external grants including a \$2.2 million funding from the ACT Racing and Gambling Commission towards a Chair in Gambling Research; \$462,000 from the Australian Competition and Consumer Commission for the Centre for Competition and Consumer Policy, and 870,000 Euro for Dr Sasha Courville of RegNet to conduct a project on 'Social Accountability in Sustainable Agriculture' funded by the four main social and environmental certification systems in EU agriculture.

The Faculty of Asian Studies secured Australian Government funding for a number of initiatives with Indonesia, a variety of additional funding to assist with the Year-in-Asia program for undergraduates; consultancy work for the business group, ASEAN Focus; consultancy work for the Singapore firm Sri Kumar Siddique; and a consultancy with Asialink (Melbourne) in the management of a prestigious national fellowship scheme. In 2002, the Faculty (in partnership with RSPAS) appointed a new Professor of Korean Studies, funded largely by the Korea Foundation.

The renewal of the Research School of Astronomy and Astrophysics's Siding Spring Observatory as a national facility began in 2002, through the \$5.6 million Systemic Infrastructure Initiative.

In the Faculty of Science, research highlights included the second ever demonstration of continuous variable teleportation, attracting worldwide media coverage and the first ever demonstrations of a non-classical interferometer, of two-dimensional spatial quantum correlations and polarisation squeezing. In biology, a new method was developed for DNA probes and more discoveries were made in combating a fungus that limits wheat production.

In geology, new volcanoes were discovered under the sea in Melanesia and new discoveries were made in tapping the power in hot dry rocks (for which a company was successfully floated on the stock exchange).

# **Events and Outreach**

The University plays a vital role in cultural and intellectual outreach, with staff playing a major role in shaping national debates, informing policy and performing valuable public service.

Among the many staff to play a prominent role in shaping national debate in 2002, the Deputy Vice-Chancellor (Research), Professor John Hearn, served as scientific adviser to the Australian House of Representatives Committee on cloning and stem cell research and Chairman of the Australian Government's Biotechnology Advisory Council.

Among many areas to make important contributions to national debate, the Strategic and Defence Studies Centre made a major contribution to issues of global security. In the wake of the Bali bombing, many media outlets turned to the ANU for expert analysis on security and terrorism issues, Indonesian and Asian politics and International Relations. The Centre for Middle Eastern and Islamic Studies continued to provide important insights into crises in Afghanistan and the Middle East. ANU Legal experts produced the *Oxford Companion to the High Court of Australia*. Many other staff also played vital roles in debate through the year.

A highly stimulating new public seminar series, the Six Pack, commenced in March, organised by the Centre for Cross Cultural Research. Structured around the single overarching theme of *Authenticities* the seminars were presented in three linked series of six. They proved to be enormously popular and provided an opportunity for researchers from across the campus, including students, to showcase their current research. The series culminated in the inaugural CCR Annual Lecture presented by Professor Joel Kahn. Three Visiting Scholars Programs were also presented, offering training to graduate students from throughout Australia and for the first time, also to professionals.

The Drill Hall Gallery attracted 15,000 people through its 11 exhibitions held during 2002, including students from numerous schools and colleges in the region who were set assignments on the Gallery's exhibitions. The Gallery's educational role extended to supervising postgraduate students of art history as interns, along with an international student from the Graduate School of Management.

The Gallery continued to work with diplomatic missions, seven of which collaborated in presenting the Fourth Drawing Biennale.

The National Europe Centre made significant achievements in research and teaching by promoting seminars, lectures, workshops and conferences in the areas of: Governance and Legitimacy, Trade, Economy and Open Markets, Education Policy and Academy-Government Linkages. In total, the National Europe Centre coordinated more than 40 events during 2002, including lectures, seminars, workshops and conferences with several thousand participants.

The Archives Program increased its web presence through its new website and through the new Australian Trade Union Archives Internet gateway. This ARC-funded project was launched in April and provides a single entry point to a range of resources on trade unions and their history for academic researchers and the general public. Dr Rae Frances of the University of NSW presented the first annual Friends of the Noel Butlin Archives Centre lecture, entitled "Confessions of a promiscuous researcher" in April.

Outreach activities of the Archives Program included two internal exhibitions "Archives as Art" and "Pearl Shells and Other Shells", tours for students, family historians and library technicians and the provision of archival advice to depositors and community groups.

The Division of Information helped develop the kSpace exhibition for the National Museum of Australia, which attracted more than 250,000 visitors during the year. The Division also conducted courses on High Performance Computing for 339 people.

The Faculty of Asian Studies established a new Australia-Southeast Asia dialogue, The Gantner-Myer Conversations: a Javanese Masterclass — the first of its kind, involving students and academic specialists from around the nation, Europe, Indonesia, Japan and New Zealand; cohosted Updates on Malaysia, Thailand, Burma, China, Korea and Vietnam, and Seminars on Indonesia and Japan-North Korea.

The Faculty of Asian Studies also co-hosted an ASEAN roundtable involving the Ambassadors of all the ASEAN states represented in Canberra and invited Federal Government officials.

The National Institute of the Arts continued its commitment to outreach programs in music and art by teaching non-degree and pre-tertiary students. Twenty-two exhibitions were held in the School of Art Gallery and Foyer Gallery during the year.

The Centre for Continuing Education offered 600 courses in five main programs, attracting more than 5000 participants.

The Centre also administered the Siemens Science Experience, the 2002 APRU conference and the fifth National Science Teachers' Summer School.

The Mount Stromlo and Siding Spring Observatory Visitors' Centres were toured by approximately 31,000 and 15,000 people respectively, in 2002, an increase of 25 per cent over the previous year.

The Australian Chemistry Olympiad Team, under the direction of Dr Geoff Salem of the Department of Chemistry, returned from The Netherlands with the outstanding result of one gold, one silver and two bronze medals.

Approximately 100,000 visitors from across Australia were attracted to the Science Circus operated by 16 students from the Graduate Diploma in Science in association with Questacon and Shell Australia.

In their first year of operation, National Institutes have made a major contribution to ANU and the wider community through public lectures, workshops, and exhibitions. At least one workshop sponsored by the National Institutes has led to the production of a policy document for the federal government whilst other workshops have been proactive in lobbying stakeholders to produce positive outcomes.

# Vice-Chancellorship

Professor Ian Chubb continued to serve as Vice-Chancellor and President of ANU throughout 2002. The year saw the departure of the Pro-Vice-Chancellor (Administration), Mr Chris Burgess, and the appointment of Professor Malcolm Gillies as Deputy Vice-Chancellor (Education), who together with the Vice-Chancellor, Deputy Vice-Chancellor, Deputy Vice-Chancellor (Research) and Pro-Vice-Chancellor comprise the University Executive.

# Conclusion

In 2002 ANU has taken significant steps to build on its fine research and teaching history. Aware of the importance of upholding the University's reputation for innovation and achievement of excellence through pioneering research, the University's leaders have taken decisive action to prepare the ANU for challenges ahead.

A reinvigorated ANU is in a strong position to deliver a stronger future for staff, students and for its owners, the Australian people.

# **Council and Council Committees**

Number of meetings and Members' attendance for the period 01/1/02 to 31/12/02

### Council

Number of Meetings: 8	
Name of Member Number of Attenda	ances
The Hon Emeritus Professor P Baume (Chair)	8
Dr A Bennett	7
Professor I Chubb	8
Professor J Hearn	8
Professor M Gillies	7
Ms J Yin	7
Mr S Michelson	1
Mr S Grey	7
Mr M Alexander	0
Ms G Carnegie	3
Ms E Nosworthy	3
Mr I Grigg	4
Dr M Keating	5
Senator B Mason	6
Senator K Carr	4
Justice M Finn	5
Ms T Kyprianou	2
Mr M Delaney	7
Ms B Arndt	8
Dr D Solomon	6
Dr P McCullagh	2
Professor A Milner	4
Professor D Evans	2
Professor J White	4
Dr I Morgan	2
Dr M Green	6
Dr A Hyslop	2 3 5
Mr K Lonsdale	3
Ms K Hill	
Mr J F Muir	7

## **Academic Board**

Number of Meetings: 7	
Name of Member Number of Attendant	ces
Professor I Chubb (Chair)	7
Professor J Richards	7
Professor E Weigold (to 30/6/2002)	1
Professor J Williams (from 1/11/2002)	1
Professor J Whitworth	4
Professor J Fox	5
Professor P Sackett (from 01/07/2002)	2
Professor D Evans	5
Professor M Harrison (from 01/11/2002)	0
Professor I McAllister (from 01/11/2002)	0
Professor B Wasson	4
Professor A MacIntyre (from 01/11/2002)	1
Professor A Jorm (from 01/11/2002)	1
Professor A Shoemaker	2
Professor A Milner (from 01/11/2002)	0
Professor T Brailsford (30/6/2002)	2
Professor G Monroe (from 01/7/2002 to 01/11/2002)	3
Professor K Houghton (from 01/11/2002)	0

Professor John Baird (from 01/11/2002)	1
Professor Michael Coper (from 01/11/2002)	1
Professor T Brown (from 01/11/2002)	2
Professor Paul Gatenby (from 01/7/2002)	3
Professor D Williams (from 01/11/2002)	2
Professor Nicolette Fraillon	7
Professor T McMichael	4
Professor B Stening (from 01/7/2002)	3
Professor J Altman (from 01/11/2002)	0
Professor B Kennett, Chair BIAS	4
Professor G Farquhar	5
Professor A McIntosh (from 01/7/2002)	3
Dr A Kumar, Chair BTF	7
Dr A Hyslop (to 30/6/2002)	3
Dr S Scott (from 01/7/2002)	4
Professor P Weeks	7
Ms A Cavanagh	6
Ms S Grey President PARSA (to 01/12/2002	6
Ms J Yin President ANUSA (to30/11/2002)	6
Dr A Edwards (from 01/7/2002)	3
Mr G Mayo (from 01/7/2002)	4
Professor A Carey (from 01/11/2002)	0
Professor I McCalman (to 30/6/2002)	1
Professor T McMichael	3
Dr A Hyslop (to 30/6/2002)	
Ms Barbara Payne (to 30/6/2002)	3
Ms H Karmel (to 30/6/2002)	3
Professor G Brennan (to 30/6/2002)	1

#### Representatives for Academic Board Members

Professor J Williams representing Professor E Weigold	1
Professor S Buckman representing Professor J Williams	1
Dr D Tryon representing Professor J Fox	1
Professor J Norris representing Professor P Sackett	1
Professor A Hill representing Professor D Evans	2
Dr R Griffiths representing Professor M Harrison	1
Professor T Hull representing Professor I McAllister	1
Dr S Dovers representing Professor B Wasson	1
Dr Simon Haines representing Professor A Shoemaker	1
Professor J Gibson representing Professor G Farquhar	1
Mr A Jory representing Ms J Yin	1

## **Finance Committee**

Name of Member	Number of Attendances
Mr J F Muir	4
Professor I Chubb	3
Professor J Richards	3
Professor M Gillies	3
Professor J Hearn	4
Mr C Burgess	1
Ms J Yin	4
Ms S Grey	3
Mr B Topperwein	1
Mr L Spencer	4
Dr A Bennett	3
Ms A Terry	3
Dr M Keating	2
Mr I Grigg	2

Senator K Carr		
Dr M Green		

#### Audit Committee

Number of Meetings: 4	
Name of Member	Number of Attendances
Mr L Spencer (Chair)	3
Mr D Lawler (Deputy Chair)	4
Ms E Nosworthy (to 27/8/2002)	2
Mr J F Muir	4
Mr D Lennie	3

## **Honorary Degrees Committee**

Number of Meetings: 1	
Name of Member Number of Attenda	nces
The Hon Em Professor P E Baume (Chair)	1
Dr A C Bennett	1
Professor I Chubb	1
Professor M Gillies	1
Professor J Hearn	1
Dr M S Keating	1
Senator B Mason	0
Dr J Hooper	1
Dr D Solomon	0
Dr S Von Caemmerer	0
Dr N Peterson	1
Ms S Grey	1
Alternates for Honorary Degrees Members	
Mr I Grigg as an alternate for Senator B Mason	1
Dr P McCullagh as an alternate for Dr D Solomon	1
Professor J White as an alternate for	
Dr S Von Caemmerer	1

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

Number of Meetings: Committee Members conferred as required throughout 2002 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**

## **UNDERGRADUATE STUDENT ENROLMENTS 2002**

COURSE		FULL-TIME PART-TIME						LL	
	F	M	Total	F	M	Total	F	M	TOTAL
BACHELOR — SINGLE DEGREES		1			II			I	
Actuarial Studies	30	40	70	3	2	5	33	42	75
Arts	406	253	659	210	83	293	616	336	952
Arts Art History & Curatorship	45	7	52	9	1	10	54	8	62
Arts Australian Studies	3		3				3	0	3
Arts Development Studies	20	2	22	4	1	5	24	3	27
Arts European Studies	10	2	12		1	1	10	3	13
Arts International Relations	35	34	69	6	1	7	41	35	76
Arts Policy Studies	6	3	9	3	2	5	9	5	14
Arts Social Work	6	1	7	5	1	6	11	2	13
AsianStudies	41	29	70	11	11	22	52	40	92
AsianStudies (Sp)	45	12	57	7	4	11	52	16	68
Commerce	203	194	397	24	30	54	227	224	451
Economics	19	27	46	6	9	15	25	36	61
Electronic Commerce	4	6	10	1	2	3	5	8	13
Engineering	13	92	105	1	6	7	14	98	112
Engineering Software	24	151	175	+	3	3	24	154	178
Finance	5	18	23			,	5	18	23
Informational Technology	30	173	203	6	16	22	36	189	225
IT Software Engineering	2	11	13	-	8	8	2	19	21
Law	26	15	41	6	3	9	32	18	50
Law (Graduate)	52	41	93	28	32	60	80	73	153
Medical Science	79	32	111	3	2	5	82	34	116
Science	212	274	486	59	42	101	271	316	587
Science Biotechnology	16	15	31	00	12	101	16	15	31
Science Communication	4	10	5				4	10	5
Science Computational Science	r	10	10	1	1	2	1	11	12
Science Forestry	15	35	50	1	3	4	16	38	54
Science Photonics	15	3	4	1	5	4	10	30	4
Science Psychology	149	58	207	22	4	26	171	62	233
NITA ACAT	149	25	35	~~~	4	20	1/1	25	35
NITA ACAT NITA Music	136	196	332	8	16	24	144	212	356
NITA Visual Arts	224	89	313	19	10	24	243	96	339
				-		-	-		
Science Resource Management	49	33	82	9 452	7 298	16	58	40 2180	98
Single Degrees Total BACHELOR — COMBINED DEGREES	1920	1882	3802	432	298	750	2372	2180	4552
	E A	07	191	1	2	0		0	194
Actuarial Studies/Commerce	54	67	121	1	-	3	55	69	124
Actuarial Studies/Economics	13	16	29	-	4	4	13	20	33
Actuarial Studies/Law	12	12	24	-		0	12	12	24
Arts/Asian Studies	50	24	74	5	3	8	55	27	82
Arts/Asian Studies (Sp)	68	35	103	3	<u> </u>	3	71	35	106
Arts/Commerce	51	50	101	5	1	6	56	51	107
Arts/Economics	33	43	76	2	3	5	35	46	81
Arts/Forestry	1	5	6				1	5	6
Arts/Law	399	206	605	19	9	28	418	215	633
Arts/Psychology	100	27	127	7	2	9	107	29	136
Arts/Science	139	92	231	14	14	28	153	106	259
Arts/Visual Arts	25	3	28	1		1	26	3	29
AsianStudies (Sp)/Economics	13	11	24	3	1	4	16	12	28
AsianStudies (Sp)/Law	52	21	73	3	1	4	55	22	77

AsianStudies(Sp)/Commerce	25	14	39	3	2	5	28	16	44
AsianStudies(Sp)/Science	14	13	27	2	3	5	16	16	32
AsianStudies(Sp)/Visual Arts	2		2	1		1	3	0	3
AsianStudies/Commerce	21	20	41		1	1	21	21	42
AsianStudies/Economics	7	6	13				7	6	13
AsianStudies/Engineering	2	3	5				2	3	5
AsianStudies/Forestry	1		1				1	0	1
AsianStudies/Law	28	7	35	2	2	4	30	9	39
AsianStudies/Science	15	8	23	2		2	17	8	25
AsianStudies/Visual Arts				1		1	1	0	1
Commerce/Economics	62	111	173	7	20	27	69	131	200
Commerce/Engineering	1	28	29	1		1	2	28	30
Commerce/Forestry		2	2				0	2	2
Commerce/IT	60	143	203	6	8	14	66	151	217
Commerce/Law	72	93	165	3	5	8	75	98	173
Commerce/Psychology	23	15	38				23	15	38
Economics/IT	6	29	35		1	1	6	30	36
Economics/Law	25	50	75	1	4	5	26	54	80
Economics/Psychology	5	2	7				5	2	7
Engineering/Arts	4	4	8				4	4	8
Engineering/Economics	3	7	10	1	1	2	4	8	12
Engineering/IT	14	91	105		3	3	14	94	108
Engineering/Science	18	68	86		6	6	18	74	92
IT/Forestry	1	2	3				1	2	3
Science Forestry/Economics	1	4	5	1		1	2	4	6
Science Psychology/Law	24	10	34				24	10	34
Science Psychology/Science	19	7	26	1		1	20	7	27
Science/Commerce	35	29	64	4	2	6	39	31	70
Science/Economics	14	19	33	2	4	6	16	23	39
Science/Forestry	6	7	13	1	1	2	7	8	15
Science/Law	75	46	121	8	4	12	83	50	133
Visual Arts/Forestry	2		2	1		1	3	0	3
Combined Degrees Total	1595	1450	3045	111	107	218	1706	1557	3263
BACHELOR TOTAL	3515	3332	6847	563	405	968	4078	3737	7815
DIPLOMA & NON-AWARD									
Arts	1	1	2	9	9	18	10	10	20
Asian Studies	1		1	6	7	13	7	7	14
NITA Visual Arts	5	14	19	11	3	14	16	17	33
Non-Award & Cross-Inst'l	36	25	61	115	60	175	151	85	236
Total	43	40	83	141	79	220	184	119	303
UNDERGRADUATE TOTAL	3558	3372	6930	704	484	1188	4262	3856	8118

F = Female M = Male Note: All enrolment tables relate to sole or major course enrolments only

STUDENT LOAD 2002				ALL					
LEVEL OF COURSE		FULL-TIME	3		PART-TIN	ΛE			
	F	M	Total	F	M	Total	F	M	Total
POSTGRADUATE	•				•	-			
IAS									
PhD	201.3	281.9	483.2	15.3	13.7	29.0	216.7	295.6	512.3
Master by Research	2.5	5.5	8.0		0.8	0.8	2.5	6.2	8.7
Master by Coursework	24.4	22.1	46.5	13.9	12.5	26.4	38.3	34.6	72.9
Graduate Diploma	9.0	6.1	15.1	6.4	3.4	9.8	15.4	9.5	24.9
Graduate Certificate				1.3	0.1	1.4	1.3	0.1	1.4
Cross-Institutional					0.3	0.3	0.0	0.3	0.3
Non-Award	3.9	4.9	8.8	0.3		0.3	4.2	4.9	9.1
IAS Total	241.1	320.4	561.5	37.2	30.7	67.9	278.3	351.1	629.4
CENTRES	·								
PhD	37.5	36.0	73.5	5.2	5.2	10.4	42.7	41.2	83.9
Master by Research	0.5	2.0	2.5	0.3		0.3	0.8	2.0	2.8
Master by Coursework	40.8	32.6	73.4	48.1	118.8	166.9	88.9	151.4	240.3
Graduate Diploma	20.1	27.3	47.4	3.4	5.5	8.9	23.5	32.8	56.3
Graduate Certificate		1.5	1.5	3.1	5.1	8.2	3.1	6.6	9.7
Cross-Institutional				0.1		0.1	0.1	0.0	0.1
Non-Award	14.1	19.4	33.5	0.3	0.1	0.4	14.4	19.5	33.9
Centres Total	113.1	118.7	231.8	60.3	134.8	195.1	173.4	253.5	426.9
FACULTIES (incl. NITA)	•								
PhD	188.1	217.2	405.3	30.2	28.0	58.2	218.3	245.2	463.5
Doct by Coursework	3.0		3.0	0.9	0.1	1.0	3.9	0.1	4.0
Master by Research	13.0	26.1	39.1	6.0	4.5	10.5	19.0	30.6	49.6
Master by Coursework	76.8	44.3	121.1	40.9	37.1	78.0	117.7	81.4	199.1
Master (Qual)					0.1	0.1	0.0	0.1	0.1
Graduate Diploma	119.3	90.6	210.0	56.0	38.9	94.9	175.4	129.5	304.9
Graduate Certificate	1.4	3.1	4.5	1.4	2.6	4.0	2.8	5.7	8.5
Non-Award	1.3	5.7	7.0	0.5	1.1	1.6	1.8	6.9	8.6
The Faculties Total	402.8	387.1	789.9	135.8	112.5	248.3	538.7	499.6	1038.2
ALL AREAS									
PhD	426.9	535.1	962.0	50.7	46.9	97.7	477.6	582.0	1059.6
Doct by Coursework	3.0	0.0	3.0	0.9	0.1	1.0	3.9	0.1	4.0
Master by Research	16.0	33.6	49.6	6.2	5.3	11.5	22.2	38.8	61.1
Master by Coursework	142.1	99.0	241.0	102.8	168.4	271.2	244.9	267.3	512.2
Master (Qual)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
Graduate Diploma	148.5	124.0	272.5	65.8	47.7	113.5	214.2	171.7	386.0
Graduate Certificate	1.4	4.6	6.0	5.7	7.9	13.6	7.1	12.5	19.6
Cross-Institutional	0.0	0.0	0.0	0.1	0.3	0.4	0.1	0.3	0.4
Non-Award	19.3	30.0	49.2	1.1	1.3	2.3	20.3	31.2	51.6
Postgraduate Total	757.0	826.3	1583.3	233.3	277.9	511.2	990.3	1104.2	2094.5
UNDERGRADUATE	I			1			1		
IAS									
Bachelor	4.8	1.8	6.5				4.8	1.8	6.5
Cross-Institutional	3.0	0.8	3.8		0.5	0.5	3.0	1.3	4.3
Non-Award	0.4		0.4	1	1	1	0.4	0.0	0.4
IAS Total	8.1	2.5	10.6	1	0.5	0.5	8.1	3.0	11.1
FACULTIES (incl. NITA)	1				·	1	1		
Bachelor	3163.4	2911.9	6075.2	209.4	139.5	348.9	3372.8	3051.4	6424.1
Diploma	5.7	15.6	21.4	9.4	6.0	15.4	15.1	21.6	36.7
Cross-Institutional	14.7	13.4	28.1	22.6	6.9	29.5	37.3	20.3	57.6
Non-Award	2.0	1.4	3.4	5.0	5.8	10.9	7.0	7.2	14.2
The Faculties Total	3185.8	2942.3	6128.1	246.4	158.2	404.6	3432.2	3100.5	6532.7

ALL AREAS									
Bachelor	3168.1	2913.6	6081.7	209.4	139.5	348.9	3377.5	3053.1	6430.6
Diploma	5.7	15.6	21.4	9.4	6.0	15.4	15.1	21.6	36.7
Cross-Institutional	17.7	14.2	31.8	22.6	7.4	30.0	40.3	21.5	61.8
Non-Award	2.4	1.4	3.8	5.0	5.8	10.9	7.4	7.2	14.6
Undergraduate Total	3193.9	2944.8	6138.7	246.4	158.7	405.1	3440.3	3103.5	6543.8
ANU TOTAL	3950.9	3771.1	7722.0	479.8	436.6	916.3	4430.7	4207.6	8638.3

ACADEMIC AREA			POSTG	RADUAT	Е		UND	ERGRA	ALL STUDENTS	
	PhD	M(R)	M(C)	Grad Dip	Grad Cert	Total	Bach	Dip	Total	
IAS										
CRES	9					9				9
JCSMR	18	1				19				19
RSAA	4					4				4
RSBS	8	1				9				9
RSC	14	1				15				15
RSES	13	1				14				14
RSISE	4	1				5				5
RSPAS	25	1	15	3		44				44
RSPhysSE	14	1				15				15
RSSS	19		10		2	31				31
IAS Total	128	7	25	3	2	165				165
CENTRES			I							
APSEM	8		342	44	14	408				408
NCEPH	9		10	2		21				21
SMS(IAS)	6					6				6
CENTRES Total	23		352	46	14	435				435
THE FACULTIES			· · · · · ·							
ARTS	40	5	9	23	1	78	526	3	529	607
ASIAN ST	5	2	12	8		27	145		145	172
ECO&COMM	9	1	24	10	1	45	596		596	641
FEIT	12	4				16	214		214	230
LAW	3	1	36	187	2	229	303		303	532
SCIENCE	33	8	13	29		83	472		472	555
NITA	1	3	16	13		33	196	19	215	248
Total Faculties and NITA	103	24	110	270	4	511	2452	22	2474	2985
ANU TOTAL	254	31	487	319	20	1111	2452	22	2474	3585

## HOME REGION OF OVERSEAS STUDENTS 2001

COUNTRY			POSTG	RADUA	ГЕ	UN	DERGRAD	UATE	ALL OVERSEAS	
	PhD	M(R)	M(C)	Grad-	Other	Total	Bachelor	Other	Total	
		()	(-)	Dip						
Asia										
Bangladesh	2		6	10	4	22	4		4	26
Bhutan			6	10	1	17				17
Brunei Darussalam	1		1			2	1		1	3
Burma (Myanmar)			1	1		2	5		5	7
Cambodia	2		6	9	4	21	1		1	22
China (excludes SARs and Taiwan Province)	16	1	130	5		152	115		115	267
Hong Kong (SAR of China)			6	1		7	55	2	57	64
India	2	1	10	1	1	15	17		17	32
Indonesia	20	1	25	10	14	70	19	1	20	90
Japan	26	1	11	11	2	51	15	1	16	67
Kazakhstan	1		2			3				3
Korea, Democratic People's Republic of (North)					4	4				4
Korea, Republic of (South)	11		11	2		24	15		15	39
Kyrgyz Republic	1					1	1		1	2
Laos	2		3	1	1	7	2		2	9
Macau			1			1	6		6	7
Malaysia	8		8	1		17	103		103	120
Maldives	1		2			3	6		6	9
Mongolia			3	1		4				4
Nepal	1		4	3	1	9	2		2	11
Pakistan	2		6	2		10				10
Philippines	7		23	7	3	40				40
Singapore	8		115	4	2	129	167		167	296
Sri Lanka		1	2	4	1	8	2		2	10
Taiwan (Province of China)	6		7	3	7	23	27	2	29	52
Tajikistan			1			1				1
Thailand	16	2	7	5	2	32	18		18	50
Turkmenistan	1		1			2				2
Uzbekistan			1			1				1
Viet Nam	10		11	4	1	26	15		15	41
Asia Total	141	7	405	95	48	696	595	6	601	1297
Еигоре										
Austria			1			1		1	1	2
Belgium	1					1				1
Bulgaria	1					1				1
Cyprus	1					1				1
Denmark	1			1		2				2
England	14		5	3		22	1		1	23
Finland			-	-			1	1	2	2
France	1		2			3	3	-	3	6
Germany	22		1	1		24	-	1	1	25
Greece	~~		1			1	2	-	2	3
Ireland	<u> </u>		-			1	1		1	1
Italy	6		1			7	<u>  ·  </u>			7
Lithuania	1		1			1		1	1	2
Netherlands	4			1		4		1	1	4
Norway			1	1		4	4		4	5
Poland	1		1			1	4		4	1
Romania	5		1			6	1		1	7
Russian Federation	2		1 2			4	1		1	5
	۷									2
Slovakia Sweden	1		1	1		1 2	1 2	1	1	5
	1			1				1	3	
Switzerland	2		1			3	1	1	2	5
Ukraine	1		17			1				1
Europe Total	64		17	6		87	18	6	24	111

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America										
Argentina							1		1	1
Bolivia			1			1	-			1
Brazil	3		1			3	1		1	4
Canada	6		11	1		18	1		1	19
Chile	0		11	1		10	1		1	19
Colombia	1					1				2
	1					1	1		1	
Ecuador							1	1	1	1
Guatemala								1	1	1
Jamaica							1		1	1
Mexico	2		1			3		1	1	4
Peru							1		1	1
Suriname	1					1				1
Trinidad and Tobago							1		1	1
United States of America	10	1	20	1	2	34	13	29	42	76
America Total	23	1	33	2	2	61	22	31	53	114
Oceania			•							
Fiji	5		2		1	8	5		5	13
Kiribati	1		1			2				2
Marshall Islands				1		1				1
Micronesia, Federated States of				1		1				1
Nauru			1			1				1
New Caledonia			1			1	1		1	2
New Zealand	44	2	5	2		53	27	2	29	82
Papua New Guinea	3	1	5	4	3	16	11		11	27
Tonga	-	1	-	-	-	1	1		1	2
Vanuatu		-	2		1	3	-			3
Pacific Total	53	4	17	8	5	87	45	2	47	134
North Africa and the Middle East		-	17	0	5	07	-10	~	- 11	154
Bahrain	1						1		1	1
Egypt	1					1	-		1	1
Iran	4		1		1	6	6		6	12
Israel	4		1		1	0	1		1	12
Saudi Arabia	2					2	3		3	5
	2					2	3 1			1
Turkey United Arab Emirates	2					2	3		1 3	5
			0		1					
North Africa and the Middle East Total	11		6		1	18	16		16	34
Africa										
Botswana	2		2			4	5		5	9
Ghana	1		~			1	Ŭ			1
Kenya			1			1	5		5	6
Lesotho			-	1		1	Ŭ		0	1
Malawi	-			1		1				1
				1		1	5		5	5
Mauritius Mozambique	1	1	1		1	4	5 1		3 1	5
Namibia	1	1	1	1	1		1		1	
				1		1			1	1
Nigeria							1		1	1
Sierra Leone							2		2	2
South Africa	3					3	1		1	4
Tanzania	1		1			2				2
Zimbabwe					1	1				1
Africa Total	9	1	5	3	2	20	20		20	40
Unknown	31	5	4		2	42	1	9	10	52
OVERSEAS TOTAL	332	18	487	114	60	1011	717	54	771	1782

	ACADEMIC	;	GENERAL	TOTAL		
	Research Only	Teaching and Research	Admin	Technical	Other	
Institute of Advanced Studies	L.		•			
Resource and Environmental Studies	17		8	7		32
John Curtin School of Medical Research	74		26	139	15	253
Astronomy and Astrophysics	21	1	13	35	4	73
Biological Sciences	71		17	85	5	177
Chemistry	47		16	46	12	120
Earth Sciences	48		13	57		118
Information Sciences and Engineering	19		11	8	0	38
Pacific and Asian Studies	84	2	50	44		180
Physical Sciences and Engineering	85	1	29	64	6	185
Social Sciences	76	6	51	29	7	168
All	541	10	232	514	49	1345
University Schools and Centres	L.					
Asia Pacific Sch. Economics & Management	9	15	30	4		58
Aboriginal Economic Policy Research	9		3	4		15
Cross-Cultural Research	16		4	4		24
Mental Health Research	6		2	9		17
Humanities Research Centre	5	0	6	4		14
Epidemiology and Population Health	17	6	9	6		38
National Graduate School of Management	1	7	12	1		20
Mathematical Sciences Institute	26		4	2		32
All	89	28	68	34		218
The Faculties	L.					
Arts	8	99	27	12		144
Asian Studies	2	37	8	2		48
Economics & Commerce	3	56	16	5		80
Engineering & IT	7	38	19	31		96
Law		43	19	7		68
Medical School		2	2			4
Science	43	113	26	83	2	267
All	62	387	118	139	2	707
National Institute of the Arts		93	40	17	8	158
Other	1	14	608	130	137	890
TOTAL	692	531	1066	833	196	3318

# Cooperation with government and other public 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 2002. This is not necessarily comprehensive.

# **Institute of Advanced Studies**

# **Research School of Astronomy and Astrophysics**

ASPLUND, Dr M., member, LOC, IAU Symposium 210, "Modelling of Stellar Atmospheres", Uppsala, Sweden.

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

BICKNELL, Dr G., member, Scientific Organising Committee, "Compact Steep Spectrum and Gigahertz Peak Spectrum Radio Sources", Kerastari, Greece.

BRIGGS. Prof. F., member, ATNF Users Committee; member, ATNF Steering Committee; member, International SKA Science Advisory Committee; chair, Early Universe and Large-Scale Structure Subcommittee; Australian LOFAR Project Scientist (through ATNF/ CSIRO); member, Dutch LOFAR Science Steering Group; chair, Dutch Observing Program Committee.

COLLESS, Dr M., member, National Committee for Astronomy of the Australian Academy of Science; member, Australian Gemini Science Advisory Committee; chair, 6dF Science Advisory Group; chair, Science Organising Committee, 6dF Galaxy Survey Workshop.

DaCOSTA, Dr G., immediate-past president and member, organising committee, IAU Commission 37 (Star Clusters and Associations); member, organising committee, IAU Division VII (Galactic System); member, Scientific Organising Committees, IAU General Assembly Joint Discussion Sessions JD4 "Astrophysical Impact of Abundances in Globular Cluster Stars", and JD6 "Extragalactic Globular Clusters and their Host Galaxies"; 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. DOPITA, Prof. M., member, Program Committee for SPIE Meeting AS21: Future EUV-UV Visible Space Astrophysics Missions & Instrumentation; member, Australian Academy of Sciences Sectional Committee 2, Physics & Astronomy; member, Special Nominating Committee, International Astronomical Union; member. 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, 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 Sub-Committee 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, Anglo Australian Telescope Board; member, NOVA (Netherlands Research School for Astronomy) International Advisory Board; co-chair, SOC for IAU Symposium 220 "Dark Matter"; member, RAVE Board (RAVE is a very large international stellar radial velocity program); member, KAOS Working Group (KAOS is a wide field multifibre spectrometer to be proposed for GEMINI).

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

JACKSON, Dr C., member, International Science Advisory Group for the SKA; member, Australian Science Working Group for the SKA; member, LOFAR International Science Consortium.

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

NORRIS, Dr J., member, National Committee of Astronomy; member, Australian Astronomy Board of Management.

PETERSON, Dr B., member, National Organising Committee for IAU General Assembly XXV.

SCHMIDT, Dr B., chair, Australian Optical Telescope Time Assignment Committee; chair, ATNF Radio Telescope Time Assignment Committee; member, Square Kilometer Array Steering Committee; councillor, Astronomical Society of Australia; representative, International Time Allocation Committee, Gemini. WOOD, Dr P., member, SOC, conference on "Masslosing pulsating stars and their circumstellar matter"; member, SOC, IAU Colloquium 193, "Variable Stars in the Local Group"; member, Australian Gemini Science Advisory Committee.

# **Research School of Biological Sciences**

#### **Comparative Genomics**

GRAVES, J.A.M., assoc. editor, *Chromosome Research* 2001–present; symposium organiser and chair, International Congress of Genetics (July 2003); member, Program Committee for the Human Genetics Society of Australasia; member, organising committee, Lorne Genome Conference; referee for grants for ARC, NH-MRC, Marsden (NZ), NIH (USA) Wellcome (UK), BBSRC (UK).

#### **Developmental Biology**

HEARN, J.P., chair, Federal Government's Australian Biotechnology Advisory Council, ABAC; chair, Australian Bioscience Consortium BIOZ; chair, Society for Reproductive Biology and Rapporteur of the World Health Organisation Asia and Pacific Panel on Reproductive Health Research; scientific adviser on Stem Cell research to Committees and Members of the House of Representatives and the Senate.

MAROTTE, L.R., Public Officer for the Australian Neuroscience Society.

## **Ecosystem Dynamics**

BALL, M.C., Public Officer, Australian Society of Plant Biologists; editorial boards of *Oecologia, Global Change Biology, Plant Biology, Tree Physiology* and *Trees Structure and Function*, referee for the following peerreviewed journals: *Ecology, Global Change Biology, Journal of Ecology, Oecologia, Plant Biology, Plant Cell & Environment, Plant Physiology, Trees Structure and Function, and Tree Physiology,* and refereed a grant application to the National Science Foundation, USA.

BARNES, B., reviewer, *IMA Journal of Mathematics Applied in Medicine and Biology.* 

CANNY, M.J., referee for the following peer-reviewed journals: *Functional Plant Biology, Plant Physiology and Biochemistry, Journal of Plant Physiology,* and *Plant Physiology.* 

DAVIES I., collaborated with Dr M. Hill, Bureau of Rural Sciences on AG ACCESS, a tool for assessing carbon stocks in agricultural lands.

DEAN C., collaborated with Dr Mick Brown, Forestry Tasmania, measuring *E. regnans* forest trees and biomass for carbon accounting and forecasting; and with A Lee, L Randall and J Austin, Bureau of Rural Sciences, carbon accounting of Qld woodlands. GILMORE, A.M., guest editor, special issue of Functional Plant Biology (October 2002, Vol 29), dedicated to the special satellite meeting on Light-stress and Photosynthesis (LS2001) held in Heron Island in August 2001 and was one of the key organisers of this meeting that coincided with the 13th International congress on photosynthesis research; peer reviewer for the following peer-reviewed journals: Planta, Plant Physiology, The Plant Cell, Photosynthesis Research, Physiologia Plantarum, Plant and Cell Physiology, Biophysical Journal, Nature, Functional Plant Biology, Functional Ecology, Comparative Physiology and Biochemistry, Tree Physiology. Botanical Bulletin of Academia Sinica: refereed a competitive grant proposal for the United States Department of Agriculture.

MITCHELL, C.D., member, organising committee for the CRC Association Conference 2003, travelled to the United States as part of an Australian delegation under the United States Australia Climate Action Partnership to discuss establishment of greenhouse accounting projects, gave a talk titled: The greenhouse issue and the fertilizer industry to the Annual General Meeting of the Fertiliser Industry Federation of Australia; presented a briefing: Carbon accounting — what's happening, to senior executives of Stanwell Corporation.

RODERICK, M.L., representative of the Ecological Society of Australia to the Federation of Australian Scientific and Technical Societies; referee for the following peer-reviewed journals: *International Journal of Wildland Fire, Remote Sensing of Environment, Tellus, New Phytologist, Tree Physiology, Functional Ecology, Plant Physiology, CSIRO Land & Water Technical Reports, Plant, Cell and Environment and Functional Plant Biology.* 

ROXBURGH, S.H., referee for the following peer-reviewed journals: *Journal of Vegetation Science, Environmental Science and Policy, Canadian Journal of Forest Research and Science in China* (Series C, Life Sciences); reviewer, Modelling Forest Systems, CABI Publishing, Wallingford, UK and Terrestrial Global Productivity, Academic Press, San Diego; collaborated with Drs A Lee, M Barson and L Randall, Bureau of Rural Sciences on landscape-scale carbon budget modelling of the Injune region and with Dr M Hill, Bureau of Rural Sciences on Range ASSESS — a spatial framework for analysis of potential for carbon sequestration in rangelands.

#### **Environmental Biology**

EVANS, John, ANU representative for the Green Machine; Management Team, Cooperative Research Centre for Greenhouse Accounting; editorial advisory board, *Functional Plant Biology*, editorial review board, *Plant, Cell & Environment.* 

FARQUHAR, G.D., member, Australian Society of Plant Biologists; Australian Institute of Agricultural Science; Australian Society for Biophysics; American Society of Plant Biologists; steering committee for the National Institute of Bioscience; Board alternate, Cooperative Research Centre for Greenhouse Accounting; steering committee for the National Institute for the Environment; Minister's Consultative Panel on National Research Priorities; editorial board, *Mitigation* and Adaptation Strategies for Global Change; Functional Ecology (British Ecological Society); review board, Plant, Cell and Environment; reviewer, University of Western Australia's Institute of Advanced Studies.

MASLE, Josette, reviewer for *Plant Cell Environment; Plant and Soil; Annals of Botany; Functional Biology.* 

#### **Genomic Interactions**

DJORDJEVIC, M.A., editor, Functional Plant Biology.

MATHESIUS, U., reviewed papers for *Plant Physiology*, *Functional Plant Biology*, *Planta, and Plant Physiology and Biochemistry*.

ROLFE, B.G., president to September and currently vice-president, Australian Electrophoresis and Proteomics Society; editor, *Plant Physiology and Biochemistry*, referee for grant applications to the United States Department of Agriculture and the National Science Foundation.

SKOTNICKI, M., reviewed Antarctic Science grant proposals, and manuscripts submitted to Polar Biology and Antarctic Science.

WEILLER, G.F., reviewer, proposed curriculum for an undergraduate degree in Bioinformatics at the University of Western Sydney; reviewed papers for *Bioinformatics and Molecular Biology & Evolution*, examiner for a PhD thesis.

WEINMAN, J.J., reviewed papers for *Functional Plant Biology, Proteomics and Electrophoresis.* 

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

BALL, E., refereed two grants for the ARC, one grant for the Marsden Foundation, reviewed a paper for Molecular Biology and Evolution, and gave seminars at the Centre for Molecular Genetics of Development, Univ. of Adelaide, and at the Institute for Molecular Biology, Univ. of Queensland.

CAMPBELL, H.D., as a member of the PC2 Laboratory Inspection Team, reviewed a paper for the *Journal of Medical Genetics*, gave an invited seminar at the Centre for the Molecular Genetics of Development, University of Adelaide, and provided expert advice to Biological Criminalistics, Forensic Services, Australian Federal Police.

CLARK-WALKER, G.D., referee for EMBO Journal, *Molecular Biology and Yeast*, member, editorial board of *Mitochondrion*.

SAINT, R. president, Genetics Society of Australia and was an ARC reviewer.

### **Molecular Plant Physiology**

ANDREWS, T.J., held discussions with CSIRO Telecommunications and Industrial Physics on the topic of artificial photosynthesis; reviewed grant applications for the ARC and manuscripts submitted to several international biochemical, molecular biological and plant physiological journals; member of the steering committee of the Australian Artificial Photosynthesis Network.

BADGER, M.R., reviewed grant applications for the ARC and manuscripts submitted to several international biochemical, molecular biological and plant physiological journals.

KANE, H.J., reviewed manuscripts submitted to international plant biological journals.

PRICE, G.D., refereed manuscripts submitted to several international biochemical, molecular biological and plant physiological journals.

VON CAEMMERER, S., monitoring editor, the journal *Plant Physiology*, editorial review board, *Plant Cell and Environment*, co-vice-chair of the Gordon conference on CO2 fixation and metabolism in green plants, Mount Holyoke, MA, USA.

WHITNEY, S.M., reviewed grant applications for the ARC and manuscripts submitted to international biochemical and plant biological journals.

#### **Photobioenergetics**

AHRLING, K., ACT representative of the Australian Society for Biophysics.

ANDERSON, J.M., co-organiser with Prof. J Barber (1) the Royal Society Discussion Meeting on Photosystem II: molecular structure and function and (2) the Novartis Foundation Royal Society Discussion Meeting on Photosystem II: molecular structure and function; editorial board, *Photosynthesis Research*, referee for *Nature*, Proceedings National Academy of Science USA, *Biochemistry, Biochimica et Biophysica Acta, Plant Cell and Environment*, Lemberg Travelling Fellowship Committee (Chair) and Plant Science Section 6 Committee of the Australian Academy of Science; Australian representative for the Royal Society.

CHOW, W.S., member, editorial board, *Physiologia Plantarum* and *Journal of Plant Physiology and Molecular Biology*, referee, USDA; referee for *Planta, Plant Physiology, Functional Plant Biology, Plant Biology* and *Botanical Bulletin of Academia Sinica*; participant in the CSIRO Student Research Scheme and the National Science Festival.

WYDRZYNSKI, T.J., member, editorial board, *Photo-synthesis Research*, referee for *Biochemistry*, Journal of the American Chemical Society; book editor, *Advances in Photosynthetic Research*.

## **Plant Cell Biology**

BAILLIE, B.K., reviewer, manuscript for Proceedings of the Royal Society of London Series B.

COLLINGS, D.A., referee, papers for *Plant and Cell Physiology*, reviewed grant application for SRON (the Netherlands)

GALWAY, M.E., referee, papers for *Plant and Cell Physiology*; reviewer, grant applications for the National Science Foundation (USA), National Science and Engineering Research Council of Canada.

GUNNING, B.E.S., referee, manuscripts for *Photosyn*thesis Research, Plant and Cell Physiology, Plant Physiology, examiner, PhD thesis, U of Melb, member, The Sir Mark Oliphant International Frontiers of Science and Technology Conference Series Committee, Department of Education, Science and Training, Australian Academy of Science, Australian Academy of Technological Sciences and Engineering.

HARDHAM, A.R., editor, *Protoplasma, Fungal Genetics and Biology, Physiological and Molecular Plant Pathology*, editorial board, *Advances in Botanical Research*; examiner of PhD theses for Melbourne University and Adelaide University; member, Executive Committee and Governing Board of the CRC for Tropical Plant Protection; member, National Committee for Plant Science, Australian Academy of Science; member, Sectional Committee 6, Plant and Microbial Sciences, Australian Academy of Science; reviewer, manuscripts for CSIRO Division of Plant Industry Cell Calcium, Fungal Genetics & Biology, *Journal of Cell Science, Mycologia, Physiological and Molecular Plant Pathology and Plant Cell*; reviewer of grant application ARC.

JOHN, P.C.L., referee, papers for *Plant Physiology* and *Planta*, member, Scientific Advisory Board of CropDesign; member, Biology Library Committee, submission on "Lead Pollution" to Healthy Rivers Commission NSW.

JONES, D.A., reviewer of grant applications for the Australian Research Council; examiner of PhD thesis for the University of Queensland; reviewer of manuscripts for *Biochimica et Biophysica Acta, Functional Plant Biology* and *Molecular Plant-Microbe Interactions*.

WASTENEYS, G.O., editor, *Plant and Cell Physiology*, monitoring editor, *Plant Physiology*, member, Faculty of 1000; referee, papers for *Journal of Cell Science, Nature*, *Nature Cell Biology, Plant Cell, Planta, Protoplasma*; reviewer, grant applications for Australian Research Council, National Science Foundation (USA), Netherlands Organisation for Scientific Research and Netherlands Council for the Earth and Life Sciences, US Department of Agriculture; Australia and New Zealand Representative, the Multinational Arabidopsis Steering Committee. In 2002, the committee produced a document on the Multinational Coordinated Arabidopsis thaliana Functional Genomics Project (<u>http://</u>

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www.nsf.gov/pubsys/ods/getpub.cfm?bio0202); ACT Representative, Australia New Zealand Society for Cell and Developmental Biology.

WILLIAMSON, R.E., member, editorial boards, *Planta* and *European Journal of Cell Biology*, referee, papers for *Planta, Plant Cell, Plant Journal, Plant Physiology, Plant and Cell Physiology*, Proceedings of the National Academy of Sciences USA; member, Postdoctoral Exchange Committee for Asia, Australian Academy of Science.

YEOMANS, A.T., referee, papers for *Plant and Cell Physiology*.

#### Visual Sciences

IBBOTSON, M.R., reviewer, manuscripts for Vision Research, Clinical and experimental Ophthalmology, Journal of Neurophysiology, Neuroscience Letters and Journal of Comparative Physiology.

MADDESS, T., chair, Biotech Australia Honours Prize Committee; member, Steering Committee of the Australian Biosciences Consortium (BIOZ); reviewer of grant proposals for the ARC and NH&MRC; Public Officer of an ACT Association (A 1849); member, Board of the Australian Centre for Intellectual Property in Agriculture (ACIPA); member, Steering Committee of the Australian Biosciences Consortium (BIOZ); alternate. ANU Pro-Vice Chancellor (Administration) on the Australian Technology Park (ATP) Advisory Council; section editor, Clinical and Experimental Ophthalmology, reviewer of papers for Current Eye Research, Experimental Eye Research, Vision Research, member, Business ACT Bioscience Committee; supervisor of three ACT High School Science Projects; two generating BHP Science Awards.

MALESZKA, R., reviewed papers for *Hormones and Behavior, Journal of Comparative Physiology, Zoology, European Journal for Biochemistry.* 

SRINIVASAN, M.V., grant reviewer for ARC, Australian-German Joint Research Co-operation Scheme; member, advisory board, International Society for Neuroethology; editorial boards of the Journal of Comparative Physiology, Australian Journal of Intelligent Information Processing Systems; reviewed papers for Nature, Journal of Comparative Physiology, Journal of Neuroscience, Journal of Experimental Biology, Machine Vision and Applications, Current Opinion in Neurobiology, election to the Expert Advisory Committee (Biological Sciences and Biotechnology) of the Australian Research Council for 2003-2005; gave Inaugural Science Presentation to the Prime Minister's Science, Engineering and Innovation Council (PMSEIC), Parliament House; elected to the Expert Advisory Committee (Biological Sciences and Biotechnology) of the Australian Research Council.

ZEIL, J., grant reviewer for National Science Foundation (USA); reviewed papers for *Journal Experimental Biology, Journal of Comparative Physiology, Behavioural*  *Processes, Physiological Entomolog,* provision of expert advice to BBC Natural History Unit, Bristol.

### **Electron Microscopy Unit**

HEADY, R.H., presented papers at the Fifth National Conference on Australia's Forest History, Hobart; Wollemi Pine Symposium, Sydney; Mt Tomah Botanic Gardens, NSW; and a symposium on current research into the conservation of Aboriginal paintings, National Museum of Australia; member, CSIRO Plant Industry Editorial Panel.

STOWE, S., administered the Australian and NZ Microscopy listserver; membership secretary, WISENET (Women in Science Enquiry Network); chaired session at 17th ASEM Conference, Adelaide, and presented poster Shared Research Infrastructure in Universities; reviewed manuscripts for Measurement Science and Technology.

Unit staff contributed to the activities of the National Youth Summer School.

# **Research School of Chemistry**

Academic staff from the RSC serve on the editorial boards of 31 international scientific journals.

BANWELL, Prof. M.G., chair, editorial advisory committee, *Australian Journal of Chemistry*, consultant, Genencor International Inc, Palo Alto; consultant, Biota Holdings Ltd, Melbourne; member, editorial boards, *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; reader, ARC grant applications.

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

COLLINS, Prof. M.A, committee member, Physical Chemistry Division, Royal Australian Chemical Institute (RACI).

DIXON, Dr N.E., visiting lecturer, School of Chemistry, University of Sydney; visiting lecturer, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm; assessor, grant applications (ARC, NH&MRC, Israel Science Foundation).

EASTON, Prof. C.J., board member, Federation of Australian Scientific and Technological Societies (FASTS); secretary and chair elect, Organic Chemistry Division, RACI; 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; member, editorial advisory board, *Current Organic Synthesis*, member, editorial advisory board, *Mini Reviews in Organic Chemistry*, member, editorial advisory board, *Letters in Organic Chemistry*, member, Scientific Committee, Ninth International Society for Free Radical Research Conference, 2004; member, Management Committee, UnIChe Program.

EVANS, Prof. D.J., 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 Subcommittee, 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, Liblice Conferences on Statistical Mechanics of Liquids; member, editorial advisory board, *Chemical Physics*, member, editorial boards, *Molecular Simulation, Molecular Physics*, assessor/reader, ARC grant applications.

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

HENDERSON, Dr M.J., member, Instrument Advisory Team for the SANS instrument at Replacement Research Reactor.

HILL, Prof. A.F., member, Synthetic and Biological College, Engineering and Physical Sciences Research Committee, (UK) (EPSRC); assessor, EPSRC grant applications; member, Referee Panel, Chemical Communications; editor, *Advances in Organometallic Chemistry* (Academic Press); member, Editorial Advisory Board, *Organometallics* 

MANDER, Prof. L.N., council member and member of audit committee, 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, ARC grant applications.

OLLIS, Dr D.L., assessor, NH&MRC and ARC large grant applications.

OTTING, Prof. G., member, editorial board, *Journal of Biomolecular NMR*; assessor, ARC grant applications.

RADOM, Prof. L., vice-president and president-elect, World Association of Theoretically Oriented Chemists; co-organiser, "Computational Chemistry in the 21st Century", Melbourne, Australia, June 2003; member, editorial advisory boards, Advances in Quantum Chemistry; European Journal of Mass Spectrometry; International Journal of Quantum Chemistry; Journal of the Chemical Society, Perkin Transactions 2; Journal of Computational Chemistry; Journal of Molecular Structure: Theochem; Journal of Physical Organic Chemistry.

REYNOLDS, Dr P.A., member, Instrument Advisory Team for the SANS instrument at Replacement Research Reactor, Coordinator UnIChe Project.

WELBERRY, Prof. T.R., past president 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; member, Single Crystal Instrument Advisory Team, Australian Nuclear Science and Technology Organisation.

WENGER, Dr E., guest-editor, *Inorganica Chimica Acta* (Special issue to be published 2003).

WHITE, Prof. J.W., president, Royal Australian Chemical Institute; chair, National Committee for Crystallography (Australian Academy of Science); chair, Advisory Committee on Replacement Research Reactor (Australian Academy of Science); chair, Steering Committee, Evaluation Report to the Antarctic Science Advisory Committee on Australia's Antarctic Science Program; 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, Small Angle Neutron Scattering Instrument Advisory Team, 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; member, Institute for the Study of Christianity in an Age of Sci-Technology; founding member ence and of International Society for Science and Religion.

WILD, Prof. S.B., consulting editor, *Tetrahedron: Asymmetry*, member, editorial advisory board, Main Group Chemistry; member, Selection Committee, Australian–German Research Cooperation Scheme; guest Professor, PhD Program, University of Leipzig.

WITHERS, Dr R.L., consultant, Electron Diffraction Commission of the International Union of Crystallography (until August); member, Aperiodic Commission of the International Union of Crystallography; member, editorial board, *Journal of Solid State Chemistry*, expert external examiner, Professorship in Structural Chemistry, Department of Physical, Inorganic and Structural Chemistry, Stockholm University, Sweden.

# **Research School of Earth Sciences**

ARMSTRONG, Dr R., with scientists from the Geological Surveys of Britain, Brazil, Botswana, Namibia, South Africa, South Korea and Swaziland; and geochronological projects for Australian and international exploration companies and consultants.

BERRY, Dr A.J., with Dr G.J. Foran, ANSTO, on Xray absorption spectroscopy of metal ions in crystals and glasses.

BRAUN, Dr J., invited speaker at a workshop on "Defining a New Seismic Risk Map of Australia" organised by Geoscience Australia, Adelaide.

CALVO, Dr E. and PELEJERO, Dr C., with Dr G.A. Logan, Geoscience Australia, on molecular biomarker analysis from marine sediments and the setting up of carbon and nitrogen isotopes analysis.

CAMPBELL, Dr I.H. and STOLTZE, Ms A., with Placer Granny Smith Pty Ltd to study ore-fluid pathways around the mesothermal gold deposits in the Laverton region, WA using alkali elements and stable isotopes; project supported by a SPIRT grant from ARC.

FABEL, Dr D. established a cooperative agreement (AMS-02-14) with the Australian Nuclear Science and Technology Organisation (ANSTO) to measure in situ produced Be-10 and Al-26 in quartz samples.

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

FITZ GERALD, Dr J.D., with M. Devries, CSIRO Division of Minerals to characterise reaction microstructures in reduced ilmenite polycrystals.

GLIKSON, Dr A., with Dr J. Gorter, AGIP Australia on lamproites of the Bonaparte Basin, Timor Sea.

GLIKSON, Dr A. with Hickman, Dr A., Williams, Dr I. and van Kranendonk, Dr M., GSWA, on the Archaean asteroid impact fallout units, Pilbara craton, Western Australia; with Pirajno, Dr F. GSWA, on the origin of the Shoemaker Impact Structure, Nabberu Basin, Western Australia and with Iasky, Dr R. GSWA, on new Western Australian impact structures.

GREEN, Emeritus Prof. D.H., Director, Ringwood Superabrasives Pty Ltd representing the University's interests in the company formed to commercialise patented ultra-hard ceramics based on diamond and cubic boron nitride composites.

GRIFFITHS, Prof. R.W., with Australian Scientific Instruments (ASI) on marketing of the Geophysical Flows Rotating Table; ASI delivered the latest unit to the Courant Institute of Mathematical Sciences, New York.

HARRISON, Prof. T.M., member, National Committee for Earth Science, developing a strategic plan for Earth sciences in Australia (due June 2003); member, Board of the Australian National Seismic Imaging Resource (ANSIR), a Major National Research Facility operated as a joint venture of GA and RSES; developed a joint appointment structure for fixed term academic positions with CSIRO Exploration and Mining; gave a Seminar for Geoscience Australia, entitled "A Mission to Really Early Earth: When did the Earth Become Suitable for Habitation?".

HEATH, Mr C., study of the "Origin and composition of Ore-forming fluids in the giant Golden Mile gold deposit, Kalgoorlie with Kalgoorlie Consolidated Gold Mines; supported through an ARC SPIRT grant to Dr I. Campbell.

HENDY, Ms E., GAGAN, Dr M. and McCUL-LOCH, Prof. M., with Dr J. Lough, Dr P. Isdale and Dr D. Barnes, Australian Institute of Marine Science; Ms Hendy's PhD research is a core project of the AUS-CORE (AUStralian COral REcords) initiative and is designed to document decadal-to-centennial climate variability in the Great Barrier Reef region over the last 400 years; new AUSCORE collaborative work is underway with Honours student, Ms K. LILLY.

KENNETT, Prof. B.L.N., support to the Comprehensive Nuclear-Test-Ban Treaty (CTBT) Organisation in Vienna through the operation of the Warramunga Seismic and Infrasound Research Station near Tennant Creek, Northern Territory; seismic and infrasound arrays managed by John Grant with assistance from Peter Biggs; very high reliability achieved with data transmitted continuously to the International Data Centre in Vienna via satellite link; director and previously deputy director, Australian National Seismic Imaging Resource (ANSIR), a Major National Research Facility operated as a joint venture by the Australian National University and Geoscience Australia; chair, Academy Committees for Postdoctoral Opportunities in Japan and exchange arrangements with N.E. Asia (China, Japan, Korea, Taiwan), Australian Academy of Science; chair, Committee for the Frederick White Conference Series, Australian Academy of Science.

LAMBECK, Prof. K., chair, Antarctic Science Advisory Committee; member, AUSAID Technical advisory Group; Foreign Secretary, Australian Academy of Science and a member of its Council; member, Executive Committee of the International Inter-Academy Panel.

McCULLOCH, Prof. M.T., with Dr P. De Cavitat, Geoscience Australia on the use of isotopic signatures to decipher basement signatures through sedimentary basin cover; with Dr D. Barnes and Dr J. Lough from the Australian Institute of Marine Sciences on the Great Barrier Reef.

McGREGOR, Ms H. and GAGAN, Dr M., with Dr G. Brunskill, Dr G.J. Lough and Dr D. Barnes, Australian Institute of Marine Science; Ms McGregor's PhD research is part of Project TROPICS (Tropical River-Ocean Processes in Coastal Settings) and aims to use corals to reconstruct the mid-Holocene climate of the Western Pacific Warm Pool north of Papua New Guinea.

McQUEEN, Dr H., with CSIRO Division of Exploration and Mining and the National Mapping Division of Geoscience Australia on absolute gravity measurements and instrument calibrations at the Mt Stromlo Gravity Station in support of the Superconducting Gravimeter installation.

MÜLLER, Ms A., with the Australian Institute of Marine Science (AIMS).

MÜLLER, Dr W., with Mr M. Westaway, National Museum of Australia, on provenancing Aboriginal human skeletal remains from Victoria using stable and radiogenic isotope analysis.

NORMAN, Dr M., with several gold exploration companies as well as projects with CSIRO and Geoscience Australia.

NUTMAN, Dr A. P., with Dr G. Gibson, Australian Geological Survey Organization (AGSO) on the tectonothermal evolution of the Broken Hill area.

PILLANS, Dr B., site investigation and hazard assessment at the Lucas Heights nuclear reactor site, Sydney, for the Australian Nuclear Science and Technology Organisation (ANSTO); completed a geological investigation and report on a Pleistocene paleontological site near Canberra, for Environment ACT; assistant director, CRC for Landscape Environments & Mineral Exploration; continued collaborative research on paleomagnetic dating of regolith with CRC personnel from CSIRO, Geoscience Australia, University of Canberra, and a number of mining companies including St Barbara Mines, Newmount, Perilya and Kalgoorlie Consolidated Gold Mines.

ROHRLACH, Mr B. and CAMPBELL, Dr I. H., LOUCKS, Dr R. R., PALIN, Dr J. M. and MCDOU-GALL, Prof. I., with WMC Resources Ltd on the study of the Tampakan Cu-Au deposit in southern Mindanao, Philippines.

SAMBRIDGE, Dr M. took part in a CSIRO sponsored gathering of Australian scientists (in Nice, France) interested in potential field inversion studies. Flowing from this a new specialist group was organised to foster collaborative projects in the area between Australian Industry, CSIRO and universities.

SAMBRIDGE, Dr M., with Dr P. Cummins, Geoscience Australia in the area of nonlinear inversion applied to source studies in the Australian continent.

SOMMACAL, Mr S. (PhD student), founding member, Association for Research between Italy and Australasia (ARIA)-Canberra, a non-profit association which aims to promote scientific and technological cooperation between Italy and Australasia.

TURNER, Prof. J. S. chaired an evaluation of Australia's Antarctic Science Program in the fields of Glaciology, Geosciences and Oceanography, the Review Committee heard submissions at the Antarctic Division in Hobart.

WILLIAMS, Dr I. S., with Australian Scientific Instruments Pty. Ltd. (a subsidiary of AnuTech Pty Ltd) in the manufacture and marketing of SHRIMP ion microprobes, taking up a 25% appointment as Applications Scientist for the company; with ASI on the development of stable isotope and multiple collector analysis on, and the final tuning of, the SHRIMP II purchased by the All-Russian Geological Research Institute, St Petersburg, including training three scientists from VSEGEI in SHRIMP analytical procedures; assisted ASI with SHRIMP marketing at Goldschmidt 2002, Davos.

WYNN, Dr J.G., member, Cooperative Research Centre for Greenhouse Accounting, Programs B and A.

YAXLEY, Dr G., with a number of Australian and international diamond exploration companies.

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

### **Computer Sciences Laboratory**

LLOYD, Prof. J, member, editorial board, *Journal of Functional and Logic Programming*, member, editorial board, *The Computer Journal*.

MENDELSON, Dr S, co-organiser, Machine Learning Summer School 2002, Canberra; program committee member, 15th Annual Conference on Learning Theory; member, COLT Steering Committee.

MILLAR, Dr B, public officer, Australian Speech Science & Technology Association Inc.; chair, ASSTA Spoken Language Database Committee; member, editorial board, Speech Communication; member, Advisory Council, International Speech Communication Association; 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, Scientific Committee, International Language Resources and Evaluation Conference; member, International Advisory Committee, International Conference on Spoken Language Processing; member, Technical Programme Committee, Audio-Video Biometric Person Authentication; member, Scientific Committee, International Congress of Phonetic Sciences.

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

THIÉBAUX, Dr S, member, Technical Program Committee, International Conference on AI Planning and Scheduling; member, Technical Program Committee, American National Conference on Artificial Intelligence; member, Technical Program Committee, Australian International Joint Conference on Artificial Intelligence; program chair, AIPS-02 Workshop on Planning via Model-Checking; member, Technical Program Committee, ECAI-02 Workshop on Model-Checking and Artificial Intelligence.

### **Department of Systems Engineering**

ANDERSON, Prof. Brian, designate CEO, National ICT Australia, president, Australian Academy of Science (to May 02); member, Board of the Australian Research Council; trustee, Ian Clunies Ross Memorial Foundation (to May 02); member, Prime Minister's Science Prize Committee (to May 02); member, PM-SEIC Standing Committee — Priority Setting

Working Group; director, Australian Foundation for Science; director, Cochlear Ltd; 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, Asian Control Professors Association: member. Prime Minister's Science. Engineering and Innovation Council (PMSEIC) (to May 2002); member, IEEE James H. Mulligan, Jr. Education Medal Committee, 2001 & 2002.

AUSTIN, Dr D, chair, ACT Robocup Junior Committee.

FEATHERSTONE, Dr R, presenter, two seminars at Dept. Mechano-Informatics, University of Tokyo;

HARTLEY, Prof. R, Adjunct Professor, Department of Computer Science, University of Western Australia; bid member, Centre for Imaging and Technology in Medicine, University of Western Australia; Program Leader (designate), NICTA Program Leader for Autonomous Systems and Sensor Technologies.

LANZON, Dr A, visitor, Honeywell Technology Inc. Minneapolis, USA; academic visitor, Department of Aerospace Engineering and Mechanics, University of Minnesota, Minneapolis, USA; academic visitor, Department of Electrical and Electronic Engineering, University of Melbourne.

MOORE, Prof. J.B., member, Sectional Committee 11 for the Australian Academy of Science; director Go-CDMA Ltd, Hong Kong.

ZELINSKY, Prof. Alexander, chief executive officer, Seeing machines Pty Ltd; reader and reviewer, Australian Research Council, Robotics Program; member, editorial board, *International Journal of Robotics Research*, chair, International Committee on Field and Service Robotics; program co-chair, 2002 IEEE/RSJ International Conference on Intelligent Robots and Systems; member, editorial board *IEEE Robotics and Automation Magazine*.

ZIMMER, Dr U, 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); program committee member, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS '02)

### Department of Telecommunications Engineering

KIVINEN, Dr J, co-chair, Program Committee, Annual Conference on Computational Learning Theory.

WILLIAMSON, Prof. R, chair, Steering Committee for Annual Conference on Learning Theory (COLT).

# John Curtin School of Medical Research

ADA, Prof. G.L., member, Australian Influenza Vaccine Committee; member, Programme Advisory Committee and Programme Executive Committee of the Australian HIV Vaccine Consortium; scientific patron of the Austin Research Institute, Melbourne; referee, Wellcome Trust, the Academy of Science and for manuscripts submitted to the Lancet; chair, Committee to assess candidates for Prime Minister's Life Sciences Award.

BAKER, Dr R., director and vice-president, Genome Conference Inc; executive director and treasurer of the Australian Society for Medical Research; expert consultant to the Human Gene Nomenclature Committee, London; member, NHMRC Grant Review Panel 1A (Biochemistry); Careers Night Speaker, Canberra Boys Grammar School, Canberra; High Fliers National Research Priorities Strategic Forum, Australian Academy of Science.

BANYER, Dr J., CSIRO 2002 Student Scheme.

BEKKERS, Dr J., consultant to Axon Instruments, Foster City, USA.

BLANDEN, Prof. R.V., member, editorial boards of *Immunology and Cell Biology*, and the Asia-Pacific Journal of Biotechnology; chair, Scientific Advisory Committee of the National Centre in HIV Virology Research.

BOARD, Dr P., member, editorial board, *Biochemical Journal*, adviser to Parkinson's NSW Inc; gave presentations on Parkinson's Disease research to the ACT Parkinson's support group; assessor of NHMRC grants; consultant to Biotron Limited.

COOPER, Dr P., consultant for The National Health Sciences Centre, The Canberra Hospital and for GlaxoSmithKline SA.

DULHUNTY, Dr A., consultant for BIOTRON; reader for ARC and an assessor for NHF; GRP member for NHMRC; Board of Directors of the ACT Orthopaedic and Muscular-skeletal Research Foundation.

EASTEAL, Prof. S., editor, *Molecular Biology and Evolution*, member, Advisory Board, Sydney University Biological Informatics and Technology Centre; member, Research Committee, Australian Institute of Sport; member, Advisory Committee, NHMRC Centre for Mental Health Research; member, Council of Scientific Editors; member, Bioinformatics Industry Opportunity Taskforce, Department of Industry, Science and Resources; member, NHMRC Genetics Project Grant Review Panel; member, Scientific Advisory Board, Entigen Inc, Sunnyvale, California; Councillor, Society for Molecular Biology and Evolution; member, Organising Committee, Lorne Genome Conference; Organizing Committee, XIX International Congress of Genetics.

FENNER, Prof. F., member, Smallpox Expert Group; member, Infectious Disease Emergency Response Group; member, Chemical, Biological, Radiological Commonwealth/State Forum of the Department of Health and Ageing; member, Prime Minister's Science, Engineering and Innovation Council.

FOSTER, Dr P., associate editor, *Pharmacology and Therapeutics*, member, executive committee of the International Eosinophil Society; member, working group for the basic science section of the International Eosinophil Meeting, Colorado, USA, 2003.

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

GOODNOW, Prof. C., member, Australian Society of Immunology; member, American Association of Immunologists; member, American Association for the Advancement of Science; member of a number of advisory boards including: NHMRC Project Grants Review Panel 2a; meeting co-organiser, Keystone Symposia 2002; member, Scientific Advisory Board, Australian Genome Research Facility; member, Scientific Advisory Board, Illumina, Inc, San Diego; member, Scientific Advisory Board, Genome Institute of the Novaratis Foundation, San Diego; member, editorial boards of the *Journal of Experimental Medicine, Immunity, Immunological Reviews, Internal Immunology, Current Biology* and *Genome Biology*.

HENDRY, Prof. I.A., science adviser on the board of the Wenkart Foundation; member, John James Memorial Ethics Committee; member, editorial board, *International Journal of Developmental Neuroscience*.

HILL, Dr C.E., member, Training Awards Committee, National Health and Medical Research Council; member, Cardiovascular Health Advisory Committee of the National Board of the National Heart Foundation.

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

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

OLESKEVICH, Dr S., radio interview with ABC 2CN, Canberra; also involved in career orientation and work experience for Madeline Fischer.

PARISH, Prof. C., editor-in-chief, Immunology and Cell Biology, member, Medical Research Advisory Committee of the Australian Cancer Research Foundation; chair, NHMRC Research Fellowships Committee Peer Review Advisory Panel; member, NHMRC Research Fellowships Committee; ANU representative on the Program Management Committee of the Australian HIV Vaccine Consortium; vice-president of the Australasian Society for Immunology.

RAMSHAW, Prof. I.A., member, Scientific Advisory Panel, Westmead Institute for Cancer Research; member, editorial board, *Viral Immunology, Microbes and Infection*, Faculty 1000.

REDMAN, Prof. S.J., member, editorial boards of *Neuroscience* (Section Editor), *Journal of Neurophysiology, Trends in Neuroscience, Journal of Computational Neuroscience, Neuroreport, Synapse, Journal of Neuroscience Methods, European Journal of Neuroscience, Journal of Clinical Neuroscience and Clinical and Experimental Pharmacology and Physiology, member, Executive Committee of the International Brain Research Organization; member, Research Advisory Board, Prince of Wales Medical Research Institute; member, Board of Neurosciences Australia; chair, Gordon Research Conference on Synaptic Transmission to be held in 2004.* 

SHANNON, Dr F., member of an NHMRC Project grant assessment panel, 2002; chair, Lorne Genome Conference organising committee for 2003.

SIMEONOVIC, Dr C., member, editorial board, *Cell Transplantation*, member of Council, Society Liaison Officer, The Transplantation Society of Australia and New Zealand; organiser on behalf of the Transplantation Society of Australia and New Zealand of two Transplantation symposia "Transplantation Today and Tomorrow" I. Immune Tolerance and II. Clinical Advances, The Australian Health & Medical Research Congress, Melbourne.

STUART, Dr G., project grant assessor for NH&MRC; teacher at the Cold Spring Harbour (USA) course on the "Physiology of Ion Channels" and the International Brain Research Organisation School of Neuroscience in Hong Kong.

THOMSON, Dr S.A., co-organiser for The Canberra Hospital Annual Scientific Meeting, Canberra.

TREMETHICK, Dr D., invited analyst for Chemtract, Biochemistry and Molecular Biology; chair, COMBIO Meeting, Sydney.

WALMSLEY, Dr B., associate editor, *Neuroscience Letters*, member, NHMRC Project Grants Discipline Panel; lecturer, Department of Physiology, University of New South Wales.

WARREN, Dr H.S., member, editorial board, *Immu-nology and Cell Biology*.

WHITWORTH, Prof. J.A., director, Anutech Pty Ltd; member, ACT Government Knowledge Based Economy Board; Honorary Ambassador for Women; member, Selection Committee, Mayne Florey Medal; member, University of New South Wales, External Independent Inquiry; chair, Advisory Panel. Commonwealth Health Minister's Award for Excellence in Health & Medical Research; Trustee, High Blood Pressure Research Foundation of Australia; member, Global Advisory Committee on Health Research, WHO; member, WHO Expert Advisory Panel on Health Science & Technology Policy; member, Task Force on Cardiovascular Disease Education for Women, Joint World Heart Federation/WHO; chair, Selection Committee for Francesco Pocchiari Award, WHO: coordinator. WHO. ACHR Peer Review subcommittee; member, International Society of Hypertension (ISH) Scientific Program Committee (Prague 2002); WHO/ISH Liaison Committee; co-chair WHO/ISH Guidelines Writing Committee; member, ISH International Scientific Program Committee (Sao Paulo 2004); member, Organising committee, WHO/ ISH Stroke meeting (2002).

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

YOUNG, Prof. I.G., editor, *DNA Sequence*, member, Biological Defence Advisory Committee, (Department of Defence); Grant reviewer, Wellcome Trust, Research Grants Council, Hong Kong.

## Research School of Pacific and Asian Studies

### **Division of Economics**

CHAND, Dr S., (with Prof. Hal Hill) briefed review team to East Timor for AusAID.

DUNGEY, Dr M., visiting fellow, New Zealand Treasury, Wellington New Zealand, Australian Commonwealth Treasury, Canberra.

FANE, Prof. G., consultant on regional decentralisation project, Ministry of Finance, Government of Indonesia; consultant to World Bank on preparation of Country Economic Memorandum for Iran.

GAI, Dr P., research adviser, Bank of England.

GARNAUT, Prof. R., chair, Pacific Economic Outlook Forecasting Group (Pacific Economic Cooperation Council), Lihir Gold Ltd, Immigration and Income Distribution Project, Department of Immigration and Multicultural and Indigenous Affairs, PNG Sustainable Development Program Limited, Asia Pacific Economics Group Pty Ltd, Lonely Planet Publications Pty Ltd; review of Federal–State financial relations; director, Ok Tedi Mining Limited.

HILL, Prof. H., adviser to AusAID on country programs and strategies in Indonesia, The Philippines, East Timor.

JHA, Prof. R., adviser, World Institute for Development Economics Research (WIDER), Commonwealth Department of Foreign Affairs and Trade; lecturing, Sri Lanka Central Bank; fellow of the World Innovation Foundation; member, Panel of Experts, Fiscal Affairs Division, International Monetary Fund; consultant, World Bank; consultant, World Institute for Development Economics Research (WIDER); reviewer, Millenium Development Goals, World Bank.

MAXWELL, Dr J., report to AusAID, 'Indonesia Poverty Data Study'.

McKIBBIN, Prof. W., board member, Reserve Bank of Australia; co-author, report for Department of Foreign Affairs and Trade on Australia–Thailand Free Trade Area, Demographic Change in Japan for Cabinet Office, Prime Minister of Japan; consultant, Australian Greenhouse Office, reports on 'Modeling Results for the Kyoto Protocol' and 'Projections of Greenhouse Gas Emissions from Stationary Energy Sector to 2020: results from the G-Cubed model'; US Congressional Budget Office; Canadian Department of Finance; coauthor, report to the OECD on 'The Global Economic Impact of China's Accession to the WTO'.

McLEOD, Dr R.H., preparation of report on the 'IMF Program of Assistance to Indonesia during 1997–2002' for the Australian Agency for International Development; 'Current problems of foreign investment in Indonesia', for Analytic Outcomes Pty Ltd; preparation of short note on 'Current economic issues in Indonesia for Asian Analysis'.

MENG, Dr X., consultant for AusAID.

WARR, Prof. P., (with John Maxwell) report to AusAID 'Indonesia Poverty Data Study'.

### **Division of Pacific and Asian History**

BAKKEN, Dr B., member, China advisory group, Norwegian Institute of Human Rights, Oslo; member, resource group, Danish Centre for Human Rights, Copenhagen briefing session, Royal Norwegian Ministry of Foreign Affairs, Oslo.

BALLARD, Dr C., invited session coordinator, Workshop on the Implementation of Legislation for Special Autonomy for the Province of Papua, Republic of Indonesia, Hotel Irian, Biak, Papua.

DENOON, Prof. D., member of Council, University of Papua New Guinea; editorial board, Department of Foreign Affairs and Trade Historical Documents Project.

LI, Dr T., assessor, Chiang Ching Kuo Foundation.

McCORMACK, Prof. G., 'Article 9 and Japan's Defence', Australian College of Defence and Security Studies, Canberra; 'Terrorism and Japan', Attorney General's Department, Australia, HMAS Harman, (ASIO class).

MARR, Prof. D., AusAID Vietnam briefing; Australian Political Council (DFAT) briefing on Vietnam.

NELSON, Prof. H., with Mr David Hegarty (SSGM), wrote submission for Senate Foreign Affairs, Defence and Trade References Committee, 'Inquiry into Australia's relationship with Papua New Guinea and other Pacific Island Countries'.

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

### **Department of International Relations**

ELLIOT, Dr L., member, steering committee, Land and Water Australia project on 'Implications for Australian Natural Resource Management of International Experiences in Institutional Change and Reform Arising from Sustainable Development'; member, Research Committee, Australian Institute of International Affairs, Australian Committee of the Council for Security Cooperation Asia Pacific; research associate, Centre for International Strategic Analysis; senior vice-president, Canberra Branch, Australian Institute of International Affairs; mentor, Asialink Young Australian Leaders program.

FRY, Mr G., lecturer, 'Theories of International Relations' and 'Contending Images of World Politics after September 11', Department of Foreign Affairs and Trade short course on World Politics; Southwest Pacific Security, Defence College; 'Peacebuilding and the Arc of Crisis in the Pacific' to the Centre, Defence and Strategic Studies; seminar, 'Successes and Failures of National Security in the South Pacific', National Security staff of Timor; presenter, New Zealand Staff College, 'Australian and New Zealand Relations with the South Pacific'.

HARRIS, Prof. S., member, Trilateral Commission; Council for Asia–Europe Cooperation; adviser, Japan Centre for International Exchange; co-chair, the Australian Committee of the Council for Security Cooperation in the Asia–Pacific (CSCAP); lecturer, Australian Defence College; speaker, Australian Institute of International Affairs.

KEAL, Dr P., seminars, Department of Foreign Affairs and Trade Graduate Trainees.

KERR, Dr P., lecturer, Australian Defence College; examiner, strategic studies section Masters program, Australian Staff Command College; Australian member, Council for Security Cooperation in the Asia– Pacific (CSCAP).

MORTON, Dr K., presenter, Civil Society in China, AusAID.

REUS-SMIT, Dr C., member, Commonwealth Foreign Affairs Council; organised joint forum with the Royal Netherlands Embassy on The Future of Humanitarian Intervention at National Press Club; coordinator and principal drafter of the national submission on International Relations to the DEST research priorities inquiry.

### Department of Political and Social Change

ASPINALL, Dr E., participant, Australia–Indonesia Young Leaders' Dialogue, Bogor, Indonesia.

BARLOW, Dr C., research panel assessment member, Malaysian Palm Oil Board, Kuala Lumpur; research supervisor, Indonesian Palm Oil Research Institute, Medan.

COLLIER, Dr C., provided advice on terrorism in the Philippines to the Foreign Minister, Attorney-General's Department, and Department of Defence.

CROUCH, Dr H., lecturer, Centre for Defence and Strategic Studies, 'Civil-Military Relations in Southeast Asia'; reader of draft article on 'Corruption in Indonesia' for World Bank.

DINNEN, Dr S., see entry under State, Society and Governance in Melanesia Project.

FEALY, Dr G., consultant, AusAID, Canberra, The Asia Foundation, Jakarta and Washington, Citigroup (SSB), Hong Kong; participant, Australian Centre of Defence and Strategic Studies seminar on Southeast Asian strategic issues; briefing for the Minister of Foreign Affairs.

GEORGE MULGAN, Assoc. Prof. A., presentation to a group of state and federal politicians and their advisers on 'Political Structures and Political Parties in Japan' under the umbrella of Australian Political Exchange Council; consultancy to serve on the international appointments committee of the Hiroshima Peace Institute in Japan; member, Japan Policy Research Institute.

MAY, Dr R., briefings on Papua New Guinea, Philippines for DFAT personnel, visiting Papua New Guinea delegations, and various foreign embassies; presenter, Australian Defence College and Australian Command Staff College courses; World Bank consultant, 'Equity aspects of the system of intergovernmental transfers in Papua New Guinea'.

O'COLLINS, Emeritus Prof. M., presented written submission to the Joint Senate Committee 'Inquiry into Australia's Relationship with Papua New Guinea and other Pacific Island countries'; participated in and presented evidence at the Senate Committee's hearing.

REGAN, Mr A., see entry under State, Society and Governance in Melanesia Project.

SAOVANA-SPRIGGS Ms R., member, PNG Students delegation to the Australian National Senate Parliamentary Committee on how to best execute financial aid to PNG. SHAND Dr R., Australian academic representative, Indian Ocean Rim Academic Group (IORAG), at the meeting of the Indian Ocean Rim Association for Regional Cooperation (IOR–ARC); consultant, Department of Foreign Affairs and Trade, 'The States' in 2001–2002; commenced a study of Australia–India bilateral relations from 1944–2002, for the Department of Foreign Affairs and Trade.

### **Division of Society and the Environment**

### **Department of Anthropology**

ROBINSON, Dr K., gender and community participation adviser, East Timor Community Water Supply and Sanitation Project (CWSSP) IDSS/AusAID; participation in peer review process, AusAID Indonesia Section Strategy.

RUMSEY, Dr A., anthropological consultant, Kimberley Land Council and Kamali Land Council; senior anthropologist in charge of the Wanjina/Wunggurr-Wilinggin claim, appearing as an expert witness in the Federal Court of Australia.

McWILLIAM, Dr A., adviser and consultant, Australian Agency for International Development; consultant, Northern Land Council with Fr G Neonbasu and RIC International for Timorese language translations, Minter Ellison for Worimi Aboriginal traditional ownership (NSW).

### Department of Archaeology and Natural History

ANDERSON, Prof. A.J., adviser, South Island Maori Rock Art Project, Ngai Tahu Development Corporation.

HOPE, Prof. G.S., advisory committee, Wingeecarribee Reserve, Sydney Catchment Authority; Lemberg Award advisory committee, Australian Academy of Science; assessor, Australian Research Council; New Zealand Research Award Assessor, Foundation for Research, Science and Technology, New Zealand Government; reviewer, National Research Fund of South Africa.

O'CONNOR, Dr S., Archaeologist's Expert Report for Goldfields Land and Sea Council for Federal Court Hearings for Native Title Nadju Claim.

WATCHMAN, Dr A., advisory member, Australian Institute of Nuclear Science and Engineering Committee for Radiocarbon Dating; microclimatic monitoring of rockshelter sites near Townsville with Department of Defence and Mr Vinod Daniel, Australian Museum; dating of rock art with Dr Ugo Zoppi, Australia Nuclear Science and Technology Organisation, Dr Rodger Sparks, Rafter Radiocarbon Laboratory, New Zealand, and Dr Ann McNichol, Woods Hole Oceanographic Institution, Massachusetts; dating the Barrier Canyon style of rock-art with the National Parks Service, Utah and National Pictographic Society, Colorado.

### Department of Human Geography

BOURKE, Dr R.M., business partner, Dames and Moore Pty Ltd, Adelaide; adviser, Australian Agency for International Development, Canberra.

### **Department of Linguistics**

BOWEN, Dr J., assessor, Australia Europe Scholarship applications.

ROSS, Dr M., international linguistic adviser, Summer Institute of Linguistics.

### **Gender Relations Centre**

REID, Ms E. and STUDDERT, Dr L., conveners, International Roundtable on Increasing Access to HIV Treatments in Resource Poor Settings; collaboration with India UNAIDS, CDC (USA), Indonesia UN-AIDS, on AusAID HIV project; Cambodia UNAIDS, UNTG, USAID, Burma UNAIDS, East Timor UN-DP, PNG UNDP, on AusAID HIV project; China DFID, UNAIDS, Thailand UNAIDS SEAICT. Ford Foundation, Malaysian AIDS Council, Vietnam Ford Foundation, Laos UNAIDS SEAICT, and Hong Kong Hong Kong AIDS Foundation; ongoing consultations and discussions with people from IAVI, International Public Private Partnerships Initiative (IPPPH), VicHealth, UNDP, University of Sydney (Institute of International Health), WHO, University of Melbourne (Australian International Health Institute), University of Queensland (School of Population Health), Australian Red Cross, Rockefeller Foundation, Burnet Institute, Albion Street Centre, World Vision Australia and Oxfam Community Aid Abroad.

#### **Transformation of Communist Systems Project**

CHAN, Dr A., invited as resource person to the First Global Workshop for Multinationals Project, Singapore, organised by the International Textile, Leather and Garment Workers' Federation.

### **Non-Divisional Groups**

### **Director's Section**

FOX, Prof. J., member, Foreign Affairs Council; International Observer with Carter Center, Presidential Elections in East Timor (April); report prepared for Environment Australia, 'A Study of Socio-Economic Issues Facing Traditional Fishers who Access the MOU Box'.

#### **Pacific Manuscripts Bureau**

MAIDMENT, Mr E., joint archives preservation projects with the National Archives of Australia on the microfilming of the archives of the Pacific Islands Co Ltd and the Pacific Phosphate Co Ltd, with the Cook Islands National Archives on identification and preservation microfilming of early Cook Islands government records, with Mr B L Howarth, the Secretariat of the Pacific Community Library, Suva, and the National Archives of Fiji on the preservation of Pacific islands scientific serials, the Samoan Ministry of Youth, Sports and Cultural Affairs on preservation microfilming of registers of indentured labourers, Westpac Historial Services survey of Westpac archives relating to the Pacific Islands.

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

BOULAN-SMIT, Dr C., consultant, Rio Tinto Kelian Mine (Kalimantan–Indonesia), communication and training programs; liaison with staff from BHP Maruwai Coal Project (Kalimantan), representatives from Placer Dome, CSIRO, NGOs, Macquarie and Melbourne Universities to discuss the Meratus Mining Project (Kalimantan).

FILER, Dr C., consultant, Morobe Gold Ltd (PNG), PNG Department of Mining; liaison with World Bank, Environment Australia and CSIRO regarding applications of remotely sensed data to land use planning in PNG; meeting with Newmont (Industry) to discuss landowner compensation in development of Martabe gold project (Sumatra), Placer Dome Newmont (Industry) to discuss social mapping of Meratus mineral prospect in Kalimantan, Porgera Joint Venture to discuss mine closure policy for Porgera gold mine (PNG); comments to PNG Department of Petroleum and Energy on Social Mapping Issues paper.

FOALE, Dr S., consultant, Lihir Management Company, monitoring the social impact of Lihir Gold Mine, PNG; discussions with Lihir Management Company and Agricultural Consultant, J Petheram, University of Melbourne, about the Millenium Ecosystem Assessment (regional sub-global assessment); contributed video material of environmental impact surveys to CSIRO Fisheries; discussions with University of Queensland on management of Tetepare Island, Solomon Islands.

HABERLE, Dr S., 'Palaeoecological Perspectives on Climate Change and its Impact on Biodiversity': summary document and presentation to the Biological Diversity Advisory Committee, Biodiversity and Climate Change Workshop, CSIRO Sustainable Ecosystems Division, Canberra; member, Executive Board, Australian Geoscience Council, National Committee for Quaternary Science (Australian Academy of Science).

HOLZKNECHT, Dr H., discussions with EA, AB-ARE, BRS, Department of Environment and Conservation, PNG, Forest Authority, PNG, WWF, PNG, Tanorama Consulting PNG, and The World Bank on implementation of the World Bank's Forest and Conservation Project in PNG.

HUGHES, Dr P., consultant, PNG Highland Highway Rehabilitation Project, World Bank and PNG Department of Works and Transport; consultant (with Dr B Allen), AusAID PNG Road Priority Study. MACINTYRE, Dr M., consultant, Lihir Management Company, monitoring the social impact of Lihir Gold Mine, PNG.

MAJID-COOKE, Dr F., consultant, WWF Sabah (East Malaysia), capacity building training in social science research methods for their project on coral reef conservation and the transborder live fish trade in the Sabah/Sulu seas.

WALKER, Dr A., participation in World Bank workshop on social and environmental sustainability in the mining sector in Lao PDR; development of 'Agreement for Collaboration' with the Thai Department of Land Development and the Centre for International Research on Agriculture for Development (CIRAD), France.

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

DINNEN, Dr S., adviser to AusAID on Fiji Law and Justice Project Identification Mission; panellist on Failed States in the Pacific, Pacific Advisory Council; adviser on Solomon Islands to Centre for Civil–Military Relations, Monterey Naval Academy, California; submission on Papua New Guinea and the Solomon Islands to Senate Standing Committee on Foreign Affairs, Defence and Trade's Inquiry into Australia's Relationship with Papua New Guinea and other Pacific Island Countries; scoping paper on the Solomon Islands for the Australian Strategic Policy Institute; member, Australian Committee of the Council for Security Cooperation in the Asia–Pacific (AUS–CSCAP).

DOUGLAS, Dr B., briefing to Priya Powell of the Policy and Management Reform Section of AusAID on the opening address by Hon C. Gallus to the 'Political Participation in the Pacific' conference at Parliament House; participated in a roundtable with the Senate Foreign Affairs, Defence and Trade's Inquiry into Australia's Relationship with Papua New Guinea and Other Pacific Island Nations, Parliament House; participated in a roundtable briefing of J. Renninger, Director, and V. Marusin, Bougainville and Solomon Islands specialist, Asia and Pacific Division, Department of Political Affairs, UN, on the 'arc of instability' and conflict situations in the region; member, Steering Committee, National Institute for Asia and the Pacific.

REGAN, Mr A., adviser to the Bougainville parties to the peace process and involvement in the process of negotiation of the Bougainville Peace Agreement signed on 30 August 2001; involvement in the joint PNG/ Bougainville working group that assisted the PNG Office of First Legislative Counsel; negotiations for an amnesty and pardon in relation to criminal offences committed in connection with the conflict; preparations for establishing a process for making a constitution for an autonomous Bougainville government; member of an international group of constitutional advisers to the East Timor Constituent Assembly arranged by The Asia Foundation. TIMMER, Dr J., member of briefing session to the Senate Foreign Affairs, Defence, and Trade References Committee.

#### Strategic and Defence Studies Centre

AYSON, Dr R., presenter, Royal New Zealand Air Force Command and Staff College, member, AUS– CSCAP.

BALL, Prof. D., completed two-year term as co-chair of the Council for Security Cooperation in the Asia Pacific (CSCAP), the premier second-track organisation for security cooperation in the region, linking strategic studies centres and Foreign Ministries in some 22 countries; co-chair of the Australian Committee of CSCAP (AUS–CSCAP), collaborating with other University and official organisations concerned with regional security in Australia.

DIBB, Prof. P., strategic policy and defence planning advice to the Secretary to the Department of Defence; facilitated four strategic outlook seminars and senior leadership seminars for the Department of Defence; seminars to the Swedish Foreign Ministry on Asian security, to a business meeting in the US on Asia's security outlook, and to Australian institutional investors on risk management after September 11 and Bali; member of Research Programs Committee of the Australian Strategic Policy Institute; participated in the Fourth Australia–Korea Forum in Hobart at the request of the Department of Foreign Affairs and Trade; member, Foreign Affairs Council; nominated as one of the Australian representatives on the ASEAN Regional Forum Register of Experts and Eminent Persons.

DUPONT, Mr A., foreign policy adviser to East Timor's Minister for Foreign Affairs and Cooperation; nominated as one of five Australian representatives on the ASEAN Regional Forum (ARF) Register of Experts and Eminent Persons; adviser to Premier of NSW, Mr Bob Carr, on homeland security; briefed the Australian Labor Party Caucus on the Bali bombing and its implications for Australian security; consultant to National Crime Authority, Department of Defence; higher education representative to the ACT Accreditation and Registration Council.

HORNER, Prof. D., member, Australian Army Military History Projects Committee; Head, Australian Army Land Warfare Studies Centre; report on the feasibility of an official history of peacekeeping for the Australian War Memorial.

HUISKEN, Dr R., prepared confidential risk assessments for industry customers.

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

### **Applied Mathematics**

ASTE, Dr T., founding member and member, board of 'ARIA-Canberra', the association for the development of collaborative research between Italy and Australia.

DI MATTEO, Dr T., founding member and member, board of 'ARIA-Canberra', the association for the development of collaborative research between Italy and Australia.

HYDE, Prof. S., consultant, CSIRO, mesostructural characterisation of pharmaceutical delivery agents; retained as an expert witness on an international pharmaceutical patent case for Davies Collison Cave, Melbourne.

SENDEN, Dr T.J., board member, The Rio Tinto Australian Sciences Olympiads; consultant, Vita Life Sciences assisting with FDA submission; member, program committee, biophysics representative, for the 2005 AIP Physics Congress.

STEWART, Dr A.M., vice president (Academic), treasurer, ANU Branch, National Tertiary Education Union.

### **Atomic and Molecular Physics Laboratories**

BUCKMAN, Prof. S., chair, ACT Chapter of the Fulbright Alumni Association; member, executive committee, Gaseous Electronics Conference (USA); member, International Scientific Committee, Symposium on the Physics of Ionized Gases (SPIG 21); member, Futures Committee, International Conference on Photonic, Electronic and Atomic Collisions; member, Will Allis Prize Committee of the American Physical Society.

CHADDERTON, Prof. L.T., founding editor, International Journal of Radiation Effects and Defects in Solids, member, editorial advisory board, Nuclear Tracks and Radiation Measurement, member, editorial advisory board, International Materials Science Forum, member, steering committee, Bilateral Science & Technology Agreement, Mexico and the Federal Government of Australia; member, United Nations Committee on Photovoltaic Applications in Less-Developed Countries, UN Centre for Science & Technology for Development; member, International Committee, Biennial Conference Series on Radiation Effects in Insulators; honorary life member, International Nuclear Track Society, and International Committee. Biennial Conference Series on Particle Tracks in Solids; member, International Committee, Biennial Conference Series on Quantum Electrodynamics and Statistical Physics.

CROMPTON, Prof. R.W., vice-president, Australian Fulbright Association, ACT Chapter convener; mem-

ber, international advisory board, International Conferences on Atomic and Molecular Data and their Applications; chair of board, Rio Tinto Australian Science Olympiads (until June).

GIBSON, Dr S.T., council and web membership database administrator, Australian Optical Society.

LEWIS, Prof. B.R., chair, 14th International Conference on Vacuum Ultraviolet Physics, Cairns, 2004; associate editor, *Journal of Quantitative Spectroscopy and Radiative Transfer*.

LOWER, Dr J., joint program coordinator, Atomic, Molecular Physics and Quantum Chemistry (AMPQC) Meeting, 15th Biennial Congress 2002 of the AIP.

WEIGOLD, Prof. E., member, Board, Australian Photonics CRC; member, Board, CRC for Functional Communication Surfaces; member, international scientific committee, International Conferences on X-Ray and Inner Shell Processes; member, international scientific advisory committee, International Symposium on (e,2e) Double Photoionization and Related Topics, Frankfurt, Germany; member, international organising committee, Sagamore (International Conference on Charge, Spin and Momentum Densities); member, Nominating Committee, American Physical Society Few-Body Topical Group; member, Australian Academy of Science Committee, Major National Research Facilities; director, Acton Lasers; chair, Innovation Access Program — International Science and Technology Competitive Grants Assessment Panel; chair, Australian Academy of Science 50th Anniversary Committee.

### **Director's Unit**

LOVE, Prof. J.D., advisory member for Far East & Australia, European Conference on Optical Communications, Italy; chair, Program Reference Group, Canberra Institute of Technology; co-chair, International Advisory Committee, OptoElectronics & Communications Conference; co-convener, Korea-Australia Photonics School, Seoul; co-convener, Singapore-Australia Photonics School, Singapore; coconvener, Education & Training Workshop, CRC Association conference, Canberra; convener, Symposium on Waveguides, International Congress on Industrial & Applied Mathematics, Sydney; deputy chair, Organising Committee, Australian Institute of Physics Congress, Sydney; director, ACT Siemens Science & Engineering Experience; director, Education & Training, Australian Photonics CRC; director, Photonics Institute, Bruce, ACT; honorary ambassador for Canberra; international adviser, Network Technology Research Centre, Nanyang Technological University, Singapore; member, ACT Government, Knowledge Based Economy Board; member, ACT Government, Knowledge Fund Panel; member, Korea-Australia Photonics Association Committee; member, Council of the Australian Optical Society; member, executive committee, Australian Photonics CRC; member, executive committee, Photonics Institute; member, organising committee, Australian Conference on Optical Fibre Technology/Conference on the Optical Internet, Melbourne, July 2003; member, organising committee, Australian Institute of Physics Congress, Canberra, 2005; member, steering committee, Australian Conference on Optical Fibre Technology; member, technical subcommittee, Fifth Pacific Rim Conference on Lasers & Electro-Optics, Taiwan, July 2003; postgraduate research student supervisor: La Trobe University; postgraduate research student supervisor: University of Melbourne; postgraduate research student supervisor: University of Sydney; program manager, Photonic Integrated Circuits, Australian Photonics CRC; reader & referee, Australian Research Council; senior vice-president education. Photonics Institute. Bruce. ACT.

KIVSHAR, Prof. Y.S., associate editor, *Physical Review E*; member, advisory board, *CHAOS*: An Interdisciplinary Journal of Nonlinear Science; guest editor, special issue of *CHAOS*: Nonlinear Localised Modes: Fundamental Concepts and Applications; guest editor, *IEEE Journal of Selected Topics in Quantum Electronics on Nonlinear Optics*, member, advisory board, *Fitzroy Dearborn Encyclopedia of Nonlinear Science*, member, program committee, International Workshop on Optical Solitons: Theory and Experiment, Chennai, India; reader and referee, Australian Research Council; general co-chair, OSA Topical Meeting on Nonlinear Guided Waves and Applications, Stresa, Italy; chair and organiser, International Workshop and Winter School: Photonic Crystal Down Under, Canberra.

### **Electronic Materials Engineering**

CHEN, Dr Y., Australian reader, Discovery and Linkage Grant Applications; member, editorial board, *International Journals of Indian Nanotechnology*.

ELLIMAN, Prof R.G., vice president and presidentelect, Australian Institute of Physics; member, international committee, international conference on Ion Beam Modification of Materials; member, international committee, international conference on Ion Beam Analysis: member. international committee. international conference on Atomic Collisions in Solids; member, editorial advisory board, Nuclear Instruments and Methods B, published by Elsevier, Amsterdam; member, editorial advisory board, Vacuum, published by Elsevier, Amsterdam; member, ACT branch committee, Australian Institute of Physics; member, specialist committee for Accelerator Science Program; Australian Institute of Nuclear Science and Engineering; member, specialist committee for Environmental Science; Australian Institute of Nuclear Science and Engineering; member, program review committee, Accelerator Applications Program, Australian Nuclear Science and Technology Organisation; member, external advisory board, Microanalytical Research Centre, University of Melbourne; member, divisional committee, Electronic Materials and Processing Division,

International Union of Vacuum Science Techniques and Applications.

FLETCHER, Prof. N., member, board, Australian Foundation for Science. Australian Academy of Science: member. executive board of FEAST (The Forum for European-Australian Science and Technology Collaboration) representing the Academy of Science, the Academy of Technological Sciences and Engineering, CSIRO and the CRC Association; member, Australian Library Collections Task Force (National Library of Australia); member, scientific advisory committee, National Acoustic Laboratories; member, Academy of Science Selection Committee for Europe-Australia Science Exchange Awards; editor, Acoustics Australia; associate editor, Journal of the Acoustical Society of America; member, editorial board, Journal of Sound and Vibration, member, editorial board, Applied Acoustics, member, building committee, Australian Academy of Science.

JAGADISH, Prof. C., chair, IEEE Australian Chapter of Electron Devices and Lasers & Electro-Optics Societies; member, publications committee, IEEE Electron Devices Society, USA; member, meetings committee, IEEE Electron Devices Society, USA; chair, Optoelectronic Devices Technical Committee of the IEEE Electron Devices Society, USA; elected member, administrative committee, IEEE Electron Devices Society, USA; member, IEEE Compound Semiconductor Devices and Circuits Technical Committee of The Electron Devices Society; member, IEEE Nanotechnology Technical Committee of The Electron Devices Society; associate editor, Journal of Nanoscience and Nanotechnology, member, IEEE Electron Devices Society Graduate Student Fellowship Selection Committee; member, IEEE Lasers and Electro-Optics Society Aron Kressel Award Selection Committee; member, administrative committee, IEEE Nanotechnology Council; chair, IEEE Nano-Optoelectronics and Nano-Photonics Technical Committee of The Nanotechnology Council; member, Publications Committee, IEEE Nanotechnology Council; member, Steering Committee, IEEE Journal of Lightwave Technology, member, editorial board, Journal of Materials Sciences, Materials for Electronics, professional adviser, LEDEX Corporation, Taiwan; director, Acton Semiconductors Pty Ltd; member, program committee, Symposium on Quantum Dot Sources and Detectors. SPIE's International Symposium on Optoelectronics 2002, San Jose, USA; member, steering committee, The 23rd International Conference on Microelectronics, Nis, Yugoslavia; member, program committee, The 8th International Conference on Electronic Materials, Xian, China; cochair, Symposium on Materials and Technologies for Electronic and Optoelectronic Devices, The 8th International Conference on Electronic Materials, Xian, China; chair, international advisory committee, 12th International Semiconducting and Insulating Materials Conference, Bratsilova, Slovakia; member, program

sub-committee on "Active and Compound Semiconductor Devices", OSA Integrated Photonics Research Conference (IPRC 2002), Vancouver, Canada; member, scientific advisory committee, conference on Optoelectronic and Microelectronic Materials and Devices, Sydney, Australia; member, program committee, 12th International Semiconducting and Insulating Materials Conference, Bratsilova, Slovakia; member, international advisory committee, Photonics 2002, 6th International Conference On Optoelectronics, Fibre Optics and Photonics. Mumbai. India: member. IEEE International Semiconductor Laser Conference, Asia-Australia Program Sub-Committee, Garmisch, Germany; member, IEEE Lasers and Electro-Optics Society Annual Meeting, Optoelectronic Materials and Processing Program Committee, Glasgow, UK: co-organiser, 2002 Fall Materials Research Society Meeting, Symposium M, Progress in Compound Semiconductor Materials for Electronics and Optoelectronics Applications, Boston, USA; member, program committee, Second IEEE Conference on Nanotechnology, Washington DC, USA; co-chair, Technical Program Committee. 3rd IEEE Conference on Nanotechnology. San Francisco; reader, Discovery Projects, Australian Research Council; external member, Promotions Committee, University of Technology, Sydney.

RIDGWAY, Dr M.C., member, organising committee/ program committee, 14th International Conference on Vacuum Ultraviolet Radiation Physics; member, organising committee/program committee, Australian Synchrotron Users Workshop; chair, Photon Factory Specialist Committee, Australian Synchrotron Research Program; member, executive committee, Australian Synchrotron Research Program; chair, EXAFS Beamline Development Committee, Australian Synchrotron Project; member, National Scientific Advisory Committee, Australian Synchrotron Project.

### TAN, Dr H.H., treasurer, IEEE ACT Section

WILLIAMS, Prof. J.S., president, Australian Materials Research Society; member, Board Australian Materials Research Institute; member, Board CRC for Functional Communication Services; member, Board Australian Phototonics CRC; member, international advisory committee, International Conference on Ion Implantation Technology; member, Adhering Body Commission, International Union of Materials Research Society; member, editorial board, *Radiation Effects and Defects in Solids*; professional adviser, LEDEX Corp, Taiwan; director, Acton Semiconductors Pty Ltd.

WEIJERS, Ms T.D.M., tutor and demonstrator, School of Physics, Australian Defence Force Academy.

### **Laser Physics Centre**

BALDWIN, Dr K.G.H., member, Australian Research Council Expert Advisory Committee: Mathematics, Information and Communication Sciences; member, International Council on Quantum Electronics; member, Australian Research Council Expert Advisory Committee: Mathematics, Information and Communication Sciences; member, General Organising Committee, International Conference on Laser Spectroscopy 2003; chair, Australian Conference on Optics, Lasers and Spectroscopy Liaison Committee; member, National Committee for Spectroscopy, Australian Academy of Science; member, National Committee for Physics, Australian Academy of Science; chair, Science Policy Committee, Federation of Australian Scientific and Technological Societies; member, ACT Branch Committee, Australian Institute of Physics; member, Science Policy Committee, Australian Institute of Physics; member, Australasian Council on Quantum Electronics.

KROLIKOWSKI, Dr W., member, technical committee of the International Workshop, Nonlinear Optics Applications NOA2003, Lukecin, Poland; referee, *Physical Review Letters and Physical Review A & E*; referee, *Journal of the Optical Society of America B*; referee, *Optics Letters, Optics Express & Optics Communications*, referee, *Acta Physica Polonica A*.

MANSON, Prof. N. B., member, international advisory committee, International Conference on Luminescence; member, international advisory committee, International Conference on Dynamical Processes in Excited State of Solids.

SAMOC, Dr A., reviewer, Journal of Applied Physics.

SAMOC, Dr M., member, editorial board, *Materials Science*.

SELLARS, Dr M., member, international advisory committee, International Conference on Spectral Hole Burning.

### **Nuclear Physics**

BYRNE, Dr A.P., member, Committee ACT Branch of the Australian Institute of Physics; member, Committee (Sec/Treasurer) Nuclear and Particle Physics Group (NUPP), Australian Institute of Physics; member, organising committee for the 19th AINSE Nuclear and Particle Physics Conference, Sydney; referee, Engineering and Physical Sciences Research Council (EPSRC), UK proposals.

DASGUPTA, Dr M., member, committee, Nuclear and Particle Physics Group, Australian Institute of Physics; supervisor, CSIRO Student Research Scheme.

DRACOULIS, Prof. G.D., member, committee, Nuclear and Particle Physics Group, Australian Institute of Physics; member, North America Committee, Australian Academy of Science, International Program of Scientific visits; member, Program Advisory Committee of the 88-inch Cyclotron (including Gammasphere), Lawrence Berkeley National Laboratory; member, Australian Academy of Science, Reactor Working Group; member, 19th AINSE Nuclear and Particle Physics Program Committee, (in association with the AIP Congress), Sydney; member, International Advisory Committee, Conference on Nuclear Structure, Crete; member, International Advisory Committee, Conference on Frontiers of Nuclear Structure, Berkeley, California, USA; ANU representative, Engineering and Physical Sciences Research Council (UK), ANU-EPSRC Agreement: beam time allocation; referee, Engineering and Physical Sciences Research Council (UK), Senior Research Fellowship Scheme: expert referee, Engineering and Physical Sciences Research Council (UK), Research Grants; Nuclear Physics Programme: evaluator. Foundation for Research Development (South Africa) — Evaluation of Research Outputs of Principal Grant Holders; reader, Physical and Earth Sciences. Australian Research Council.

FIFIELD, Dr L.K., member, scientific advisory committee, 9th International Conference on Accelerator Mass Spectrometry, Nagoya, Japan; member, Scientific Advisory Committee, 17th International Radiocarbon Conference, Wellington, New Zealand, September 2003; external reviewer, Accelerator Mass Spectrometry Project at ANSTO; expert adviser, Consultant, AMS program at the Tandar Laboratory, Buenos Aires, Argentina; major grant proposal referee, United States NSF major facilities proposal; ANU nominee, ACT Radiation Council.

HINDE, Dr D.J., member, international advisory committee, Eighth International Conference on Nucleus-Nucleus Collisions, Moscow (2003); member, International Advisory Committee, FUSION03 International Conference, Japan November 2003; reader, Physical and Earth Sciences, Australian Research Council.

STUCHBERY, Dr A.E., member committee, ACT Branch, Australian Institute of Physics; chair, Nuclear and Particle Physics Group (NUPP), Australian Institute of Physics; member, 19th AINSE Nuclear and Particle Physics Program Committee, (in association with the AIP Congress), Sydney; MSc thesis examiner, University of Melbourne; MSc thesis examiner, University of Sydney; expert referee, research grants; Nuclear Physics Programme, Engineering and Physical Sciences Research Council (UK); expert referee, Concerted Action Program of the Ministry of Education of Flanders (Belgium), Katholieke Universiteit Leuven; reader, Physical, Chemical and Earth Sciences, Australian Research Council.

TURKENTINE, Mr R.B., member, Tender Evaluation Committee for the supply of Liquid Nitrogen and Compressed Gases.

WILSON, Dr A.N., member, committee ACT branch, Australian Institute of Physics; member, sub-committee for awarding prizes and travel grants, ACT Branch of Australian Institute of Physics.

### **Optical Sciences Centre**

AKHMEDIEV, Prof. N., member, scientific program committee, 3rd IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena, April 2003, Georgia, USA; member, program committee, 15th International Physics Summer School "Dynamic Summer, Topics in Nonlinear Dynamics, Collective Phenomena and Complexity" Canberra, Australia; member, technical program committee, Nonlinear Guided Waves and Their Applications Conference, Stresa, Italy.

### **Plasma Research Laboratory**

BLACKWELL, Dr B.D., service to Stellarator Physics Advisory Committee, Princeton Plasma Physics Laboratory, Princeton, USA.

BORG, Dr G.G., editor, *Czech Journal of Physics*, draft report preparation for the Standing Committee on Communications, Information Technology and the Arts; Inquiry into Wireless Broadband Technologies. Parliament of Australia.

BOSWELL, Prof. R.W., vice-president, Committee for The 12th Gaseous Electronics Meeting; member, Asia Pacific Conference on Plasma Science and Technology; member, Forum for Europe and Australian Science and Technology.

HARRIS, Prof J.H., member, Stellarator Physics Advisory Committee, Princeton Plasma Physics Laboratory, Princeton, USA; member, Plasma Specialist Committee, AINSE; member, executive committee, International Energy Agency Implementing Agreement for Research on Stellarators; chair, 13th International Stellarator Workshop, Canberra, Australia; draft report preparation for the Standing Committee on Communications, Information Technology and the Arts; Inquiry into Wireless Broadband Technologies, Parliament of Australia.

HOWARD, Dr J., member, editorial board, *Plasma Physics and Controlled Fusion*, organiser, 6thJapan-Australia Plasma Diagnostics Workshop, University of Sydney.

SHATS, Dr M.G., member, 11th International Congress on Plasma Physics Program Committee.

### **Theoretical Physics**

BALL, Dr R., committee member, minutes secretary, ACT branch of the Australian Institute of Physics; liaison officer, FEAST-France, RSPhysSE; member, WISENET; member, ANZIAM.

BATCHELOR, Prof M.T., member, advisory board, *Journal Physics A*; medal committee, Australian Mathematical Society.

BAXTER, Prof R.J., member, editorial board, *Journal* of *Physics A*, Mathematical and General; member, edito-

rial board, *Journal of Geometric and Functional Analysis*, member, editorial board, *Journal of Statistical Physics*, member, advisory board, *Physica A*; member, editorial committee, *Philosophical Transactions of the Royal Society, Series A*; member, editorial board, *Annals of Combinatorics*, member, editorial board, *Theoretical Physics and Related Mathematics* (Internation Press).

DAS, Dr M. P., member, editorial board, *Condensed Matter and Materials Communications*, an international journal published by Nova Science, New York; co-convener, Annual Gordon-Godfrey Research Workshops on Condensed Matter Physics; member, international advisory committee, International Workshops on Condensed Matter Theories; member, international advisory committee, International Conference on Physics at Surfaces and Interfaces, Puri (India); member, international advisory committee, International Conference on Phonons in Condensed Materials, Bhopal (India); member, local organising committee, Excon-02, Darwin.

DEWAR, Prof. R.L., member, Commission 16, International Union of Pure and Applied Physics; member, National Committee for Physics; chair, ACT branch committee, Australian Institute of Physics; chair, International Congress on Plasma Physics; member, local organising committee, WSEF2002-World Space Environment Forum; alternate, Executive Committee of the IEA Implementing Agreement on the Development of the Stellarator Concept; member, Board of CSIRO Complex Systems Science Centre.

GULACSI, Dr M., associate editor, *Philosophical Magazine*, UK; deputy director general, International Biographical Center, UK.

KHEIFETS, Dr A., referee to Journal of Physics.

KUMAR, Dr K., member, editorial board, *Journal Transport Theory and Statistical Mechanics*, Marcel Dekker, New York.

ROBSON, Dr B.A., member, organising committee, 19th AINSE Nuclear and Particle Physics Conference, Sydney, NSW.

SEN, Dr S., associate editor, *Journal of Fusion Energy*, Kluwer Publication, Holland; organiser and chair, Fusion Meeting, SCI-2003, Orlando, USA; consultant, Fusion Research Centre, Hampton University, USA.

XU, Dr W., referee, Discovery Grant, NSERC, Canada.

## **Research School of Social Sciences**

ACKLAND, Dr R., long-term adviser, Thailand–Australia Social Protection Facility; consultant, technical assistance for poverty monitoring in FYR Macedonia (Social Support Project, The World Bank). AHMED, Dr E., member, editorial board, *Canberrar Din Ratri*, quarterly newsletter, Bangladesh Australia Association Canberra Inc.

BESSELL, Dr S., member, Policy Advisory Committee, PLAN International (Australia).

BOOTH, Prof A., 1996–2002 executive committee, European Association of Labour Economists (Election); 1997–2002 Council of the Royal Economic Society (RES) (Election).

BOOTH, Dr H., council member, Australian Population Association.

BRAITHWAITE, Prof J.B., 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; Board of trustees, Law and Society Association; council member, American Society of Criminology; director, Foundation for Effective Markets and Governance; honourary consultant fellow, World Innovation Foundation; honourary consultant, Australian Law Reform Commission; member, NGO Alliance, Working Party on Restorative Justice; ACT Sentencing Committee; ACT; scientific advisory board, Drug Use Monitoring in Australia; subcommittee on restorative justice, advisory panel, Equal Opportunity Commission, Victoria.

BRAITHWAITE, Dr V., adviser on compliance, New Zealand Inland Revenue; adviser, OECD Centre for Tax Policy and Administrations, Task Group 4, Sydney; chair, ethics committee, Australian Institute of Criminology; member, cash economy task force, Australian Taxation Office; participant, Criminology Research Council strategy meeting with academic leaders in criminology, Canberra.

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

BREUNIG, Dr R., consultant, Department of Family and Community Services; consultant, for Productivity Commission.

BREUSCH, Dr T., member, methodology advisory committee, Australian Bureau of Statistics, Canberra; chair, Australasian Standing Committee, Econometric Society; consultant on Modelling ICT use and productivity in the Australian economy, Productivity Commission, Canberra.

BUTLER, Ms L., member, Collaborative Activities Working Group, Forum for European–Australian Science and Technology cooperation (Feast).

CANE, Prof P., Herbert Smith Visiting Fellow, University of Cambridge; member, Commonwealth Treasury Negligence Review Panel; secretary and treasurer, Australian Society of Legal Philosophy. CHAPMAN, Prof B., adjunct professorial fellow, Melbourne Institute; chair, HILDA Reference Group, University of Melbourne; Commissioned paper on the effects on students of changes to HECS, Sydney University Senate; member, Australian Bureau of Statistics Labour market Advisory Committee.

CLEMENTS, Dr G., committee member, Canberra One Parent Family Support Group; member, Burgmann College Council.

COBB-CLARK, Dr D., consultant to Department of Family and Community Services on the parenting payment intervention pilot, long-term unemployed pilot, mature-age pilot, and workless couples pilot; Executive Committee, Canberra Economic Society; member, ministerial advisory council on government schooling; reference committee, Household Income and Labour Dynamics in Australia (HILDA) panel survey, University of Melbourne; Research Fellow of IZA (Institute for the Study of Labor, Bonn).

COURVILLE, Dr S., adviser, International Federation of Organic Agriculture Movements (IFOAM) on Code of Conduct for Organic TRADE; coordinator, Australian Fair Trade Alliance (FTA); member, standards committee, Biological Farmers of Australia Co-op; vicepresident, management committee, Australian Environmental Labelling Association (AELA).

DAVIES, Prof. M., adjunct professor at the Macquarie Centre for Cognitive Science.

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

DEACON, Prof. D., member, Ken Inglis Prize committee.

DOUST, Ms J., member, executive committee, Australian Historical Association.

DRAHOS, Prof. P., member, Médecins Sans Frontières Working Group on Intellectual Property Rights and Access to Medicines.

DRYZEK, Prof. J., member of International Jury, Grawemeyer Award for World Order, Louisville, USA.

GIBSON, Dr R., treasurer of the Research Committee on Political Sociology, International Sociological Association (Research Committee 18); International Political Science Association (Research Committee 16); member, Executive Committee, British Politics Group of the American Political Science Association.

GLASER, Dr J., Committee member, German 'Gesellschaft f\_r Wissenschafts- und Technikforschung'.

GOODIN, Prof. R.E., Academic adviser, Institute for the Integrated Study of Future Generations, Kyoto, Japan Advisory Board, Project on "Moral Issues, Human Rights and Tobacco Control" (Jerome Katz, Dept. Communications, Rutgers University, director; Robert Wood Johnson Foundation, sponsor); Executive Committee (Australian Representative), Society for the Advancement of Socio-Economics; member, Founding Board, Committee on the Political Economy of the Good Society (PEGS).

GRABOSKY, Prof. P., Deputy Secretary General, International Society of Criminology; member, Campbell collaboration, crime and justice steering group; national advisory body on gambling, Minister of Family and Community Services; Australian Capital Territory crime prevention committee; advisory committee on workplace privacy and surveillance, Victoria Law Reform Commission; President, Australian and New Zealand Society of Criminology.

GRAY, Dr E., ACT contact, Australian Population Association.

GREGORY, Prof. R.G., consultant, AusAid, Labour market issues assistance Phase 2 for the China Capacity Building Program; consultant, NSW Board of Vocational Education and Training; member, Economic Statistics User Group, Australian Bureau of Statistics; member, SPIRT Project Steering Committee, Victoria University of Technology.

GRIFFITHS, Dr T., member, Board of the Australian Science and Technology Heritage Centre; member, Scientific advisory board, Earthwatch Australia.

GUNNINGHAM, Prof. N., member, Taskforce on Low Regulatory Concern Chemicals, National Industrial Chemicals; member, Notification and Assessment Scheme.

HIGMAN, Prof. B., president, Australian Association for Caribbean Studies.

HULL, Prof. T.H., consultant, AusAID activities in Indonesia; member, Board of Trustees, ICDDRB: Centre for Health and Population Research, Dhaka, Bangladesh.

JOHNSTONE, Prof. R., advisory committee, Review of the Workplace Health and Safety Act Qld; member, National Occupational Health and Safety Commission Research Advisory panel; National Occupational Health and Safety Commission Library Advisory Committee.

JONES, Prof. G., chair, Council of CICRED (Committee for International Cooperation in National Research in Demography), headquartered in Paris; honorary treasurer and member, executive committee, Academy of the Social Sciences in Australia; member, International Organizing Committee for the South-East Asian Regional Population Conference, sponsored by the International Union for the Scientific Study of Population, Bangkok.

JUPP, Dr J., adjunct professor RMIT University; chair, Australian Fabian Society (ACT); committee member, Friends of Peace in Sri Lanka; executive committee member, Politics and Ethnicity Committee of the International Political Science Association; international member, Refugee Studies Centre, York University, Canada; member, Policy Research Network, National Institute for Governance; member, Adult Migrant English Program Research Advisory Committee; member, Asia Pacific Migration Research Network of the UNESCO–MOST program; member, Canberra Regional Committee on Migration, Planning and Settlement, Department of Immigration and Multicultural Affairs.

KHOO, Dr S., member, ethics committee, Australian Institute of Health and Welfare.

KIPPEN, Dr R., consultant, Department of Immigration and Multicultural and Indigenous Affairs on population issues; expert media contact, Australian Bureau of Statistics for the release of the 2001 issue of Births, Australia.

LANGMORE, Dr D., member, Historic Places Advisory Committee, ACT.

LUCAS, Dr D., board member, Australian Reproductive Health Foundation; president and public officer, the Welsh Society of Canberra.

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

MAHER, Ms I., director, Foundation for Effective Markets and Governance.

MARSH, Dr I., director, Australian Business Foundation; member, Indigenous Forum Planning Committee, Foundation for Young Australians; research director, Committee for Economic Development of Australia; Senate Fellow, Department of the Senate.

McDONALD, Prof. P., board member, Relationships Australia Canberra and Region; Central Bureau member, International Organising Committee for the 2005 International Population Conference, Tours, France; chair, Panel A, Academy of the Social Sciences in Australia; council member, International Union for the Scientific Study of Population; member, external reference group, HILDA Survey, Melbourne Institute of Applied Economic and Social Research; PhD examinations for University of New South Wales and Massey University; supervisor, Australian National Internship Program.

MITCHELL, Dr D., project leader, ASEAN–Australia Social Safety Net Workshops: Jakarta, Bangkok, Manila and Kuala Lumpur; long-term adviser, Thailand–Australia Social Portection Facility; International Sociological Association (Research Committee 19).

MOLONY, Prof. J., adjunct prof, Australian Catholic University; president, Independent Community for

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Refugees, Australia; trustee, Eureka Stockade Memorial Trust.

MORRISON, Dr B., consultant and adviser, The Alannah and Madeline Foundation, Melbourne; consultant on development of a National Safe School Framework for Commonwealth Department of Education, Science and Training; consultant, Philadelphia School Reform Commission, USA; member, International Children's Week Committee, Canberra; Gender and Violence Educators (GAVE) Coalition, Canberra.

PAGAN, Prof. A., member of Panel Group on "What Model should be used for Monetary Policy Analysis", San Francisco Federal Reserve Annual Conference; member, University of Adelaide Economics Department Review Committee.

PETTIT, Prof. P., advisory board, Gourmet Philosophy Report 2002; advisory committee to the Program Committee in Social and Political Philosophy, American Philosophical Association, Eastern Division; external assessor for chair appointment, Bristol University 2002/03; member, advisory board, The McDonnell Project in Philosophy and the Neurosciences, Simon Fraser University, Vancouver; member, board of academic advisers, Freedom Project, John Templeton Foundation 1999; member, Review of Faculty of Philosophy, Oxford University.

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

ROWSE, Dr T., member, Australian Institute of Aboriginal and Torres Strait Islander Studies; member, prize committee.

RYAN, C., consultant, Department of Health and Ageing, with Prof. Bruce Chapman.

SAWER, Prof. M., Executive, Research Committee 19, International Political Science Association; member, advisory panel, Australian Prime Ministers' website, National Archives of Australia; member, international consultative committee, Research Centre on Women and Politics, University of Ottawa; member, Panel C executive, Academy of the Social Sciences in Australia; member, steering committee, Australian Women's Constitutional Network.

SCHINDLMAYR, Dr T., consultant, Australian Defence Organisation on Defence Personnel Triangle; consultant, Economic and Social Commission for Asia and the Pacific, United Nations on theme study for the 59th Commission Session.

SCOTT, Mr C., consultant, Queensland Office of Fair Trading on reform of fair trading legislation.

SMITH, J., academic supervisor, Australian National Internships Program, academic supervisor, School of Political and Social Inquiry, Monash University; member, National Board of Directors, Australian Breastfeeding Association; policy adviser, Australian Council of Social Services; project manager, Health-PACT/Australian Breastfeeding Association; member, Executive of the Australian Society for Legal Philosophy.

STAPLETON, Prof J., academic associate, Fountain Court Chambers, The Temple, London; adviser, American Law Institute, Restatement of the Law (Torts): General Principles; consultant, Appletons (New Zealand); Merrill Lynch (UK); Esso Class Action Joint Claims Syndicate; Statutory Visiting Professor in Law, University of Oxford.

STONE, Dr A., chapter; executive committee, Australian Society of Legal Philosophy; advisory group, ACT Deliberates — An ACT Bill of Rights (Deliberative Poll); consultant, Australian Government Solicitor for Mulholland v Australian Electoral Commission; to Phillips Fox (Solicitors); to Women Into Politics on Women's Charter for Political Reform; convener, management committee, Women's Legal Centre ACT and Region; member, advisory panel; executive committee, Australian Association of Constitutional Law ACT.

THOMAS, Dr P., technical adviser, AusAID on the regional health project Pacific Action for Health, on preventing non communicable diseases; member, training team on poverty alleviation on China Capacity Building Programme; member, Centre for Democratic Institutes advisory board; member, International Advisory Board, Sexual Health and Family Planning Australia; Australian representative at the Commonwealth Secretariat consultation and workshop on Conflict Resolution, London; member, communication research advisory group for the Geneva Centre for Humanitarian Demining; Technical adviser to AusAID on the regional Pacific Children's Programme on preventing child abuse; technical adviser to the Department of International Development, United Kingdom, on non formal education in the Pacific.

UHR, Dr J., member, advisory panel, Australian Prime Ministers' website, National Archives of Australia; Senate Fellow, Department of the Senate.

VAITHAINATHAN, Dr R., member, Recognition of Medical Specialities Advisory Committee, Australian Medical Council, 2001–; referee for NHMRC grants.

WAJCMAN, Prof J., assessor, Australian Research Council; referee for grant applications, Economic and Social Research Council and the Leverhulme Trust (UK), and the National Science Foundation (USA).

WATCHIRS, Dr H., consultant, Australian Health Ministers' Advisory Council, National Mental Health Working Group; UNAIDS; Australian National Council on AIDS, Hepatitis C and Related Diseases.

WILLHEIM, Mr E., contributor, ACT Bar Association's Continuing Legal Education Program. WITHERS, Prof G., adjunct professor, Macquarie Graduate School of Management; Consultant, Commonwealth Bank of Australia; consultant, Commonwealth Department of Health and Aged Care; member, Funding Review of the National Museum of Australia; President (ACT), Committee for Economic Development of Australia; vice president, Institute of Public Administration of Australia (ACT Branch).

ZHU, Dr Y., council member, China Population Association; vice-president, Population Association of Fujian Province, China.

ZINES, Prof L.R., member, advisory board, British Institute of International and Comparative Law and the Board's Commonwealth Law Section.

## Centre for Resource & Environmental Studies

BRADBURY, Dr R., National Oceans Office: participate in workshop on risk management for marine systems; NOO and FRDC: facilitate workshop on marine biogeographic classification; DIMIA: participate in ministerial launch of CSIRO population report; Sloan Foundation: participate in marine biodiversity workshop at Scripps; National Forest Inventory: facilitate workshop on data systems.

GRAFTON, Dr R.Q., appointed to the Socio-Economic Working Group, National Oceans' Office; external referee for Productivity Commission.

HEINSOHN, Dr R., Australian Research Council Reader (under contract).

HUTCHINSON, Prof M., contribution to the final synthesis book of the IGBP Core Project Biospheric Aspects of the Hydrological Cycle (BAHC); adviser and quality assessor for the Australian Greenhouse Office, Environment Australia; adviser to Geoscience Australia on future development of fine scale digital elevation models of Australia.

JAKEMAN, Prof A.J., editor-in-chief, *Environmental Modelling and Software*; editorial board, *Environmetrics*, *Journal of Forecasting, Ecological Modelling, Hydrological Processes, Systems Analysis Modelling Simulation*; Board of Directors, International Association for Mathematics and Computers in Simulation (1988-). Affiliate, CRC for Catchment Hydrology (iCAM).

PEZZEY, Dr J.C.V., member, Program Committee for the 2nd World Congress of Environmental and Resource Economists, held in Monterey, California, USA.

ROBIN, Dr L., international forum on National Museum of Australia's Environmental History Exhibition (Tangled Destinies), sponsor: Museums Australia at National Museum and by video conference, to the Boston design studio, Amaze Designs.

ROSE, Dr D.B., 'The Kamu/Malak Malak Dispute', with the Kamu clan, the Bureau of the Northern Land

Council, and members of the legal firm Priestly Walsh (Darwin).

TROY, Prof. P., Transition to Sustainability: An Adelaide Case Study with Department of Planning, South Australia; database for research into sustainability report for Department of Infrastructure Victoria with various government agencies and energy and water corporations; made a submission to and appeared before the Senate Inquiry into Urban Water Management and to the New South Wales Parliamentary Inquiry into Urban Water Infrastructure with Prof. I White of CRES.

WASSON, Prof. R.W., chair, ACT Government's Sustainability Expert Reference Group; vice chair, Science Committee, International Geosphere & Biosphere Program; editorial board, Quaternary International & Regional Environmental Analysis; member, UNESCO International Hydrology Program, Erosion and Deforestation Working Group.

WHITE, Prof. I., chair, Oyster Research Advisory Committee (NSW Fisheries); member, NSW Acid Sulphate Soils Management Advisory Committee (ASSMAC, NSW Agriculture); chair, ASSMAC Technical Coordination Committee (NSW Department of Land and Water Conservation); member, National Committee for Coastal Acid Sulfate Soils (Environment Australia); member, UNESCO World Commission on Ethics in Science and technology Sub-Committee on the Ethics of Water Use; member, UNESCO International Hydrology Programme VI, Technical Advisory Group, Water and Society; member, editorial board, UNESCO-Cambridge University Press International Hydrology Series; member, STAR Water Working Group, South Pacific Applied Geoscience Council, Fiji.

## The Faculties

## **Faculty of Arts**

ALLEN, C., editorial board member; *Diachronica* and *Journal of Historical Pragmatics*; board member; *The History of English* (the journal of The Korean Society of the History of English); chair, Linguistics and Philology Section of the Australian Academy of the Humanities for a term of three years.

ALLISON, P., excavation reports completed for Cultural Heritage Division, NSW National Parks and Wildlife Service; The Kinchega Archaeological Research Project: Interim Report of Excavation of the Old Kinchega Homestead 2000: The Kinchega Archaeological Research Project: Interim Report of Excavation of the Old Kinchega Homestead 1999.

ANGELIDES, S., member of Victorian State Government's Attorney General's Street Prostitution Advisory Group. The Australian National University Annual Report 2002

BLOUL, R., prepared a consultancy report for NSW Legal Aid Commission on Islam and the issue of discrimination.

BORNY, G., board member, Capital Arts Patrons Association.

BROWN, P., member, selection committee for French Government National Postgraduate Scholarships to France; guest speaker at a literary soirée, organised by various Embassies, Canadian High Commission and Alliance Française, during the "Semaine de la Francophonie", ANU; translated a number of articles (34,000 words) for *China Perspectives* (ISSN 1011-2006), a publication of the French Centre on Contemporary China (CEFC).

CAMPBELL, R., member of the ACT Law Reform Commission.

CARROLI, P., coordinated the visit of Professor Roberto Grandi, Vice-Rector, International Relations of the University of Bologna.

CLELLAND, C., judge for Rock Eisteddfod 2002.

CREMIN, A., (visiting fellow) member executive committee ICOMOS (International Committee on Sites and Monuments); editor of the Australia ICOMOS journal *Historic Environment*.

CURTHOYS, A., member, Research Advisory Board; member, Australian Institute of Aboriginal & Torres Straits Islander Studies; member, Advisory Board, Senate Dictionary of Biography; member, Academy of Social Sciences of Australia Workshop Committee; member, Executive Committee, International Australian Studies Association (InASA); member, editorial boards, *Aboriginal History; Australian Feminist Studies; Labour History; UTS Review; Feminist Review* (UK), corresponding editor; *Public History Review; Journal of Australian Studies; Hecate; Borderlands* (electronic journal).

GRIEVE, J., consultant translator for the French Nobel Prize winning non-government organisation Médecins Sans Frontières; National Gallery talks on Rodin, Balzac, Victor Hugo and Camille Claudel.

GEORGE, J., co-program chair for the 2003 International Studies Association Conference in Portland, Oregon; USA; member, International Advisory Board, *European Journal of International Relations;* member, editorial board, *Antepodium: An Antipodean Journal of World Affairs;* member, editorial board, *Millenium: Journal of International Studies*, LSE; member, editorial board of *Borderlands* e-Journal, University of Adelaide.

GREIG, A., member of ACT Board of Senior Studies History Panel.

GRISHIN, S., judged the \$10,000 Albury Art Prize, collaborated with the National Gallery of Australia on a major publication of their Australian art collection and the history of the gallery.

HARRIS, S. (Visiting Fellow), Australian Institute of International Affairs — participant in two roundtable discussions.

HART, J., member, Executive Board of Presidency Research Consultant to UK Home Office.

HERCUS, L., adviser to Wangkangurru people with work on planning the route of the Great Australian Cattle drive; introduced the Paakantyi CD at Bourke, Wilcannia and Dareton; assisted with Wangkumara land-claim along the Cooper and at Tibooburra respectively.

HIGGINS, I., appointed a General Editor of *The Cambridge Edition of the Works of Jonathan Swift* and attended inaugural editorial meetings in Cambridge.

HILLMAN, R., member, Arts and Humanities Institutes; appointed to NITA outreach steering committee; member, steering committee of the Centre for Cross-Cultural Research; member, Musicology Society of Australia; member, Goethe Society.

HISCOCK, P., Archaeological research on behalf of Allan Carriage and the Aboriginal Tent embassy at Sandon Point, resulting in a report and a submission to proceedings before the Land and Environment Court of NSW.

HOPKINS, A., member, editorial board of *Health and History.* 

IRELAND, R., chair of the NAATI Russian Panel.

JANSEN, L., ANU representative at the Accreditation Panel for German; participated in a LIFT workshop for language teachers, entitled "Dealing with Mixed Abilities and Mulitple Levels in the Language Classroom".

JENKINS, F., referee for the Internet Encyclopaedia of Philosophy.

KOCH, H., member, Translations Advisory Committee of the Bible Society in Australia; member, School Committee of the South Pacific Summer Institute of Linguistics.

KOEPKE, B. (PhD Scholar), Prince Klaus Fund of the Netherlands made a major award to an Afghan musician nominated by Mr Koepke, who had met him during field work.

KNOTT, J., consultant to National Archives of Australia.

KUHN, H., set up a foundation, <u>Weyse Fonden</u>, to promote the knowledge of Danish 'guldalder' (goldenage) music; speaker when <u>Weyse Fonden</u> was presented to the public in the Royal Theatre in Copenhagen.

LEWINS, F., member, Review Committee reviewing Bachelor of Social Work Programs, Australian Catholic University. LO, J., academic adviser for the "Voices and Visions from Asia" CD-ROM series for Curriculum Corporation, Australia.

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

McKINLEY, M., extensive media appearances: radio 190; t.v.54; print 38; online 11.

MERLAN, F., collaboration with Conservation Commission of the Northern Territory and Katherine Aboriginal Regional Languages Association in advisory capacities; consultancy for the Northern Land Council, Darwin, in the matter of Aboriginal relations to a lime quarry which has been developed on Elsey Station, Northern Territory; with Nicolas Evans, preparation of Ngalkbon Dictionary (Arnhem Land, NT) for publication by AIATSIS, (funded by the Bawinanga Aboriginal Corporation, Maningrida).

MOLITERNO, G., member, Cassamarca Lectureships Committee which administers the 11 lectureships in Italian Studies funded by the Cassamarca Foundation (located at the University of Western Australia); member, Management Committee of ACIS (the Australiasian Centre for Italian Studies).

MOORE, B., vice-president, Australian Lexicographical Association (becoming president in December).

MULLER, K., ACT CESAA liaison member at the National Europe Centre; supervised a DFAT intern's project for MPs on the subject of Australia and European enlargement.

NOURZHANOV, K., formal and informal advice to: Department of Immigration and Multicultural and Indigenous Affairs; Refugee Review Tribunal; Lake Ginninderra College, Canberra — Special lecture; media interviews to, inter alia, SBS Radio and Television, ABC Television, *South China Post*.

PAPADAKIS, E., consultant to Deloitte, Touche Tohmatsu on Europe.

PETERSON, N., consultancy for Torres Strait Regional Authority to assist in preparation of the Torres Strait native title claim to the sea in the Strait and joint coordination of the Torres Strait Regional Authority's anthropology submission with Dr Jeremy Beckett.

RAGHAVAN, P., invitation to join editorial board of *Oriental Anthropology.* 

RENDLE-SHORT, J., member of ALAA and AEMCA.

RAWSON, B., member, editorial board, *The Cambridge Guide to Classical Civilization*, member, editorial board, *Antichthon.* 

ROSE, P., reviewed eleven papers for *Speech Science and Technology 2002*; one for *Journal of Phonetics* and one for the *Journal of the International Phonetics Association*, invited to present a day-long workshop on Forensic Speaker Identification for the *Australian Linguistics Institute*, invited to give a presentation at the *2002 Media Science Forum (The Science of Terrorism);* produced two forensic phonetic reports, one for the crown and one for the defence.

ROWLAND, D., member, Behavioural Sciences Accreditation Panel, ACT Board of Senior Studies; member of council Australian Association of Gerontology, ACT Division; member, editorial board of *Australasian Journal of Ageing.* 

RUSSELL, G., steering committee member, National Institute of the Humanities, member research committee in second semester.

SAHA, L., editor, *Journal Social Psychology and Education: An International Journal*, chair, Section 14 Social Psychology of Education, World Congress of Sociology, Brisbane, July.

SAIKAL, A., Senate Foreign Affairs, Defence and Trade References Committee Hearing on "Rogue States and Weapons of Mass Destruction"; Monash University workshop "Politics, Religion and Culture in an Age of Terrorism (keynote address); Griffith University, Brisbane — Public lecture; Australian Defence Force Academy — lecture series; Australian Defence College - lecture series; Attorney-General's Department lecture series; Australian Institute of International Affairs, National Office, Canberra - participant in two roundtable discussions; Australian Institute of International Affairs, Queensland Branch - guest lecture; Orana School, Canberra — special lecture; Radford College, Canberra — special lecture; formal and informal advice to: Department of Immigration and Multicultural and Indigenous Affairs, Refugee Review Tribunal, Refugee Council of Australia; media interviews to, inter alia, ABC Television (including the News, Lateline, 7.30 Report ), ABC Radio (various national programs and regional networks, including AM, PM, Late Night Live ), SBS Television and Radio, CNN, News Radio Singapore, commercial networks in South Australia, New South Wales, Victoria and ACT, Reuters, Voice of America.

SCHMIDT, G., organised three guest lectures at the Goethe Society, by the Bosnian Ambassador, by Prof. Konrad Ehlich, Ludwigs-Maximilians-University in Munich; and by Prof. Emeritus Hans Kuhn; sat on the DAAD'S (German Academic Exchange Service) selection committee for research scholarships, at the invitation of the German Embassy.

SHEARMUR, J., chair of the Department of Health and Age Care's Departmental Ethics Committee.

SIM, R., Cultural Heritage representative on the Tasmanian World Heritage Area Consultative Committee — a federally appointed committee which provides advice to relevant Federal and State Ministers on the management of the World Heritage Area. SUMMERHAYES, C., Creative Director of the Art of the Documentary Conference to be presented by the National Institute of the Humanities; member of the steering committee for National Institute of the Humanities.

THIEL, U., member, editorial board, American journal *History of Philosophy Quarterly*, awarded a Fellowship at the Duke August Library Research Centre in Wolfenbuettel, Germany.

TORABI, Dr M., language training to staff from Embassy of the Federal Republic of Germany; special lectures on Persian Literature to Canberra Community Groups; media interviews to SBS Persian Program.

TRAVERS, M., secretary of the Australian Society of WW1 Aero Historians.

TURNER, A., conducted a *Voice Use and Maintenance* workshop for the staff of St Clare's College in September 2002.

WARHURST, J., member, editorial board, Commonwealth and Comparative Politics; member, editorial board, *Australian Journal of Politics and History*, member, editorial board, Australian Canadian Studies; member, editorial board, Policy Organisation and Society; member, Australasian Study of Parliament Group, ACT; member, Board of Catholic Welfare Australia and its Social Policy and Research Standing Committee.

WIERZBICKA, A., member editorial board of several journals, including *Cognition and Emotion, Culture and Psychology, Pragmatics, Studies in Polish Linguistics, Russkii Jazyk v Nauchnom Osveshchenii*, and *Australian Journal of Linguistics,* reviewed papers for *Emotion, Culture and Psychology, Ethos, Journal of Pragmatics,* and *Australian Journal of Linguistics,* reviewed abstracts for various conferences, including the forthcoming International Congress of Linguists; elected member, Australian Academy of the Humanities, Australian Academy of Social Sciences, Russian Academy of Social Sciences.

WHITE, K., president of the Cancer Council of ACT.

WINDLE, K., member, NAATI Russian Panel and the Regional Advisory Committee; Secretary-Treasurer of the Australian and New Zealand Slavists' Association (ANZSA) and continued to produce the Association's twice-yearly *Newsletter*; member, editorial board, *Australian Slavonic & East European Studies*, assessed submissions for publication in this journal as well as for *Mots pluriels* (published at the University of Western Australia); Honorary Visiting Fellow, School of Politics, Australian Defence Force Academy, working with Dr David Lovell (Head, School of Politics) on the Communist International's archival records of its links with the Communist Party of Australia in the 1920s and '30s.

WRIGHT, I., Honorary Secretary, Cambridge Australia Trust; Australian correspondent for the International Association of University Professors of English; board member, National Institute of the Arts.

## **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.

CARROLL, D., editor's assistant, Southeast Asia Publications Series, Asian Studies Assoc of Australia (ASAA).

CHAN, Dr A., 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 DC; member, advisory committee, Chinese Sociology & Anthropology; president, Australian Association for Communist and Post-Communist Studies 1999–2002.

CORBETT, Prof. J., member, editorial board, *Journal* of Japanese and International Economics, conducted annual conference on Japan's Economy in Tokyo with National Bureau of economic research (Boston)/Centre for Economic Policy Research (London)/University of Tokyo and Stockholm School of Economics; lecturer, Australian Defence College; session chair (Japan's Economy) at Conference of Economics Society of Australia.

DILLER, Dr A., member, editorial boards, *Journal of Written Language and Literacy* and *Mon-Khmer Studies*, Thai related language and cultural advice to Canberra bureaucracy and community organisations.

EDWARDS, Dr L., secretary, Asian Studies Association of Australia (ASAA); editor-in-chief ASAA's *Women in Asia* series; general councillor, Chinese Studies Association of Australia; register of Peers — Australia Council for the Arts, member, editorial Boards — *Asian Studies Review* and *Intersections: Gender, History and Culture in the Asian Context.* 

HAJJAR, Dr, N., 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.

HENDRIKS, Dr P., member, review panel for JET Programme applications to the Embassy of Japan in Australia; chair of examiners National Japanese Essay-Writing Competition; member, review panel, International Baccalaureate examinations in Japanese; consultant on Japanese examinations for the University of Oslo.

HOGUE, C., senior adviser, ASEAN Focus Group; editorial review board, *Journal of International Communications* (Macquarie University).

HOOKER, Prof. V., sessional chair, 'Indonesia Update'; member, editorial board, journal Review of Indonesian and Malaysian Affairs, editor, Southeast Asia Publications Series run jointly by the Asian Studies Assoc of Australia (ASAA) and Allen & Unwin; vicepresident, Association of the Publication of Indonesian and Malaysian Studies; international advisory board, Journal of Southeast Asia Research (SOAS London); reviewer manuscripts, International Journal of Feminist Politics, member, Foreign Affairs Council (Department of Foreign Affairs and Trade), member, International Advisory Board of Encyclopaedia for Women in Islamic Cultures (Leiden, Brill); co-organiser Australia Indonesia institute Moslem Exchange Program (with Prof. Ricklefs University of Melbourne), board member, Australia-Indonesia Institute.

IKEDA, S., vice-president, Australia-Japan Society, ACT; chair, Steering Committee Canberra Japanese Supplementary School.

ISHIHARA, S., executive member (treasurer), Australian Speech Science and Technology Assoc; expert adviser (Japanese language) ACT Board of Secondary School Studies.

JOHNSON, Dr D., regular contributor, *SBS World Guide* and the *Asian Analysis* website; editor, *Asian Analysis*, monthly virtual journal in <<u>http://www.asean-focus.com</u>> prepared for the business sector group, ASEAN Focus.

JUNTANAMALAGA, P., with Thai staff at the University of Sydney assisting in the preparation of teaching activities and the use of technology in Thai language instruction; assisted DFAT providing cultural orientations for the Australian Youth Ambassadors program.

KUMAR, Dr K., vice-president/Treasurer and committee member, 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.

LEE, Dr D-Y member, ACT Board of Secondary Education Japanese Accreditation Panel; member, editorial board for *e-Journal of Asian Linguistics & Language Teaching*, member, Council of Canberra Korean community school.

MILNER, Prof. A.C., member, Federal Government's Foreign Affairs Council; member, Council of Asialink; member, Advisory Council of the Australasia Centre of The Asia Society; member, Council of the Malaysia Cultural Foundation: co-chair of the Australian Committee of the Council for Security Cooperation in the Asia-Pacific; member, editorial committee, Cambridge University Press, Asia-Pacific Series, editorial commit-Australian Journal of International Affairs tee. (Australian Institute of International Affairs), editorial committee, Southeast Asia Publications Series, Asian Studies Assoc. of Australia (ASAA), organiser of the Gantner-Myer Conversations (Australian-ASEAN, Track II Dialogue hosted by the Myer Foundation with Asialink); convener, Asialink — Australian National Leaders program (Canberra Retreat); participant, Williamsburg Conference of the Asia Society (Kuala Lumpur) and the St James Ethics Centre/ISIS Conference (Bangkok); delivered fourth ABC Asia-Pacific lecture: collaborated with Deakin University delivering coursework to the Australian Defence College.

LI, Dr N. co-editor, *EAJRS-Newsletter* (European Association of Japanese Resource Specialists).

LOUIE, Dr K. editor, ASAA's Asian Studies Review, member, Executive Committee Asian Studies Assoc of Australia (ASAA), member, Australia-China Council; member following editorial boards: The China Journal, Journal of the Australasian Universities Language and Literature Association, E-journal of Asian Linguistics and Language Teaching.

POWERS, Dr J., series editor, *Studies in Buddhism and Tibetan Culture*, Snow Lion Publications; Curzon Press, *Critical Studies in Buddhism* series, *Journal of Indian Philosophy and Religion*, initiated Mind Science Forum involving Dalai Lama in Canberra open forum.

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

QUINN, Dr G., member, Indonesian Accreditation Panel, ACT Board of Senior Secondary Studies and the National Reference Group, Australian Consortium of In-Country Indonesian Study (ACICIS).

REYNOLDS, Dr C., member, International Advisory Committee, *Journal of the Siam Society*, member, International Advisory Board, Kyoto Review of Southeast Asia.

SANDILANDS, C., active in oversight of administrative arrangements between ANU and Thai Universities supporting the high profile Year in Asia program (Thailand) and the DEST sponsored University Mobility in Asia Program; Thai related language and cultural advice to Canberra bureaucracy and community organisations.

SHIN, Dr G.-H., member (overseas) Presidential Advisory Council on Democratic and Peaceful Unification (Korean (Central) Government; foundation member, Korean Society (ACT); organised/co-chaired, National Strategic Korean Language Education Conference, UNSW.

VERVOORN, Dr A., consulting editor, *Oxford University Press*.

WELLS, Dr K., president, Korean Studies Association of Australasia.

## **Faculty of Economics and Commerce**

## School of Business and Information Management

BARTON, A.D., chair, Annual Research Lecture in Government Accounting Committee; member, Executive Committee and Treasurer, Cambridge Australia Trust; member, Executive Committee and Treasurer, Australian Science Olympiads.

BIRT, J.L., member, AIESEC Exchange Program Selection Committee; Organising Committee, AAANZ Accounting Education Special Interest Group; member, Technical Committee, AAANZ Annual Conference; member, Business and Finance Panel, Board of Senior Secondary Studies; reviewer for Accounting & Finance.

BURRITT, R.L., external adviser to the Australian National Audit Office on s.516 reporting under the Biodiversity Protection and Environmental Conservation Act 1999: editor. Asia Pacific Centre for Environmental Accountability Journal and International Coordinator of APCEA; Editorial Advisory Board and Editorial Panel Accounting Forum, Journal of Environmental Management; member, United Nations Division for Sustainable Development Environmental Management Accounting international expert working group; member, Steering Committee, Environmental Management Accounting Network (Asia Pacific); member, Technical Committee for AAANZ Conference, Perth; invited expert at the Environment Australia and Victoria EPA, Finance and Sustainability Forum, Melbourne; member, ACT Government Sustainability Expert Reference Group reporting to the Chief Minister, ACT; member, Institute of Chartered Accountants in Australia, Triple Bottom Line Committee August.

CRAIG, R.J., editorial boards of: Accounting Commerce and Finance: The Islamic Perspective, Asian Review of Accounting, Journal of Akuntasi and Auditing, Indonesia; editorial adviser, Accounting Education: An International Journal, ANU research integrity adviser; member, Organising Committee, CPA Australia Research Lecture in Public Sector Accounting; external adviser to the Malaysian Graduate School of Management; ANU representative, NSW/ACT CPA Australia Universities Committee; member, CPA Australia First Year Case Studies Committee: assistance to Government: A report written by Prof. Craig (with N. Tas-Anvaripour) titled "Towards Better Company Accounting and Financial Reporting in APEC", endorsed by APEC Finance Ministers, published on the APEC website and the website of the APEC Finance Ministers' 2002 Congress in Mex-(See http://www.shcp.gob.mx/fmp2002/docs/ ico. 6000h.html).

FREEMAN, C., consultant, Government of the Republic of Tajikistan through contract with the Asian Development Bank; consultant, Vietnam National Health Insurance through contract with Thailand-Australia Social Protection Fund; assistance to the Australian Consortium for Social and Political Research Incorporated (ACSPRI) on computer systems design.

GOODE, S., editorial board, *Journal of Information Systems Education*, academic supervisor, Australian National Internship Program.

GREGOR, S., president, Australasian Association of Information Systems; vice-president, Australian Council of Professors and Heads of Information Systems; IT Communications and Outsourcing Committee; Canberra Business Council; associate editor, Australasian Conference on Information Systems.

HOUGHTON, K., member, Council International House, University of Melbourne; joint reviewer, Australian Audit Practice KPMG; member, editorial boards: *Managerial Auditing; Accounting Accountability* and Performance, Journal of Business, Finance and Accounting, reviewer for Accounting Organizations and Society, Accounting and Business Research, Accounting Review, Australian Accounting Review.

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

MONROE, G., president, Accounting Association of Australia and New Zealand; assessor for ARC grants; editor of special forum on auditor independence for the *Australian Accounting Review*; member, editorial boards: *Accounting & Finance, Australian Accounting Review, Accountability and Performance, Accounting Research Journal, Issues in Accounting Education, International Journal of Accounting Literature.* 

TRAN, A.V., consultant, Business Skills Section, Department of Immigration and Multicultural Affairs; research consultant, Australian Taxation Office, Large Business and International.

VAN DER ENG, P., convener, Economic History of Southeast Asia (ECHOSEA) Project; member, Board of Studies, Graduate Program of Southeast and South Asian Studies.

### **School of Economics**

BREUNIG, R., adviser, Department of Family and Community Services, Productivity Committee.

CHEN, P., member, Economics Accreditation Panel, ACT Board of Senior Secondary Studies

CORNISH, S., chair, ACT Board of Senior Secondary Studies, assisted Governor of Reserve Bank of Australia.

GRANT, S., member, Council of Econometric Society; Institute of International Education's Screening Committee for Fulbright Applications to Australia by US Citizens. MENEZES, F., member Organisational Committee Latin American Meeting of the Econometric Society, Sao Paulo; Public Economic Theory Meeting, Paris 1, Sorbonne-Pantheon.

TYERS, R., external Fellow of the Global Trade Analysis Project, Purdue University, Fifth Annual Conference on Global Economic Analysis, Taipei; Centre for Research on Globalisation and Labour Markets, School of Economics, University of Nottingham.

### **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, Department of Treasury ACT Government 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.

## The Faculty of Engineering and Information Technology

CHRISTEN, Dr P. and New South Wales Department of Health, parallel techniques for high-performance record linkage.

DENNIS, Mr M. and the Bureau of Meterology, insulation forecasting for solar and architectural application.

KALYANASUNDARAM, Dr S. and Vehicle Standards Division, Commonwealth Department of Transport and Regional Services, developing biomechanical models of infant dummies for side impact problems; development of child restraint capsules and sandwich panels for side impact

STACHURSKI, Dr Z. and Royal Australian Mint, investigation of supplied non-metallic inclusions and grain size measurement on metallic blanks; surface defects on supplied metallic (silver) blanks.

## **Faculty of Law**

BEHRENS, Dr J., chair, ACT Domestic Violence Prevention Council, appointed from 1 December 2002; member, editorial board, *Australian Journal of Family Law*, member, Violence sub-committee, Family Law Council; part-time member, Social Security Appeals Tribunal.

BOTTOMLEY, Prof. S.C., president, Corporate Law Teachers Association; member, editorial committee, *Australian Journal of Corporate Law*; legal adviser, Senate Standing Committee on Regulations and Ordinances; guest speaker, Cancer Council of Australia Annual Board Workshop, on directors' duties and corporate governance.

BRONITT, Mr S., visiting Professor, University of Alabama; visitor and guest lecturer, University of Western Ontario and University of Saskatchewan; visiting fellow, University of Limerick; justice fellow, Law and Justice Foundation of NSW, research project on "move-on" powers; external examiner, University of Hong Kong; member, criminal law committee, Law Society of the ACT; chair, ACT Domestic Violence Prevention Council, state editor, *Criminal Law Journal*.

BURRELL, Mr R., guest lecturer, teaching in Warsaw for Cambridge's European Law Program, University of Cambridge; external examiner, University of London.

BYRNES Prof. A., 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; member, conference organising committee, ANZSIL Annual Conference; member, external forum on gender, Asian Development Bank; corapporteur, International Law Association Committee on Human Rights Law and Practice; advisory committee, International Women's Rights Watch (AsiaPacific): co-editor. Australian Yearbook of International Law (mid-2002); correspondent. Butterworths Human Rights Cases, co-organiser, series of international criminal law events with Netherlands Embassy; international resource person in training, Mongolian government officials and non-governmental organisations on the implementation of the UN Convention on the Elimination of All Forms of Discrimination against Women. in Ulaanbaatar; resource person, Regional Judicial Colloquium on the application of international human rights law at the domestic level, organised by the UN Division for the Advancement of Women and the UN Economic and Social Commission for Asia and the Pacific, Bangkok; external examiner, University of Toronto; panel member, Deliberative Poll on an ACT Bill of Rights; guest lecturer, University of Tasmania.

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

CHARLESWORTH, Prof. H.C., member, Committee to Review Monash Law School; member, Global Law Faculty, New York University Law School; counsellor, American Society of International Law; chair, International Law Association, Committee on Teaching International Law; co-patron, ACT Women's Legal Centre, assessor, Australian Research Council; member, advisory board, *Traffic* (journal of the University of Melbourne Postgraduate Association); advisory board, *Leiden Journal of International Law*, board of editors, *American Journal of International Law*, co-editor, *Australian Yearbook of International Law*, chair, ACT Bill of Rights Consultative Committee; convener, international law training course, Department of Foreign Affairs and Trade.

CREYKE, Prof. R., member, selection committee, University of New England; invited participant, international workshop on judicial review, Tilburg University. The Netherlands: consultant (with Professors McMillan and Pearce), Lord Chancellor's Department, UK; member, Administrative Review Council; commissioner, ACT's Independent Competition and Regulatory Commission; vice-president, Australian Institute of Administrative Law; Veterans' Affairs editor, Administrative Law Decisions Service and Administrative Law Bulletin; member, editorial board, National Law Review; special counsel, Phillips Fox Lawyers; director, Public Law Weekend conference; co-director, with P Sutherland, Inaugural Workshop for ACT Tribunals; speaker, 25th Anniversary Dinner of Office of Commonwealth Ombudsman; speaker and presented paper, Meeting in Perth of Australian Association of Constitutional Law; submission to Commonwealth Attorney-General's Department re National Judicial College of Australia; speaker, Australian Institute of Ju-Administration, Annual Conference dicial on Tribunals; consultant and presenter, Department of Veterans' Affairs.

KENT, Dr A., editorial board, *China Information* (Leiden).

MATHEW, Dr P., treasurer, Australian and New Zealand Society of International Law; member, editorial board, *Australian Yearbook of International Law*; faculty member, Advanced Refugee Law Workshop; faculty member, international law training course, Department of Foreign Affairs and Trade; submission on, and oral evidence to Migration Zone Excision Inquiry, Legal and Constitutional References Committee; panel member for ACT's Deliberative Poll on a Bill of Rights.

McCRYSTAL, Ms S., president, Tenants' Union, ACT Committee; member, Welfare Rights and Legal Centre, ACT; committee member, Housing Review Committee — ACT Housing..

McDONALD, Mr L., member, executive committee, Australian Society of Legal Philosophy; reviews editor, *Australian Journal of Legal Philosophy.* 

McMILLAN, Prof. J.D., examiner PhD thesis, University of Sydney; external referee, Sydney Law Review, Monash University Law Review, seminar participant and presenter, Tilburg University, Netherlands, invited participant in International Workshop on 'Judicial Review and Bureaucratic Impact'; reviewer, South African National Research Foundation, review application by scholar for evaluation and rating; presenter, Norwegian Parliament Standing Committee on Scrutiny and Constitutional Affairs, presentation in Canberra to visiting delegation, 11 Sept.; president, Australian Institute of Administrative Law; member, editorial board, Federal Law Review, AIAL Forum; member, Federal Offenders Review Panel, Commonwealth Attorney-General's Department; consultant, Board of Taxation; consultant, Government Services Group, Clayton Utz on public law issues; member, Commonwealth Government Agencies Annual Reports Award Selection Committee, Australian Institute of Public Administration.

MORGAN, Mr W., editor, *Sexualis Lex* (formerly *Australasian Gay and Lesbian Law Journal*); consultant, Tasmanian Government, Attorney General's Department; consultant, Gilbert and Tobin, solicitors, consultant to pro bono clients, UN Human Rights Committee cases and anti-discrimination cases.

NOLAN, Mr M., forensic associate, School of Psychology, University of NSW; member, Australian and New Zealand Association of Psychiatry, member, Society of Australasian Social Psychologists; reviewer, British Journal of Social Psychology/European Journal of Social Psychology.

PEARCE, Prof D., president, ACT Racing Appeals Tribunal; member, Copyright Tribunal; chair, ACT Cricket Association Independent Tribunal; executive member, Australian Institute of Administrative Law; chair, Independent Review of Breaches and Penalties in the Social Security System; editor, *AIAL Forum*, Administrative Law Service (Butterworths), Administrative Law Decisions (Butterworths); editorial boards, *Federal Law Review, International Ombudsman Yearbook*; referee, *Federal Law Review, Sydney Law Review, AIAL Forum, Aust Journal of Labour Economics*, witness, Senate Community Affairs References Committee on Social Security Bill; opening address, Defence Intellectual Property Seminar; papers presented, Department of Health and Aging Legal Section, Administrative Decisions Tribunal (NSW), ANU Law Faculty Contemporary Issues Seminar.

RIDGE, Ms P., empirical research project, NSW Synod of the Uniting Church in Australia.

RIMMER, Dr M., hosted visits from a range of international speakers: Mildred Cho, Research Fellow, Centre for Biomedical Ethics, Stanford University; Mary Footer, Deputy Director, Amsterdam Centre for International Law, University of Amsterdam; Dr Jagveer Sindhu, Director, The Asia & Pacific Seed Association, Thailand; board member, Muse Magazine, member, copyright and intellectual property committee, Australian Library and Information Association; member, Australian Digital Alliance, National Tertiary Education Union; reviewer, University of Toronto Press Inc., Federal Law Review, Australian Aboriginal Studies, involved in government discussions, including Environment Australia's Access to Genetic Resources scheme; ALRC's Inquiry into Gene Patenting; parliamentary debate, Stem Cell Research and Intellectual Property.

SELBY, Mr H., instructor with USA's National Institute for Trial Advocacy, National Training Program; chair, Lyneham High School Board; joint editor, *Expert Evidence*, presenter, Forensic Medical Officers Workshop on expert evidence; referee, *Sydney Law Review*, *Melbourne University Law Review*.

SEYMOUR, Adj Prof. J., member, research unit review committee; International Advisory Board, *New Zealand Bioethics Journal*, Canberra Hospital Clinical Ethics Committee; Research Ethics Committee, Australian Institute of Criminology; Victims Assistance Board of the Australian Capital Territory; submissions to Principles Based Review of the Law of Negligence (Ipps Committee); Review of the Law of Manslaughter in New South Wales; paper presented, Academy of Social Sciences in Australia Workshop, University of Melbourne.

SHERMAN, Prof B., external examiner, University of Sydney, University of London; consultant, Environment Australia; co-authored (with R Burrell, Faculty of Law) AFFA Draft Policy Paper *Intellectual Property in the Rural Sector*, chair, Rural Research and Development Corporation.

SPENDER, Ms P., panel member, book symposium on John Farrar, *Corporate Governance in Australia and New Zealand*; speaker and presenter, the *Corporations and Financial Regulation in the Digital Economy* Conference organised by Centre for Law in the Digital Economy

(CLiDE), Monash University and Corporate Law Teachers Association at Monash University; referee, University of New South Wales Law Journal, Federal Law Review, Australian Journal of Legal Philosophy, presented conference paper, 'Deckchairs Overboard: Corporate Law and the Rhetoric of Corporate Governance', to the Corporate Citizens in Corporate Cultures: Restructuring and Reform Workshop, Osgoode Hall Law School, Toronto, Canada., sponsored by the Feminism and Legal Theory Project, Cornell Law School, Osgoode Hall Law School, York University and the University of British Columbia Faculty of Law; attended, committee of Australian Law Deans Meeting, Perth WA; member, Ainslie School Board; submissions to Ministerial Meeting on Public Liability Insurance regarding the law of negligence and litigation practice and the Review of the Law of Negligence by the Panel of Eminent Persons; liaised with, professional ethics committee, Law Council, regarding the appeal in the McCabe tobacco litigation; member, liaison committee, ANU, National Judicial College of Australia.

STELLIOS, Mr J., secretary, International Commission of Jurists, Canberra Branch; assistant editor, *Federal Law Review*, Senate briefing (with Mr W Morgan), Senate Foreign Affairs, Defence and Trade Committee WTO General Agreement on Trade in Services.

STEWART, Mr D.J., member, editorial committee, *Federal Law Review;* executive committee, Australian Law and Economics Association; chair, board of management, ACT Welfare Rights and Legal Centre.

WHEELER, Dr F.D., chair, ACT Advisory Panel, Australian Association of Constitutional Law; comments editor, *Public Law Review*, expert participant, Comparative High Courts Conference, University of North Texas.

WEEKS, Prof P.C., member, external review panel, School of Law, University of Newcastle; chair Review of School of Law and Law Awards, University of New England; ANU observer, Council of the Law Society of the ACT; member, National Committee of Management and Convener of the ACT Chapter; member, editorial committee, *Australian Journal of Labour Law*, consultant on labour law matters, Phillips Fox.

## **Faculty of Science**

### School of Biochemistry and Molecular Biology

ALTIN, Dr J., reviewed papers for the Journals: *Immunology and Cell Biology* and *Analytical Biochemistry* and collaborated with Prof C Parish (JCSMR) in a project funded by Lipotek to develop cancer vaccines and targeted liposomal agents for use in the treatment of cancer.

BEHM, Dr C., archivist, Council member, and chair, Education Committee, Australian Society for Parasitol-

ogy and attended a Council meeting in Sydney; referee for: *Biochimica et Biophysica Acta, Parasitology Today, Parasitology, International Journal for Parasitology, Molecular and Biochemical Parasitology, Folia Parasitologica;* assessor, Wellcome Trust (UK) and NWO, The Netherlands; presented seminars at the Malaghan Institute of Medical Research, Wellington, and at Wallaceville Animal Research Centre, Upper Hutt, New Zealand; examined two PhD theses, from the University of Melbourne and Victoria University of Wellington; Dr Behm visited Dr Grant's laboratory at the Wallaceville Animal Research Centre, Upper Hutt, New Zealand for 6 months on OSP leave.

BRÖER, Dr S., member, editorial board, *Neurochemical Research*, managing editor, *Cellular Physiology and Biochemistry*, reviewed papers for *Journal of Neurochemistry*, *Biochemical Journal* and *European Journal of Physiology*, *Glia*, and *Journal of Pharmacology*.

CLARK, Prof I., 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 Immuni-Parasitology, and International Journal for Parasitology, reviewed 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), and maintained the NARF Homepage; member, NHMRC's Grantnet Users Reference Group and their representative on the overall Grantnet Management Committee.

FAHRER, Dr A., member, AGRF/ACRF DNA resource network committee; reviewer for: NHMRC grants and *Australian and New Zealand Journal of Surgery*; participated in the Meat and Livestock Australia Genome Initiative.

HOWITT, Dr S., member, council for the Australian Society for Biochemistry and Molecular Biology; refereed papers for *Science* and *Biochim. Biophys. Acta*. reviewed ARC grants.

KIRK, Prof K., specialist editor in Physiology for the *In*ternational Journal of Parasitology, refereed papers for Nature, Science, EMBO Journal, Molecular Microbiology, Biophysical Journal, Molecular Pharmacology, British Journal of Pharmacology, Trends in Parasitology, International Journal of Parasitology, European Journal of Pharmacology and Comparative Biochemistry and Physiology, ARC 'Reader' and refereed grant applications for the NHMRC, the Wellcome Trust and the Leverhulme Trust. MARTIN, Dr R., reviewed grants for the National Heart Foundation; refereed papers for journals: *Experimental Neurology, Nuroscience Letter* and *Neuroscience*.

MATHESIUS Dr U., reviewed papers for *Plant Physiology, Functional Plant Biology, Planta,* and *Plant Physiology and Biochemistry.* 

O'NEILL, Dr H., Faulty of Science Delegate to the Austrade Exhibition in Singapore for recruitment of international students; member, editorial board, *Immunology and Cell Biology*, reviewed papers for the journal; referee of NH&MRC project grant applications.

POGSON, Dr B. co-supervised several PhD students based at CSIRO Plant Industry and RSBS; collaborated with Dr R Willows (Macquarie University), Dr K Niyogi (UC, Berkeley, USA), Dr D DellaPenna and Dr J Ohlrogge (Michigan State University, USA), Dr B Grimm (Berlin, Germany) and Dr P Mullineaux (John Innes Institute, UK).

SMITH, Dr G., attended a symposia held by Australia 21, Sydney, funded by the Ian Potter Foundation; reviewed papers for the *Journal of Applied Phycology*.

VANLEEUWEN, Dr B., collaborated with staff of the Pest Animal Control Cooperative Research Centre, CSIRO Entomology and CSIRO Sustainable Ecosystems in student supervision.

VERMA, Dr N., member, Biology Accreditation panel for the ACT Board of Senior Secondary Studies; assessor of grant applications for the NHMRC and ARC; member of the judging panel for the ASM Young Speakers Night; refereed papers for *FEMS Microbiology Letters*.

### School of Botany and Zoology

BoZo has extensive collaborations with CSIRO Entomlogy and CSIRO Plant Industry involving joint grants and research projects, adjunct appointments, and teaching at undergraduate and postgraduate level. Other major collaborations involve several state and commonwealth government agencies, e.g. the Australian Federal Police forensics program.

BRADBURY, Howard, and Rezaul Haque developed a new, simple method for the separation of the cyanogenic glucoside linamarin from young cassava leaves. Linamarin is used in our cyanide kits as a standard to check that the method is working satisfactorily. They also continued production and distribution of simple picrate kits for determination of total cyanide in cassava and other important plants and of urinary thiocyanate, the breakdown product of cyanide in the body. The kits are available free of charge to agriculturalists and health workers in developing countries under a grant from the Australian Centre for International Agricultural Research (ACIAR). Kits have been sent to 32 countries mainly in Africa, but also in Asia and the Pacific. The largest number of kits went to Mozambique, where we have a collaborative research project with Dr Julie Cliff a medical doctor, Mrs Paula Cardoso, a senior health professional, and Mr Mario Ernesto, a medical chemist. Howard also coordinates the Cassava Cyanide Diseases Network, which has grown to 142 members from 34 countries.

COOPER, Paul, collaboration with Penny Greenslade on development of a plan for preventing exotic collembola from invading sub-Antarctic islands (funding provided by Antarctic Scientific Advisory Committee).

HAPPOLD, David, member, Burramys & Mastacomys Recovery Plan, NSW National Parks and Wildlife Service.

NAYUDU, Murali, gave a talk on genetic engineering to farmers as part of the Grain Growers farmers update; several members of staff are involved in BISACT (Biological Sciences in ACT), the science outreach arm of the School of Botany and Zoology: Murali NAYUDU, Terry MURPHY, Merv ASTON, Margaret HILTON and John VRANJIC ran the program at seven ACT primary schools; BISACT was also the major display for the ANU at the Great Exhibition of the Australian Science Festival.

OLSEN, Penelope, continued research and conservation work with Environment Australia (endangered species recovery plans, expert adviser for referrals, etc), Bureau of Resource Sciences (invasive pest risk assessment) and Brisbane City Council (habitat management for raptors).

### **Department of Chemistry**

BARROW, Dr R.A., treasurer, ACT branch of the RACI.

CHAI, Dr C.L., ACT representative, Organic Division of the RACI.

CIFUENTES, Dr M., memberships officer, ACT Branch of the RACI.

HUMPHREY, Dr M.G., honorary treasurer, Royal Australian Institute of Chemistry Inorganic Division; past president, ACT Branch of the RACI.

SALEM, Dr G., member, General Science Accreditation Panel, ACT; director, Rio Tinto Australian Science Olympiads Chemistry Program; ACT representative, Chemical Education Division Standing Committee of the RACI; member, RACI Education Committee.

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

### **Department of Geology**

ARCULUS, Prof. R.J., cooperative research with the Solomon Islands Geological Survey; collaborative research with the Australian Geological Survey Organisation; CSIRO Exploration & Mining; Institute of Geological and Nuclear Sciences (NZ); National Oceanographic and Atmospheric Administration (USA).

CHRISTY, Dr A.G., associate editor of *Mineralogical Magazine* (UK).

COX, Prof. S.F., member, committee of the ACT Board of Secondary Studies which oversees Year 11/12 curricula in Earth Sciences.

JONES, Dr P.J., corresponding member, subcommission on Carboniferous Stratigraphy, International Union of Geological Sciences.

NICOLL, Dr R.S., titular member, subcommission on Ordovician Stratigraphy, International Union of Geological Sciences; corresponding member, subcommission on Permian Stratigraphy, International Union of Geological Sciences; corresponding member, subcommission on Triassic Stratigraphy, International Union of Geological Sciences.

STRUSZ, Dr D.L., corresponding member, subcommission on Silurian Stratigraphy, International Union of Geological Sciences; councillor, International Association for the Study of Fossil Cnidaria & Porifera.

TAYLOR, Prof. S.R., chair, Advisory Committee, Australian Centre for Astrobiology, Macquarie University; chair, House Committee, Australian Academy of Science; associate editor, Meteoritics and Planetary Science.

#### **Department of Mathematics**

BRYCE, R A., ANU convener, Canberra Mathematics Enrichment Program (with Aust. Math. Trust); presenter in CMEP; member, Problems Committee of the Australian Mathematics Competition; member, Problems Committee of the Mathematics Challenge for Young Australians; member, the Australian Mathematical Olympiad Committee; member, the Australian Mathematics Trust Advisory Committee.

COSSEY, P J., associate editor, Bulletin Aust MS; public officer, Aust MS and AMPAI; Council member, Aust MS.

FERRARIO, L., referee for NSF, Austria; referee for Telescope Time Allocation, UK; referee for *Astronomy & Astrophysics* Journal; referee for *Monthly Notices of the Royal Astronomical Society* Journal.

HASSELL, A., reviewer, Mathematical Reviews.

HOWE, A A T., treasurer, Australian Mathematical Society and AMPAI.

ISAEV, A V., associate editor, Journal Mathematical Analysis and Applications.

LOY, R J., member, International Steering Committee, Banach Algebra Conferences.

ORMEROD, E A., academic adviser, ANU Chapter of Golden Key International Honour Society; Judge, Golden Key International Showcase.

ROBERTS, S G., member and treasurer, Computational Mathematics Group.

SMYTHE, N F., Apple University Development Fund Awards Committee; proceedings editor and Planning Committee, AUC Conference, Adelaide Uni.

### **Department of Physics**

BACHOR, Prof H.A., quantum imaging with Prof. C. Fabre (Universite Paris VI, France) as part of the QUCOV European Network Quantum cryptography and quantum noise reduction by Prof. H.A BACHOR and Dr P K LAM with Prof. G. Leuchs (Universitaet Erlangen, Germany) as part of the QUANTUM European Network Light detection and generation below the quantum noise limit by Prof. HA BACHOR and Dr P K LAM with Dr R. Schnabel and Prof. K. Danzmann (Universitaet Hannover, Germany).

BYRNE, Dr A.P., development of an ion implanter for radioisotopes with Dr H. Timmers and Assoc. Prof. D.H. Chaplin (University College, ADFA, UNSW); and Dr A.M. BAXTER, spectroscopy of neutron deficient lead and thallium nuclei with Prof. G.D. Dracoulis, Dr G.J. Lane (RSPhysSE), Dr A.O. Macchiavelli (LBL, Berkeley CA); decay of superdeformed 192Pb with Dr A. N. Wilson, Prof. G.D. Dracoulis, Dr G.J. Lane (RSPhysSE). Dr A.O. Macchiavelli (LBL, Berkeley CA); diffuse damage in semiconductors with Dr M. C. Ridgway (RSPhysSE), Dr R. Vianden and F Ruske, (ISKP, Universitaet Bonn, Germany); superallowed Beta decays with Assoc. Prof. P.H. Barker (University of Auckland, NZ); neutron rich translead nuclei using radioactive beams with Prof. G.D. Dracoulis. Dr G.J. Lane. (RSPhysSE) and Prof. P. M. Walker (University of Surrey, UK).

FRANCIS, Dr P., red quasars from the two micron all sky survey with Drs R. Cutri and B. Nelson (Caltech); galaxy clusters in the high redshift universe with Drs B.Woodgate and H. Teplitz (NASA Goddard Space-Flight Center), G. Williger (Johns Hopkins University) and P. Palunas (University of Texas, Austin).

HOPE, Dr J.J., development of XMDS numerical package for high-performance integration with Dr P.D. Drummond and Mr G. Collecut (University of Queensland); continuous evaporation as a pumping method for an atom laser with Dr. M.J. Davis (University of Queensland); HOPE, Dr J.J., single mode quantum statistical model of an atom laser with Mr A.S. Bradley (Victoria University, NZ); and Dr J.D. CLOSE, atomic detection using spatial modes of an optical resonator with Dr R.J. Ballagh (Otago University, NZ).

HOUWING, Dr A.F.H., Scramjet flows with Dr R. Boyce, and Dr N. Mudford, (School of Aerospace and

Mechanical Engineering at the Australian Defence Force Academy, UNSW).

LAM, Dr P.K., generation of spatial squeezing and entanglement for optical imaging with Prof. C. Fabre and A. Maitre, (Paris University, France); generation of optical Einstein-Podolsky-Rosen entanglement with optical fibres with Prof. G. Leuchs, (Universität Erlangen-Nürnberg, Germany).

McCLELLAND, Prof. D.E., and Dr S.M. SCOTT, gravitational wave detection (Japanese projects TAMA and LCGT).

SAVAGE, Dr C., theory of topological structures in spinor Bose-Einstein Condensates with Dr J. Ruostekoski, (Dept. of Physical Sciences, University of Hertfordshire, UK).

SCOTT, Dr S.M., gravitational wave detection data analysis with LIGO Laboratory, US and the LIGO Science Collaboration; development of visualisation software for General Relativity with Dr B.J.K. Evans (ANUSF); boundary constructions for space-time by with Dr P. Szekeres, (University of Adelaide) and Dr M.J.S.L Ashley (Pennsylvania State University); member, Committee of the International Society on General Relativity and Gravitation; member, editorial board, *Classical and Quantum Gravity*, IOP Publishing; initial cosmological singularities with Dr G.B. Ericksson, (University of Queensland).

### School of Psychology

BRINKMAN, J., school visits and a public lecture in the DEETYA/ABC sponsored "Science in the Bush" program.

BYRNE, D., chair and convener, *Workshop on Occupational Stress in Australia: Health, Social and Economic Costs*, sponsored by the Academy of the Social Sciences in Australia with additional support from Comcare Australia and the ANU National Institute of Social Sciences and the ACTU; held in Adelaide.

### School of Resources, Environment & Society

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

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

BHATI, Dr U.N., wrote and distributed four ANU Forestry market reports, in association with Australian Forest Growers and RIRDC, L&W Australia and FWPRDC. BRACK, Dr C. 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; and with CSIRO in development of a Carbon Accounting Toolbox.

BROWN, Em. Prof. V., collaborated in research projects with the Universities of New South Wales, Griffith, Latrobe and Western Sydney; with Baulkham Hills Shire Council and 25 Local Government Authorities Australia wide; and with the Murray-Darling Basin Commission and Bureau of Rural Sciences.

CARY, Dr G., appointed to the ACT Bushfire Council; associate editor, *International Journal of Wildland Fire*, and continued collaboration with: USDA Forest Service on landscape fire regime modelling; IGBP/GCTE on landscape fire model comparison; Aracruz Cellulose in eucalypt growth modelling; the Tasmanian Parks and Wildlife Service and the NSW National Parks and Wildlife Service on landscape fire regime modelling; the NSW National Parks and Wildlife Service on Fuel Modelling for Fire Management; the ACT Government as a member of the ACT Bushfire Council; ActewAGL on the effects of fire on the hydrology of the Cotter Catchment.

DARGAVEL, Dr J., collaborated with Macquarie University and others in the publication of Volumes V and VI of Australia's Ever Changing Forests, the proceedings of national forest history conferences.

GILL, Dr Malcolm, chair, ACT Bush Fire Council; member, ACT Bushfire Fuel Management Committee.

GREENE, Dr R., president, Australian Association of Natural Resource Management; and member, McKell Medal Advisory Panel; also Secretary of the Australian Clay Minerals Association (till May 2002); collaborated with TRANSGRID on the rehabilitation of the impacts of vegetation clearing in sub-alpine regions of NSW and with the cotton industry, advising on methods of soil management.

GUNNINGHAM, Prof. N., adviser to the United Nations Environment Program on the role of environmental management systems and regulation, and to the OECD (Public Management Service) on the design of best practice environment regulation; collaborated with the Department of Environment Protection (WA) and Environment Protection Authority (Vic) on a research project on 'next generation environmental regulation'.

JAMES, Dr R., member, ACT Forests Advisory Board; member, CRC Sustainable Production Forestry; member National Farm Forestry Silviculture Project. KANOWSKI, Prof. P.J., co-faciliated, with Michael Williams and Associates, community stakeholder workshops under the NSW Western Regional Agreement Process, for Planning NSW; co-organised with Dr R. Keenan and Mr A. Gerrand, Bureau of Rural Sciences and the collaboration of CSIRO and the Plantation Timber Association of Australia, a national conference entitled "Prospects for Australian Forest Plantations 2002"; 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, International Institute for Environment & Development Asia-Pacific Regional Advisory Panel; member, Crawford Fund Forestry Program Committee.

LAFFAN, Dr Shawn, member, Snowy Information Sharing Group, a collaboration of stakeholders in the Snowy River region of NSW with the aim of better utilising available spatial information and data.

LINACRE, Dr Edward, presented the lecture series 'Weather in a Week' as a contribution to National Science Week.

MACKEY, Dr B., organised "Education for Sustainable Living" at the World Summit on Sustainable Development, and participated in numerous other events globally, for the Earth Charter organisation; member, Catholic Ecocare Australia; research collaborations with partners in CRC Greenhouse Accounting.

MAHENDRARAJAH, Dr S., cooperation with Aidan Flanagan, of Forest Industries of AFFA in developing marketing tools, especially, game theory for forest industries development; and cooperating 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; continued research collaboration with Dr Dan Etherington. Managing Director of Kokonut Pacific P/L on the refinement and promotion of direct micro-expelled coconut oil as a renewable energy source for the South Pacific and closing the energy cycle in remote island communities; member, Accreditation Panel for Agriculture, Board of Senior Secondary Studies, reviewing and approving college course initiatives; member, Forest Economics research group, CRC- Sustainable Production Forestry.

RACE, Dr D., collaborated with Greening Australia nationally; member, Sustainable Silviculture Program, CRC Sustainable Production Forestry; member, AF-FA's Reference Group for National Farm Forestry Coordinator.

RUTHERFORD, Dr P., assisted the NSW Environment Protection Authority in developing and drafting amendments to environmental legislation dealing with the regulation of interstate transport of hazardous wastes, including provisions to facilitate approved reuses of such wastes; commenced work on the ARC Linkages Project "Regulatory design for water quality management in urban catchments", a three-year collaborative effort between the ANU (SRES) and the Western Australia Department of Environment & Water and the Western Australia Water Corporation.

SLEE, Dr M., continued liaison with GR Davis Pty Ltd in improvement of commercial eucalypt oil production.

TIDEMANN, Dr C.R., member, editorial board of Acta Chiropterologica (Warsaw); referee for a number of scientific journals; member, CRC for Vertebrate Pests, the Flora and Fauna Committee and the Vertebrate Pest Advisory Committee of the ACT Government; adviser 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.

TURNER, Dr B., 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.

## **University Schools and Centres**

# Asia-Pacific School of Economics and Management

BENNETT, J., 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, member of advisory board. Centre for Independent Studies; NSW Environment Protection Authority, Environmental values of rivers; Environment Australia, Wetland protection incentives; Queensland Department of State, Competitiveness of locations for mineral processing; occasional adviser to Productivity Commission. Australian Water Technologies and South East Catchment Management Board.

De BROUWER, G., member, American Economic Association; member, East Asian Economic Association; member, Economic Society of Australia.

CHAND, S., member, American Economic Association, member, Economic Society of Australia.

DRAKE-BROCKMAN, J., Services Industries Research, with ANZ, Corrs Chambers Westgarth, NEC,

Telstra, Arup, Standards, SAI, Cox Group, ATUG and the Macquarie Bank.

DRYSDALE, P., 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, Kvoto: 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, Service Industry Research, with ANZ, Corrs Chambers Westgarth, NEC, Telstra, Arup, Standards, SAI, Cox Group, ATUG and the Macquarie Bank.

DUNCAN, R., 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, Outreach activities for PNG and the Pacific Region, Pacific Updates with the University of the

South Pacific and the Foundation for Development Cooperation. Papua New Guinea Updates with the Lae Chamber of Commerce and Industry, Institute of National Affairs, Lae & Port Moresby and the University of Goroka, Divine Word University, Madang.

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

FINDLAY, C., 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, Services Industries Research with ANZ, Corrs Chambers Westgarth, NEC, Telstra, Arup, Standards, SAI, Cox Group, ATUG and the Macquarie Bank.

GANGULY, R., fellow, Australian Institute of Management.

GROGAN, D., consultancy with AusAID, Asian-Pacific Economic Literature Journal Subscription, member, Canberra Society of Editors; associate editor, Pacific Economic Bulletin. Pacific Updates with the University of the South Pacific and the Foundation for Development Cooperation. Papua New Guinea Updates with the Lae Chamber of Commerce and Industry, Institute of National Affairs, Lae & Port Moresby and the University of Goroka, Divine Word University, Madang

HESS, M., editor, Labour and Management in Development, Human Resource Management in Papua New Guinea with the University of Papua New Guinea.

JAMES, H., Strategic development with the University of Malaya and Kebangsaan, member, Environment Institute of Australia; member, International Human Dimensions Program — Australia.

LAL, P., executive member, Australia and New Zealand Society of Ecological Economics; member, Australian Institute of Agriculture Science and Technology (AI-AST); 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.

LAMBERTON, D., 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*. LEUNG, S., AusAID, Ho Chi Minh National Political Academy teaching and research project on public policy; United Nations Development Program Implementation of the Vietnamese Government's tenyear socio-economic strategy; Department of Foreign Affairs and Trade, Corporate governance in Vietnam.

LARMOUR, P., Corruption and Anti-Corruption training course with the NSW Independent Commission Against Corruption; Governance and Poverty Reduction Training Course with AusAID.

McCAWLEY, P., Financial Governance in Asia, with the World Bank; Development Gateway Group Report with the World Bank. Economic Diplomacy and Services Provision with the Indonesian Government.

REILLY, B., United Nations and Democratization, with the United Nations, 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.

SIDORENKO, A., AusAID, Global Distance Learning Initiative (Virtual Colombo Plan); MOFTEC, China Economics and Foreign Trade Training Project, Insurance Policy Study.

SONG, L., 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.

TAIT, M., member, editorial board, *Asian-Pacific Economic Literature*, member, editorial board, Pacific Economic Bulletin; executive editor, Cambridge University Press, Trade and Development Series; Pacific Updates with the University of the South Pacific and the Foundation for Development Cooperation; Papua New Guinea Updates with the Lae Chamber of Commerce and Industry, Institute of National Affairs, Lae & Port Moresby and the University of Goroka, Divine Word University, Madang.

# Centre for Aboriginal Economic Policy Research

ALTMAN, Prof. J.C., as CAEPR Director, Prof. Altman is guided by an Advisory Committee, including two senior officers from the Aboriginal and Torres Strait Islander Commission (ATSIC), an Aboriginal or Torres Strait Islander representative nominated by the ATSIC Board of Commissioners, an Indigenous communities representative nominated by the Advisory Committee, one senior officer of the Department of Employment and Workplace Relations, and one senior Department of Family and Community Services officer; ATSIC provides funding to ANU to assist it to operate CAEPR to facilitate the provision of high quality, independent research that will assist the furthering of the social and economic development and empowerment of Aboriginal and Torres Strait Islander people and this research is negotiated as part of an annual research planning process between ATSIC and the Centre; the Department of Family and Community Services is also a stakeholder and undertakings to this Department are defined in a multiple-year funding agreement; Board Member, Key Centre for Tropical Wildlife Management, Northern Territory University (NTU); Board Member, Centre for Indigenous Natural and Cultural Resource Management, NTU: visitor, Kev Centre for Tropical Wildlife Management, NTU; preparation with Peter Whitehead, Director, Key Centre for Tropical Wildlife Management, NTU: of information brief on feral animal management consultancy in Kakadu National Park; member, Specialist Program Advisory Group in a commentary on the Tropical Savannas Management Cooperative Research Centre research plan; member, Research Advisory Board, VicHealth Koori Health Research and Community Development Unit. University of Melbourne: member. Advisory Committee to the Cultural Ministers Council Statistics Working Group, Department of Communications. Information Technology, and the Arts: Associate Editor, Journal of Tourism Studies; Referee, Urban Anthropology (USA), Ethno Records of the South Australian Museum, Nature Australia, Australian Aboriginal Studies and Aboriginal Studies Press; facilitated a CAEPR workshop for the Northern and Central Land Councils at University House to assist in their preparations for the Australian National Audit Office performance audit of Northern Territory land councils and the Aboriginal Benefit Account; engaged to provide independent advice as a member of the Management Committee for the team conducting the first five-year review of the Gulf Communities Agreement, relating to the Pasminco Century mine project in north-west Queensland in cooperation with Queensland Department of State Development; advice to Australian Institute of Family Studies regarding the Stronger Families Learning Exchange project at Indigenous communities; comment submitted on the Queensland Government's Wildlife Management Review Discussion Paper (with Michelle Cochrane); submission to the Parliamentary Joint Committee on Corporations and Financial Services Inquiry into the Level of Banking and Financial Services in Rural, Regional and Remote Areas of Australia (with John Taylor); evidence given at public hearing of, and prepared submission to, the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs Inquiry into Capacity Building in Indigenous Communities (with Will Sanders, Diane Smith); ongoing collaboration with Rio Tinto Ltd as an opinion leader on their partnership with Indigenous Australians programs and community relations programs; submission to National Health and Medical Research Council on the document 'Value and

Ethics in Aboriginal and Torres Strait Islander Health Research' (with Maggie Brady, Jerry Schwab) Collaboration with Lumbu Foundation on planning proposed Indigenous Outlook Forum in 2003; assisted International Business Leaders Forum (United Kingdom) with External Assurance Review of Rio Tinto's Social and Environmental Reporting: expert witness for Timber Creek township Native Title Claim; presentation to the Norwegian Parliament's Standing Committee on Scrutiny and Constitutional Matters on contemporary Indigenous; met with and made presentation to a delegation from the Kenyan Land Commission; met with Assistant Deputy Minister Canadian Indian and Northern Affairs; advice to Productivity Commission on the 'Draft framework for reporting on Indigenous disadvantage'; art valuation, Elspeth Young Estate; Art valuation, Meehan/Jones Collection for Museum and Art Galleries of the Northern Territory; Art valuation for National Gallery of Australia; met with Dr Carmen Lawrence and Ms Jenny Macklin to discuss policy and research relating to Indigenous education and employment; advice to NLC and Kakadu Board on Kakadu Regional Economic Development Strategy: advice to Bawinanga Aboriginal Corporation on an Employment and Economic Scoping Project report prepared on behalf of the Northern Territory Area Consultative Committee by cross-cultural consultants; provided advice to Anangu Pitjantjatjaraku on a report 'Anangu Pitjantjatjara Lands: Strategic Economic Initiatives Plan. Phase 2'.

BRADY, M., adviser, New South Wales Health over Aboriginal Drug and Alcohol Strategy; adviser to Far West Area Health Service on the Alcohol Community Development Project; referee for Social Science and Medicine, ANZ Journal Public Health; grant assessor for Alcohol Education and Rehabilitation Foundation; National Drug Law Enforcement Fund; advice to Australian Labor Party policy officer regarding policy on substance abuse; presentation at National Alcohol Policy Meeting with Department of Health and Social Services, Namibia; Collaboration on National Health and Medical Research Council grant with Dr Peter d'Abbs (James Cook University/Menzies School of Health Research) and Associate Professor Dennis Gray (National Drug Research Institute, Curtin University): consultancy for AUSAID providing input to the South African Capacity Building Program as technical support to the University of the Western Cape, Cape Town; short course convened at the University Winter School on capacity building; convened Winter School course on Managing alcohol programs in communities, University of Western Cape, South Africa; produced an alcohol manual for South African community health workers, AUSAID-funded collaboration with Public Health Program, University of Western Cape; Submission to National Health and Medical Research Council on the document 'Value and Ethics in Aboriginal and Torres Strait Islander Health Research'.

CHAMPION, M., completed a 12-month placement at CAEPR from the Aboriginal and Torres Strait Islander Commission Queanbeyan Regional Office under the Inter-agency Placement Scheme in April.

COCHRANE, M., comment submitted on the Queensland Government's Wildlife Management Review Discussion Paper (with Prof. J.C. Altman).

HAMILTON, F., commenced a placement at CAEPR from the Aboriginal and Torres Strait Islander Commission's National Policy Office under the Inter-agency Placement Scheme in December.

HUNTER, B., Research Associate, Centre for Applied Economics, The Hawke Institute, University of South Australia, Adelaide; member, Editorial Board, Australian Journal of Labour Economics: referee. The Economic Record, Australian Economic Review, Australian Economic History Review, and Australian Journal of Labour *Economics:* collaboration with colleagues at the Reserve Bank of Australia and Australian Institute of Family Studies on a discussion paper on Marginal Attachment to the Australian Labour Market: advice and assistance to Australian Institute of Family Studies on issues relating to family friendly work practices; advice and assistance to Social Policy Research Centre, University of New South Wales on 'Family friendly work practices and Indigenous Australians' report (destined for the Organisation for Economic Cooperation and Development); advice on sampling issues and questionnaire design of the Family Work Decision Survey conducted by Australian Institute of Family Studies in November; advice to Productivity Commission on the 'Draft framework for reporting on Indigenous disadvantage'; met with Dr Carmen Lawrence and Ms Jenny Macklin to discuss policy and research relating to Indigenous education and employment; met with Australian Labor Party's policy review on locational disadvantage and Indigenous Employment at Parliament House.

LEVITUS, R., assistance to Melanie Jansen, Institute for African Studies, University of Mainz, Germany, relating to a study of political alliances between Aboriginal and non-Aboriginal organisations.

MARTIN, D.F., participated in CAEPR workshop for the Northern and Central Land Councils at University House to assist in their preparations for the Australian National Audit Office performance audit of Northern Territory land councils and the Aboriginal Benefit Account; membership of a team conducting the first fiveyear review of the Gulf Communities Agreement, relating to the Pasminco Century mine project in northwest Queensland; membership of a multidisciplinary team reviewing the *Aboriginal Councils and Associations Act* (Cth) (1976) for the Registrar of Aboriginal Corporations; membership of a multidisciplinary team developing a national funding model for Prescribed Bodies Corporate under the Native Title Act for the ATSIC. McDONNELL, S., submission on behalf of Reconciliation Australia to the Parliamentary Joint Committee on Corporations and Financial Services Inquiry into the Level of Banking and Financial Services in Rural, Regional and Remote Areas of Australia; Evaluation of the Tangentyere bank pilot project, with Reconciliation Australia and Tangentyere Council, Alice Springs.

PETERS-LITTLE, F., member, Editorial Board, *Aboriginal History*; Interaction with Jumbunna Indigenous House of Learning, University of Technology, Sydney, for ARC Project.

SANDERS, W., evidence given at public hearing of, and prepared submission to, the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs Inquiry into Capacity Building in Indigenous Communities (with Jon Altman, Diane Smith); referee for Policy, Organisation and Society, Australian Journal of Social Issues and Canadian Journal of Political Science; evaluation of pilot Centrelink branches operating in Maningrida and Palm Island for Centrelink; presentation to the Norwegian Parliament's Standing Committee on Scrutiny and Constitutional Matters on contemporary Indigenous issues; advice to Productivity Commission on the 'Draft framework for reporting on Indigenous disadvantage'; met with Dr Carmen Lawrence and Ms Jenny Macklin to discuss policy and research relating to Indigenous education and employment

SCHWAB, R.G., member, steering committee, DEST 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; member, selection committee, 2002 DEST Research Fellowships; submission to National Health and Medical Research Council on the document 'Value and Ethics in Aboriginal and Torres Strait Islander Health Research': collaboration with Lumbu Foundation on planning proposed Indigenous Outlook Forum in 2003; presentation to the Norwegian Parliament's Standing Committee on Scrutiny and Constitutional Matters on contemporary Indigenous issues; met with Assistant Deputy Minister Canadian Indian and Northern Affairs; met with Dr Carmen Lawrence and Ms Jenny Macklin to discuss policy and research relating to Indigenous education and employment; met with Peter Shergold, Secretary, and Wendy Jarvie, Deputy Secretary of Department of Education, Science and Training to discuss research on maximising education engagement among young Indigenous students; met with Dr Brendan Nelson, Commonwealth Minister for Education, Science and Training, to discuss research on Indigenous educational engagement; advice to Central Australian Remote Health Development Services; advice to Jawoyn Association.

SMITH, B., adjunct lecturer at School of Australian Environmental Studies, Griffith University, Brisbane.

SMITH, D.E., evidence given at public hearing of, and prepared submission to, the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs Inquiry into Capacity Building in Indigenous Communities (with Jon Altman, Will Sanders); participated in CAEPR workshop for the Northern and Central Land Councils at University House to assist in their preparations for the Australian National Audit Office performance audit of Northern Territory land councils and the Aboriginal Benefit Account; met with delegation from the Kenyan Land Commission; advice to Productivity Commission on the 'Draft framework for reporting on Indigenous disadvantage'; met with Neil Westbury, Northern Territory Office of Indigenous Policy regarding Indigenous policy issues.

SUTHERLAND. D., ongoing collaboration with University of Newcastle on Indigenous education issues.

TAYLOR, J., collaboration with colleagues at University of Queensland, University of Waikato, University of Houston, University of Calgary, Mahidol University, McMaster University and Stanford University in the production of a volume on Indigenous population mobility; submission to the Parliamentary Joint Committee on Corporations and Financial Services Inquiry into the Level of Banking and Financial Services in Rural, Regional and Remote Areas of Australia (with Jon Altman); collaboration with Lumbu Foundation on planning proposed Indigenous Outlook Forum in 2003; referee, Australian Aboriginal Studies; presentation to the Norwegian Parliament's Standing Committee on Scrutiny and Constitutional Matters on contemporary Indigenous issues; met with delegation from the Kenyan Land Commission; Advice to Productivity Commission on the 'Draft framework for reporting on Indigenous disadvantage'; met with Dr Carmen Lawrence and Ms Jenny Macklin to discuss policy and research relating to Indigenous education and employment; advice to Queensland Treasury on issues of service population estimates; advice to ABS on Community Housing Infrastructure Needs Survey output and data quality; participation in ABS Committees advising on the development of the Indigenous Social Survey and General Social Survey; provided advice to Anangu Pitjantjatjaraku on a report 'Anangu Pitjantjatjara Lands: Strategic Economic Initiatives Plan, Phase 2'.

## **Centre for Cross-Cultural Research**

CHURCHER, Ms Betty, deputy chair, Australia-India Council.

EDMUNDS, Dr Mary, member, National Native Title Tribunal; member, National Alternative Dispute Resolution Advisory Council.

KLEINERT, Dr Sylvia, member, Australian Institute of Aboriginal & Torres Strait Islander Studies

MACDONALD, Dr Amanda, council member, Institute of Post Colonial Studies, Melbourne.

MACDOUGALL, Ms Judith, selection committee, 2002 Gottingen International Ethnographic Film Festival, Germany.

McGRATH, Dr Ann, co-convener, Proof and Truth: the Humanist as Expert, symposium, Australian Academy of the Humanities.

MORPHY, Prof. Howard, member, Expert Advisory Committee, Disciplinary Panel, Humanities and Creative Arts, Australian Research Council; consultant on native title issues, Northern Lands Council; fellow, Australian Academy of the Humanities; adjunct curator, Kluge-Ruhe Aboriginal Art Collection, University of Virginia, USA; chair, Wenner-Gren Foundation for Anthropological Research Expert Advisors Committee, New York, USA; member, Australian Institute of Aboriginal & Torres Strait Islander Studies; fellow, Royal Anthropological Institute of Great Britain and Ireland; member, American Anthropological Association; member, Association of Social Anthropologists of the UK and the Commonwealth.

THOMAS, Dr Mandy, adviser on recruitment of Vietnamese prison officers, NSW Department of Corrective Services; vice president, Australian Anthropological Society.

TURNBULL, Dr Paul, vice president for teaching, H-Net, the International Online Network for Humanities.

## Centre for Educational Development and Academic Methods (CEDAM)

PEARSON, Margot, member of 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 30 institutions from Australia and New Zealand. fIRST is a web-based resource for supervisors and others with responsibility for research training.

TREVITT, Chris, invited participant and contributor at the Australian Government Forum for East Asia-Latin America Cooperation (FEALAC) Working Group on Education/Science and Technology 2 day meeting; contributed to management and program committees for Association of Pacific Rim Universities international conference held jointly at ANU and University of Sydney on *Distance Learning and the Internet*.

## **Centre for Mental Health Research**

ANSTEY, Dr K. J., member, Departmental Ethics Committee, Commonwealth Department of Health and Ageing; member, Management Committee, Prevention of Older Persons Injury (POPI) Research Program; member, Scientific Advisory Committee, POPI; member, Scientific Program Committee, Australasian Society for Psychiatric Research; member, Board of Editors, *Psychology and Ageing*, member, Board of Editors, *Ageing International*.

BERRY, H. L., member, Relationships Australia National Research Reference Group; president, Board of Directors, Relationships Australia Canberra and Region.

BIRD, Dr M., member, Alzheimer's Association Advisory Committee.

CHRISTENSEN, Prof. H., chair, Conference Organising Committee, Australasian Society for Psychiatric Research; member, Mental Health Panel, NHMRC Project Grants; member of the Executive, Publicity Officer and Webmaster. Australasian Society for Psychiatric Research; member, Medical and Scientific Advisory Panel, Alzheimer's Disease International Research Committee. Alzheimer's Australia: member. ACT Suicide Prevention Policy Group, ACT Department of Health, Community Care and Aging; member, Steering Committee, YBBlue Project: member, Expert Panel, Medicare Benefits Schedule for Focused Psychological Strategies and Evidence Based Treatments, Commonwealth Department of Health and Ageing; member, Expert Panel, Web and Telecounselling, Commonwealth Department of Health and Ageing; member, Advisory Board, beyondblue website; member, Advisory Board, Reachout!; member, Board of Editors, Gerontology: International Journal of Experimental and Clinical Gerontology, member, Board of Editors, Psychology and Ageing.

DEAR, Dr K. B. G., Statistical Editor, Cochrane Collaboration Acute Respiratory Infections Group.

GRIFFITHS. Dr K. M., member, Scientific Organising Committee, Australasian Society for Psychiatric Research Annual Scientific Meeting.

JORM, Prof. A. F., member, Australian Primary Health Care Research Institute Advisory Committee; member, Research Committee of the ORYGEN Research Centre; member, Research Committee of the Australian Rotary Health Research Fund; chair, NHRMC Project Grant Review Panel in Mental Health; chair, Research Committee of beyondblue: the national depression initiative; member, Committee of World Psychiatric Association Section of Epidemiology and Public Health; member, Executive of the National Association of Research Fellows; member, ACE Mental Health Project Steering Committee, Commonwealth Department of Health and Ageing; member, Board of Editors, Brain Ageing, member, Board of Editors, Australasian Journal on Ageing, member, Advisory Board, International Journal of Methods in Psychiatric Research.

KITCHENER, B., member, ACT Mindmatters Reference Group; member, ACT Mental Health Promotion, Prevention and Early Intervention Reference Group; member, ACT Mental Health Providers Network. RODGERS, Dr B., member, NHMRC Program Grant Assessing Committee (Public Health); member, Consortium Advisory Group of the Longitudinal Study of Australian Children "Growing Up in Australia"; member, Board of Editors, *Journal of Social Welfare and Family Law.* 

## **Humanities Research Centre**

Collaborative conferences conducted by the HRC: Telenovelas & Soap Opera: Negotiating Reality with Christina Slade (University of Canberra): New World. First Nations: Native Peoples of Mesoamerica and the Andes under Colonial Rule, with Dr David Cahill and Blanca Tovías (University of NSW): National Narratives and Identities in a Global World: The Latin American Case, with Dr Barry Carr and Dr Steve Niblo (La Trobe University): Location of Spirituality: Experiences and Writings of the Sacred, with Dr Minoru Hokari (Keio University); The Theory and Practice of Early Modern Autobiography Symposium, Dr Philippa Kelly (University of NSW) and Dr Lloyd Davis (University of QLD); The Diaspora of the Latin American Imagination conference was supported by the Australian National Centre for Latin American Studies.

BARCLAY, Dr Glen, (visiting fellow), ABC Radio interviews (7) as international relations expert on Tampa refugees, terrorism, Afghanistan, Israel and Palestine and Iran; ABC TV 7.30 Report interview as international relations expert on refugees.

BELL, Mr Robert, (PhD student), lecture on Scandinavian design at University of Canberra; delivered conference paper 'Wood and design identity in Scandinavia', at *Designing Futures* conference, Perth; lecture on 'Scandinavian Design' to the Association of Australian Decorative and Fine Arts Societies, Canberra.

BENJAMIN, Dr Roger, 'Recherches orientalistes et initiative indigène: les peintres algériens à l'époque coloniale', in symposium Regards obliques sur l'orientalisme: la peinture des sociétés d'Islam, Ecole des Hautes Etudes en Sciences Sociales: the first of four lectures in French based on his book *Orientalist Aesthetics*, 'Renoir and Orientalism', National Gallery, London; 'Colonial Museology in Algiers', in 'Occidents will Happen', symposium at the Tate Britain, London; 'La France musulmane: colonial and indigenous identities in the painting of French Algeria', Nationalism and French Visual Culture, 1870–1914, Center for Advanced Study in the Visual Arts, National Gallery of Art, Washington, repeated the lecture at the Washington University in St. Louis.

BLACKALL, Mr Chris, (PhD student), conference paper 'Rethinking Information Literacy in Higher Education: the Case for Informatics' delivered for the Victorian Association of Library Automation; Conference workshop 'Digital Objects in Educational Products, Sights and Sounds in Scholarly Communication', for the National Scholarly Communications Forum, the Australian Academy of the Humanities and the National Library of Australia.

BONYHADY, Dr Tim, (joint appointment with the Centre for Cross-Cultural Research and the Centre for Resource and Environmental Studies). curator. Burke and Wills: From Melbourne to Myth, National Library of Australia and subsequently staged at the Art Gallery of South Australia, Adelaide and the State Library of Victoria, Melbourne; public lectures: 'The Gum Tree in the Garden', for *Reviewing the Colonial Landscape*. State Library of Victoria, Melbourne, 'Burke and Wills: From Melbourne to Myth', University of Tasmania, Hobart, 'Burke and Wills: A Curator's View', State Library of Victoria, Melbourne, 'The Colonial Earth', The Philip Bacon Lecture, University of Queensland, Brisbane, 'Burke and Wills: From Melbourne to Myth', Roval Society of Victoria, Melbourne; ABC Radio and ABC television interviews on the Burke and Wills: From Melbourne to Myth exhibitions.

CHURCHER, Dr Betty, (joint appointment with the Centre for Cross-Cultural Research), Deputy Chair, Australia–India Council; conducted research for her forthcoming SBS television 3-part documentary series on the art of the two world wars of the 20<sup>th</sup> century; wrote catalogue entries on Jon Molvig, Arthur Boyd, and Ian Fairweather for the National Gallery of Australia publication *Australian Art at the National Gallery*, wrote catalogue entry on Albert Tucker for the Australian War Memorial publication *Artists in Action*, wrote catalogue essay 'The Sublime in Australian Art' for the Art Gallery of Western Australia publication *The Sublime, Wesfarmers Collection.* 

CLARK, Ms Christine, international adviser for Indonesian Contemporary Art Triennial 2004 invited by the Indonesian Arts Directorate.

ELLIOTT, Prof. Ralph, member Australia Day in the Capital Territory Committee, Australia Day Poets' Place project; public lectures and ABC Radio interviews for *Treasures from the World's Great Libraries* exhibition at the National Library of Australia.

GALLA, Dr Amareswar, president, Asia-Pacific Branch of the International Council of Museums (ICOM), Paris; convener, 7<sup>th</sup> Regional Assembly ICOM.

GAMMAGE, Prof. Bill, assessor and adviser, *Australian History Mysteries* kit and CD ROM for National Museum of Australia; Interviewer, Drovers History Project, National Library of Australia: (18 interviews at Charters Towers 2002); selection panel, Frederick Watson Fellowships, National Archives of Australia; commentator (with Philip Satchell) ABC Anzac Day march broadcast, and host, special Anzac program, 5DN, Adelaide; member, Editorial Advisory Board, *War in History*, based in Cambridge and Colorado; secretary to August 2002, Manning Clark House, and Committee member August 2002–; guest lecturer, English Dept, ADFA. Maria HERNANDES-LLOSAS, Dr, (visiting fellow) delivered lecture at the joint HRC–National Museum of Australia conference 'Archaeology, Community and Identity in South America'; interviews on ABC Radio.

KNELLWOLF, Dr Christa, (visiting fellow), presentation 'The Travelling Imagination: A Comparison of Imaginary with Real Journeys of Exploration', Harold White Fellowship Presentation at the National Library of Australia.

McCALMAN, Prof. Jain, Reference Advisory Group, Australia at the Crossroads, Commonwealth Government Inquiry into Tertiary Education, 2002; Advisory Group, Commonwealth Government Review of National Research Priorities. 2002–3: historical consultant, 'Outlaws' 2003 exhibition, National Museum of Australia; Australian Academy of the Social Sciences Representative, Harold White Fellowships Committee, National Library of Australia; President, Australasian and Pacific Society of Eighteenth Century Studies; President, Australian Consortium of Humanities Centres and Institutes; Research Infrastructure Committee, Australian Academy of the Humanities; National Academies Forum, Advisory Committee; exadviser. National Museum of Australia: pert International Affiliates Committee, Humanities Research Institute. University of California. Irvine: Advisory Board, Centre for Advanced Studies in the Humanities, Griffith University, 2001-2; elected President, Australian Academy of the Humanities, 2001-4; Steering Committee, National Institute of the Humanities, 2001-2; Australian Scholarly Editions Centre Committee, Australian Defence Force Academy, 2001-3: Advisory Board, Centre for Eighteenth-Century Studies, University of Queensland; Senior Selection Committee, Griffith University; Validation of Master of Cultural Studies course at Lingnan University, Hong Kong, September 2002; member, National Library of Australia Council, September 2002; Chair, Freilich Foundation.

McCALMAN, Prof. Iain, and Dr Caroline TURNER, development of a new postgraduate program in Museum Studies with the National Museum of Australia.

MACLACHLAN, Dr Alastair, (visiting fellow), gave the following papers: 'The Whig 18<sup>th</sup> Century', at Sydney University; 'The Last Patriot: Sir Arthur Bryant and the Study of British History', at ADFA; 'Historians and the Beginnings of the Study of Nationalism', University of New South Wales; delivered 6 lectures on historiography entitled 'Rethinking History' for Sydney University; and various other guest lectures at Sydney University.

MURPHY, Ms Bernice, (PhD student), member of Commonwealth Government's Visions of Australia Committee; Vice-President of International Council of Museums, (ICOM), Paris, Maison de l'Unesco); member of two standing committees of Council: ICOM Ethics Committee (until June) and ICOM Legal Affairs and Properties Committee (June ff.); Board Member, Museum Domain Management Association (registered USA) — a joint initiative of ICOM (Paris) and the J Paul Getty Museum & Institute (Los Angeles); member of International Committee for Museums and Collections of Modern Art (CIMAM); attended annual meeting and program of CIMAM in Berlin and Wolfsburg, Germany; ex-officio member of Advisory Council of, meeting annually in Paris; Ex officio member of the board of ICOM Asia-Pacific: as member of ICOM Ethics Committee, contributor to new, revised version of ICOM Code of Ethics for Museums; International Program Adviser. Museum of Contemporary Art. Taipei: delivered paper to international meeting of ICOM-UMAC, International Committee for University Museums and Collections, meeting at ANU, Canberra: author of 'Clifford Possum Tjapaltjarri & Tim Leura Tjapaltjarri, Napperby Death Spirit Dreaming, in a publication called Fieldwork, (commissioned essay on the collection marking the opening of the new Australian galleries at Federation Square), for the National Gallery of Victoria; 'Constellations from Shanghai', in Shanghai Star (commissioned essay for the Casula Powerhouse): 'Interdisciplinary Partnerships in the Redefinition of Culture and Museums', in Proceedings of the International Congress of the World Federation of Friends of Museums [Sept. 1999] published by the World Federation of Friends of Museums, 2002; 'Local Bearings', essay in A Constructed World, an exhibition catalogue for the Croatian Artists Association.

PICKERING, Dr Paul, presented two sessions at the History Teachers Summer School, held in collaboration with the National Centre for History Education and the History Teachers Association; Briefings on Britain for Australian Volunteers International.

STEHBERG, Dr Ruben, (visiting fellow), delivered lecture at the joint HRC–National Museum of Australia conference 'Archaeology, Community and Identity in South America'.

TURNER, Dr Caroline, paper on Indonesian art for international conference 'Mediating Human Rights and Democracy' Curtin University, Perth; commentary at Symposium 'Archaeology, Community and Identity in South America', National Museum of Australia; paper and workshop facilitator, 7<sup>th</sup> Regional Assembly of Asia-Pacific Branch of International Council of Museums (ICOM-ASPAC) 'Museums and Intangible Heritage', Shanghai Museum, China; paper on Indonesian art for exhibition Bali: a window to the twentieth century Indonesian art, Asia Society, RMIT, Melbourne; paper at Asian Studies Association of Australia/RSPAS/ FECCA (Federation of Ethnic Councils of Australia) Conference, Canberra, National Gallery of Australia; public lecture 'Wenda GU', 12/2/02, for the National Gallery of Australia; adviser to the National Museum of Australia for 2003 'Outlaws' exhibition as well as exhibition project on immigration for 2004; adviser to the National Library of Australia for forthcoming exhibition 'Liberty and Terror' on the French Revolution; adviser to Asia Society on the exhibition *Bali: a window to the twentieth-century Indonesian art*, touring Australia 2002/03; appointed to selection committee for ACT panel of the Winston Churchill Memorial Trust's Churchill Fellowships.

#### The Herbert and Valmae Freilich Foundation

PENNY, Dr Benjamin and Prof Andrew Markus (Monash University) co-conveners, 'Flows of People -Waves of Bigotry' community conference. Melbourne and Sydney, a collaboration between the Foundation, Monash University's Australian Centre for the Study of Jewish Civilisation and the Australian National Maritime Museum; with Dr Paul Connolly (University of Ulster at Jordanstown), and ACT Department of Education, workshop on prejudice and discrimination in the classroom for ACT preschool teachers; with National Library of Australia and Reconciliation Australia, conference 'International Perspectives on Reconciliation'; speakers: Dr Paul Connolly (University of Ulster at Jordanstown), Prof. Volker Gransow (Free University of Berlin), Prof. Mapule Ramashala, (Vice-Chancellor of the University of Durban-Westville, South Africa); convener, 'Our Fear of Strangers: Wogs, Refos and Illegals in the Public Imagination', conference, Adelaide with Hawke Research Institute of the University of South Australia - associated with the conference were a public lecture by Dr Margaret Reynolds, National President of the United Nations Association of Australia on 'Why is Australia so Paranoid about Refugees?'.

### **The Graduate School**

BALLARD, J., member, UN/USAID team reviewing Papua New Guinea's Medium Term Plan on HIV/ AIDS.

BOWEN, G., treasurer, Australian and New Zealand American Studies Association; member, Executive Committee, Australian and New Zealand American Studies Association.

WOOD, J., treasurer, International Biometric Society.

### **Mathematical Sciences Institute**

### **Centre for Mathematics and its Applications**

ANDREWS, B.H., member, advisory board: *Journal of Physics A: Mathematical and General.* 

BAXTER, R.J., member, editorial boards: *Journal of Geometric and Functional Analysis, Annals of Combinatorics, Theoretical Physics and Related Mathematics* (International Press); member, advisory board, Physica A; Senior Fellow: Asia-Pacific Centre for Theoretical Physics, Seoul, Korea. CAREY, A.L President, Australian Mathematical Society (to September 30).

DALEY, D.J., adviser/consultant, ACT Board of Secondary International Statistical Institute Studies; trustee, Applied Probability Trust; associate editor, *Journal of Applied Probability and Advanced Applied Probability Journal*, ANU representative on NSW Vice-Chancellor's Technical Committee on Scaling.

GANI, J.M., editor, *The Mathematical Scientist*, Springer series on Proability and its Applications; associate editor, *IMA Journal of Mathematics Applied in Medicine and Biology, Journal of Applied Probability, Utilitas Mathematica.* 

HALL, P.G., president, Bernoulli Society for Mathematical Statistics and Probability, member, editorial boards, *Australian and New Zealand Journal of Statistics, Annals of Statistics, Econometric Theory, Journal of Statistical Planning and Inference, Korean Journal of Statistics, Probability Theory and Related Fields, Statistica Sinica,* chair, Sectional Committee 1, Australian Academy of Science; chair, advisory board, Australian Mathematical Sciences Institute; chair, National Committee for Mathematics; member, Scientific Advisory Board, New Zealand Mathematical Sciences Institute; Sectional Committee 1, Royal Society of London.

HEYDE, C.C., 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, reviewer, US National Science Foundation, National Research Council of Canada.

HEGLAND, T.M., member, editorial boards, *Computational Statistics and Data Analysis, SIAM Journal of Scientific Computing*, chair, Computational Mathematics Group of ANZIAM; member, ANZIAM board.

KOVÁCS, L.G., member, editorial boards, *Periodica Mathematica Hungarica*, *Publicationes Mathematicae Debrecen*.

LIU, S., reviewer, Mathematical Reviews; Chilean Research Council; contributing editor, *Current Index to Statistics*.

LOU, Z., reviewer, Zentralblatt MATH.

McCOY, J.A. member, APESMA, Australian Mathematical Society.

McINTOSH, A.G.R., member, editorial board, *Bulletin* of the Australian Mathematical Society.

NEUMANN, B.H., honorary editor, Bulletin of the Australian Mathematical Society, The Australasian Journal of Combinatorics; editor (member of editorial board), Houston Journal of Mathematics; editorial consultant, Southeast Asian Bulletin of Mathematics; Mathematical Spectrum.

NEWMAN, M.F., member, editorial boards, *Journal of Symbolic Computation; International Journal of Algebra and Computation;* Australian Mathematical Olympiad Committee; member, problems committee, Mathematics Challenge for Young Australians; GAP (Groups, algorithms and programming) Council.

NIELSEN, O.M., member, program committee, ADM02 Data Mining Workshop.

ROBINSON, D.W., member, *Journal of Evolution Equations; Reviews in Mathematical Physics*.

TRUDINGER, N.S., 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, Selection Committee for Presidential Award: Taiwan National Science Council.

WANG, X.-J., member, editorial board, *Journal of Partial Differential Equations*.

WILSON, S.R., associate editor, *Computational Statistics & Data Analysis*, representative, Statistical Society of Australia, Australian Foundation for Science; member, Conference Advisory Committee, IBS; 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*, member, ASC16:16th Australian Statistical Conference Committee.

#### **Centre for Bioinformation Science (CBiS)**

BOOTH, H., contributor, Australian Science Festival, ArtSci in the City.

WILSON, S.R., associate editor, Annals of Human Genetics, member, editorial board, Statistical Methods in Medical Research, editor, Biometrics Section, Encyclopedia of Life Support Systems, member, NHMRC Program Grant Review Panel.

#### **Department of Mathematics**

BRYCE, R A., ANU convener, Canberra Mathematics Enrichment Program (with Aust. Math. Trust); presenter in CMEP; member, Problems Committee of the Australian Mathematics Competition; member, Problems Committee of the Mathematics Challenge for Young Australians; member, the Australian Mathematical Olympiad Committee; member, Australian Mathematics Trust Advisory Committee.

COSSEY, P J., associate editor, *Bulletin Aust MS*; Public Officer, Aust MS and AMPAI; Council member, Aust MS.

FERRARIO, L., referee for NSF, Austria; referee for Telescope Time Allocation, UK; referee for *Astronomy* & *Astrophysics* Journal; referee for *Monthly Notices of the Royal Astronomical Society* Journal.

HASSELL, A., reviewer, Mathematical Reviews.

HOWE, A A T., treasurer, Australian Mathematical Society and AMPAI.

ISAEV, A V., associate editor, *Journal Mathematical Analysis and Applications*.

LOY, R J., member, International Steering Committee, Banach Algebra Conferences.

ORMEROD, E A., academic adviser, ANU Chapter of Golden Key International Honour Society; judge, Golden Key International Showcase.

ROBERTS, S G., member and treasurer, Computational Mathematics Group.

SMYTHE, N F., Apple University Development Fund Awards Committee; proceedings editor and member, Planning Committee, AUC Conference, Adelaide University.

# National Centre for Epidemiology and Population Health

DIXON, Dr J., member, NHMRC working Party on socio-economic status and health, Health Advisory Committee; member, NHMRC QUT Steering Committee on Strengthening and extending Australia's research capacity and infrastructure as these relate to socioeconomic health inequalities and area disadvantage.

GARDNER, Dr A., member, ACT Health Human Research Ethics Committee.

ISAAC-TOUA, Dr G., member, External Reference Group, *Measuring Australia's Progress*, Australian Bureau of Statistics.

KJELLSTROM, Prof T., member of Advisory Group on Indoor air and health, Environment Australia; member of advisory group on Environmental health indicators, Commonwealth Department of Health and Ageing. McMICHAEL, Prof A.J., member, Health Advisory Committee, NHMRC; chair, Grant Review Panel (Public Health), NHMRC.

PONSONBY, Dr A-L., member, Editorial Writing Committee, Healthy Home Document on indoor air quality. Commonwealth Department of Health and Aged Care; member, Primary Prevention of Asthma, National Asthma Reference Group, Commonwealth Department of Health and Aged Care.

SIBTHORPE, Dr B., member, Steering Committee, Evaluation of the GP Education, Support and Community Linkages Program and the EPC MBS Items Component of the EPC Package, Department of Health and Ageing; member Steering Committee, Aboriginal Community Controlled Health Services Service Activity Reporting, Department of Health and Ageing.

### **National Europe Centre**

GAGE, J., organised seminars at the National Europe Centre with the Embassy of Slovenia (Professor Bogomil Ferfila, University of Ljubljana) and the Embassy of Spain (Amirah Inglis, author of *Australians and the Spanish Civil War*); supervised an intern in the Australian National Internships Program (ANIP) placed at the Department of Foreign Affairs and Trade to prepare an overview document on the Spanish Economy; with TE-GART, G., participated in the Forum on European and Australian Science and Technology (FEAST) event in Melbourne.

PAPADAKIS, Prof. E. and GAGE, J., organised seminars at the National Europe Centre with the Royal Netherlands Embassy (Mr Paul Scheffer, Dutch author and commentator; Ambassador Peter Van Walsum, former President UN Security Council), the Department of Foreign Affairs and Trade (by His Excellency, Mr Jonathan Philp, Australian Ambassador to Turkey), the Embassy of the Federal Republic of Germany (Ambassador Dr Klaus-Peter Klaiber, KCMG, Embassy of the Federal Republic of Germany), the European Commission (European Commissioner Poul Nielson, Commissioner for Development and Humanitarian Aid; Mr Jose Manuel Silva Rodriguez, Director General, Agriculture Directorate-General of the European Commission; Mr Willem Noë, European Commission DG in the Economic and financial affairs Unit.), the High Commission of Malta (The Prime Minister of Malta, The Hon. Edward Fenech-Adami), the Embassy of Spain (H. E. Mr Carlos Bastarreche Sagües, Secretary General for European Affairs, Ministry of Foreign Affairs, Spain); coordinated a workshop on Asia Pacific Studies for the Department of Education Science and Training and the Department of Foreign Affairs and Trade, members of the Public Service and the university came together to share research and ideas.

PAPADAKIS, Prof. E. & KENYON, D., coordinated a Multilateral Trade workshop for the Department of The Australian National University Annual Report 2002

Foreign Affairs and Trade, participants were from both the Public Service and the university.

PAPADAKIS, Prof. E., KENYON, D. & DRAKE-BROCKMAN, J., made a submission to a White Paper, *Advancing the National Interest* for the Department of Foreign Affairs and Trade.

PAPADAKIS, Prof. E., organised seminars at the National Europe Centre with the Embassy of Sweden, (Professor Olof Petersson, Stockholm Professor of Political Science and Research Director, The Centre for Business and Policy Studies, Stockholm), the Embassy of Poland (Professor Krzysztof Zanussi, Polish Film Director and Intellectual), the Embassy of Belgium (lecture by Mrs Annemie Neyts-Uyttebroeck, Belgian Minister of State for Foreign Affairs (Agriculture); consultant on a report prepared for the Hon. Mark Vaile, Minister for Trade, on *Engaging the New Europe: The Euro and After.* 

TEGART, G. (AM), participated in talks with policy advisers for the European Union Science and Technology Policy (in Brussels); visited the Institute for Prospective Technological Studies in Seville; prepared a report for the National Office for the Information Economy titled *A Review of European Foresighting Studies on the ICT Industry* 

# Joint research projects undertaken with universities, CSIRO and other institutions

# **Institute of Advanced Studies**

# **Research School of Astronomy and Astrophysics**

3D hydrodynamical stellar model atmospheres by Dr M ASPLUND with Dr A Nordlund (Copenhagen University), Prof. RF Stein and Mr R Trampedach, (Michigan State University).

3D Non-LTE radiative transfer by Dr M ASPLUND with Prof. M Carlsson (Oslo University).

The light elements in the early universe by Dr M AS-PLUND with Dr P Nissen (Aarhus University), Dr F Primas (ESO), Prof. DL Lambert (University of Texas, Austin), Prof. VV Smith (University of Texas, El Paso), Ms AE Garcia-Perez and Mr R Collet (Uppsala University).

The first stars and the chemical enrichment of the universe by Dr M ASPLUND, Prof. M BESSELL and Prof. J NORRIS with Dr N Christlieb (University of Hamburg), Prof. TC Beers (Michigan State University), Dr SG Ryan (Open University) and Dr W Aoki (National Astronomical Observatory of Japan).

Metal-Poor halo stars and damped Lyman-Alpha systems, by Dr M ASPLUND with Dr P Nissen (Aarhus University) and Dr M Pettini (Cambridge University).

Chemical composition of the sun, by Dr M ASPLUND with Dr C Allende Prieto, Prof. DL Lambert (University of Texas, Austin), Prof. AJ Sauval (Observatoire Royal de Belgique) and Prof. N Grevesse (Universite de Liege).

Observational signatures of stellar convection by Dr M ASPLUND with Dr C Allende Prieto, Prof. DL Lambert (University of Texas, Austin) and Dr PS Barklem (Uppsala University).

Born-again giant stars by Dr M ASPLUND with Dr F Kerber (ESO).

Search for young stellar groups in the solar neighborhood by Prof. M S BESSELL with Prof. B Zuckerman (UCLA) & 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 (ANU & University of Hamburg).

6dF Survey for halo stars by Prof. M S BESSELL with Prof. B Gibson (Swinburne), Dr J Bland Hawthorn (AAO), Prof. T Beers (MSU, USA) and Dr N Christlieb (Hamburg Observatory). BVRI photometry of young stars by Prof. M S BESSELL with Dr R Shobbrook and Prof. B Zuckerman (UCLA) & Dr I Song (UCLA).

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).

High energy gamma-ray observations using CANGA-ROO by Dr G BICKNELL with The Gamma-Ray Group of the Institute for Cosmic Ray Research at the University of Tokyo and the High Energy Astrophysics Group at the University of Adelaide.

The HIPARK survey by Prof. FH BRIGGS and Prof. KC FREEMAN with Dr J Reynolds (ATNF) Dr L Stavely-Smith (ATNF), Dr B Korbalski (ATNF), Prof. B Gibson (Swinburne), Dr M Zwaan (Melbourne) and Dr D Barnes (Melbourne).

Radio probe of the epoch of reionization by Prof. FH BRIGGS with Dr J Reynolds (ATNF) and Prof. B Erickson (Tasmania).

Nature of the z=0.005 damped Lyman-alpha absorber against 3C232 by Prof. FH BRIGGS with Dr B Wakker (Wisconsin).

The 2dF galaxy redshift survey: a cosmological survey of galaxies by Dr M M COLLESS, Dr B A PETERSON and Dr C A JACKSON, Dr S P DRIVER and Dr R De PRO-PRIS, with Drs J Bland-Hawthorn, I R Lewis, T J Bridges and R D Cannon (AAO), Dr W J Couch (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 COL-LESS with Dr K Taylor (Caltech) and 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 Armardroff, (NOAO) and Dr N Caldwell (CfA).

The variable stars of the dwarf spheroidal companions to M31 by Dr G DA COSTA with Dr T Armardroff (NOAO), Dr G Jacoby (WIYN) and Dr B Pritzl (NOAO).

The origin of globular cluster abundance anomalies clues from the main sequence by Dr G DA COSTA, Prof. J Norris, Ms L Stanford, Dr B Croke with Dr R Cannon (AAO).

Tidal structure in galactic satellites by Dr G DA COSTA, Prof. K Freeman, Mr M Coleman with Dr J. Bland-Hawthorn (AAO).

H-Alpha and infrared star formation rates for the nearby field galaxy survey by Dr LS KEWLEY and Prof. MA DO-PITA (RSAA) with Prof. M Geller (Harvard-Smithsonian Center for Astrophysics, Cambridge, MA) and Dr Rolf A Jansen (Arizona State University, Tempe).

Star formation rates in interacting starburst galaxies by Prof. M A DOPITA and M Pereira with Dr Lisa S Kewley (Harvard-Smithsonian Center for Astrophysics, Cambridge, MA) and Prof. M Capaccioli (Osservatorio Astronomico di Capodimonte, Naples, Italy).

Abundances of HII regions and starburst galaxies using stong emission lines by Prof. MA DOPITA with Dr Lisa S Kewley (Harvard-Smithsonian Center for Astrophysics, Cambridge, MA).

The COLA project: compact objects in low-powered AGN by Prof. M DOPITA with E Corbett (Anglo-Australian Observatory, NSW), Dr R P Norris (ATNF, CSIRO), Dr L S Kewley and Dr A L Zezas (Harvard-Smithsonian Center for Astrophysics, Cambridge, MA), Dr PN Appleton and Prof. C Struck (Iowa State U), Dr AP Marston (Caltech), Dr V Charmadaris (Cornell University) and Dr T Murphy (IPAC, CIT, Pasadena).

FUSE observations of NGC1068 by Prof. MA DOPITA, Dr GV BICKNELL and B GROVES with Dr GN Cecil (Univ of N Carolina, USA), Dr W Zheng (JHU, USA), Dr Z Tsvetanov (JHU, USA), Dr MG Allen (U Strasbourg, France) & Dr L Binette (UNAM, Mexico).

The high-velocity filaments in the narrow-line region of NGC 1068 by Prof. MA DOPITA and B GROVES with Dr GN Cecil (Univ of N Carolina, USA), Prof. A S Wilson (U Maryland), Dr P Ferruitand Dr E P (Observatoire de Lyon), & Dr L Binette (UNAM, Mexico).

What excites LINERs: The Brilliant Case of NGC 3998 by Prof. M A DOPITA with Dr L Dressel (STScI, USA).

Are narrow line regions in active galaxies dusty and radiation pressure dominated? by Prof. M A DOPITA, B GROVES, Dr R S SUTHERLAND with Dr L Binette (UNAM, Mexico) and Dr G N Cecil (U of N Carolina, USA).

The millennium galaxy catalogue by Dr S DRIVER with Dr J Liske (ROE), Dr N J G Cross (JHU) and Mr D Lemon (St Andrews).

Cluster luminosity function studies by Dr S DRIVER with Dr S Phillipps (Bristol) and Dr W J Couch (UNSW).

The NGST interdisciplinary scientist investigation by Dr S DRIVER with Prof. R A Windhorst, Dr S C Odewahn, Dr R Jansen (ASU), Mr S Cohen and Mr H Yan (ASU), Dr C Conselice (CalTech) and Dr I Waddington (Bristol). Red quasars from the two micron all sky survey by Dr PJ FRANCIS with Dr R Cutri and Dr B Nelson (IPAC).

Gas in high redshift galaxy clusters by Dr PJ FRANCIS with Dr BE Woodgate (NASA GSFC), Dr G Williger (Johns Hopkins) and Dr P Palunas (UT Austin).

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 Capaccioli (Osservatorio di Capodimonte, Naples); Prof. O Gerhard (University of Basel); Prof. R Kudritzki and Dr R Mendez (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).

Observations with the planetary nebulae spectrograph 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 B PETERSON and Prof. K FREEMAN with the MACHO Team (several institutes including 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, Prof. J Norris with 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 Olszewski (Steward Observatory).

The AAO stellar population survey by Prof. K FREE-MAN and Prof. J NORRIS with Prof. G Gilmore (Cambridge); Prof. R Wyse (JHU).

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).

Studies of the outer regions of galaxy disks by Prof. K FREEMAN with Dr M Pohlen (IAC).

The RAVE collaboration: an international program to measure 50 million stellar radial velocity by Prof. K FREE-MAN with a team of collaborators from Australia, Germany, UK, US, Sweden, France, Italy.

Structure of the galactic bulge from the MACHO red clump stars by Dr R FUX and Dr T AXELROD with Dr P Popowski (MPI Garching, Germany).

The evolution of the local radio source populations by Dr C JACKSON with Dr E M Sadler (U of Sydney) and the 2dFGRS team.

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.

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 (CSIRO/ATNF).

Deep radio imaging of the Chandra Deep Field South by Dr C JACKSON with Prof. Dr A Koekemoer et al. (STScI) and R Norris (CSIRO/ATNF).

A pilot 20 GHz radio survey with the Australia Telescope Compact Array by Dr C JACKSON with Prof. R Ekers, Dr L Staveley-Smith (CSIRO/ATNF) and Dr E Sadler (Sydney).

Radio source counts and galaxy populations at low radio frequencies and flux densities by Dr C JACKSON with Dr N Kassim (NRL).

The nature of nearby high HI mass-to-light ratio field galaxies by Mr B WARREN, Dr H JERJEN, Prof. K C FREEMAN with Prof. L Staveley-Smith (ATNF).

Search for the cosmological fingerprints in the supergalactic plane by Dr H JERJEN with Prof. M Valtonen, Mr R Rekola and Dr L Takalo (Tuorla Observatory, Finland).

The evolution of dwarf elliptical galaxies: nature or nurture? by Dr G DA COSTA, Dr H JERJEN with Prof. B Binggeli (Astronomisches Institut Basel, Switzerland) and Dr M Rejkuba (European Southern Observatory, Germany).

Spectroscopic measurements of an exceptional gravitational lens by Dr H JERJEN with Dr R A Cabanac, Dr C Lidman, and Dr A O Janusen (European Southern Observatory).

Bar pattern speed and disk kinematics in early-type dwarf galaxies by Dr H JERJEN with Dr V Debattista (Institute for Astronomy, ETH Zurich, Switzerland) and Prof. O Gerhard and Mr F Barazza (Astronomisches Institut Basel, Switzerland).

VLT surface photometry and isophotal analysis of earlytype dwarf galaxies in the Virgo cluster by Dr H JERJEN with Mr F Barazza and Prof. B Binggeli (Astronomisches Institut Basel, Switzerland).

Dynamics of the shearing sheet by Dr A J KALNAJS with Prof. A Toomre (MIT).

The most metal deficient stars by Prof. J E NORRIS, Prof. M S BESSELL and Dr M ASPLUND with Dr W Aoki (National Astronomical Observatory, Japan), Prof. T C Beers (Michigan State University), Dr N Christlieb (Hamburger Sternwarte, Germany) and Dr S G Ryan (Open University, United Kingdom).

Carbon-rich metal-poor stars by Prof. J E NORRIS and Prof. M S BESSELL with Dr H Ando and Dr 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: magnesium isotope ratios in Omega Centauri and other clusters by Prof. J E NORRIS, Dr G S DA COSTA and Ms L Stanford, with Dr J Lattanzio (Monash University) and Ms I Ivans (California Institute of Technology).

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).

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).

The MAGNUM project by Dr B PETERSON with Prof. Y Yoshii (Institute of Astronomy, University of Tokyo) and Prof. Y Kobayashi (National Astronomical Observatory of Japan).

The Tokyo Institute of Astronomy Schmidt Telescope Camera by Dr B PETERSON with Prof. K Kawara (Institute of Astronomy, University of Tokyo).

The high-Z SN search by DR B P SCHMIDT with Dr N Suntzeff, Dr C Smith (CTIO); Dr A Clocchiatti (U Catolica); Prof. R Kirshner, Dr P Challis, Dr S Jha, Dr T Matheson (Harvard); Dr B Leibundgut, Dr J Spyromilio, Dr J Solleman (ESO); Dr M Phillips (Carnegie); Prof. C Stubbs (UW); Dr A Filippenko, Dr R Chornock (Berkeley); Dr J Tonry, Dr B Barris (Hawaii); Dr A Riess (STScI); Dr P Garnavich and Dr S Holland (Notre Dame).

The essence project by Dr B P SCHMIDT with Dr N Suntzeff, Dr C Smith, Dr A Rest (CTIO); Dr A Clocchiatti (U Catolica); Prof. R Kirshner, Dr P Challis, Dr T Matheson (Harvard); Dr B Leibundgut, Dr J Spyromilio, Dr J Solleman (ESO); Dr M Phillips (Carnegie); Prof. C Stubbs, DR A Becker (UW); Dr A Filippenko, Dr R Chornock, Dr S Jha (Berkeley); Dr J Tonry, Dr B Barris (Hawaii); Dr A Riess (STScI); Dr P Garnavich and Dr S Holland (Notre Dame).

Supernova intensive study with HST by B P SCHMIDT with Prof. R Kirshner (Harvard), Dr D Branch (Oklahoma), Prof. R Chevalier (Virginia), Dr A Filippenko (Berkeley), Dr C Fransson (Stockholm), Dr B Leibundgut (ESO), Dr N Panagia (STScI), Dr M Phillips and Dr N Suntzeff (CTIO) and Prof. C Wheeler (Texas).

The Southern Edgeworth Kuiper Belt survey by Dr B P SCHMIDT with Dr T Axelrod (Arizona); Prof. C Alcock, Dr J Goldader (U Penn); Dr K Cook and Dr S Marshall (LLNL).

The REACT gamma ray burst study by Dr B P SCHMIDT and Mr P PRICE with Dr T Axelrod (Arizona), Dr S Kulkarni and Dr F Harrison (CalTech) and Dr D Frail (NRAO).

Southern all sky supernova survey by Dr B P SCHMIDT and Ms M. SALVO with Dr M Ashley (UNSW).

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).

Optical/Near-IR spectra of ABG stars by Dr P R WOOD with Dr A Lancon (University of Strasbourg).

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 (Leiden), Dr M Cioni (ESO) and Prof. A Omont (IAP Paris).

Orbital velocities of Symbiotic Stars by Dr P R WOOD with Dr K Hinkle, 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).

High disperion spectra of variable red giants in the Magellanic Clouds by Dr P R WOOD with Dr M Cioni (ESO).

# **Research School of Biological Sciences**

#### **Comparative Genomics**

Genomic imprinting in marsupials by J GRAVES and J DEAKIN with Dr K Mate, Macquarie University.

Evolution of the marsupial and monotreme immune responses and immune responses genes by J GRAVES and J DEAKIN with Belov K (Australian Museum) and R Miller (Albuquerque, New Mexico).

Characterisation of human RBMX, a candidate for Xlinked mental retardation by J GRAVES and M DEL-BRIDGE with Dr C Shwartz, JC Self Research Institute, South Carolina, USA.

Characterisation of genes for cognitive abilities on the human X chromosome in tammar wallaby by J GRAVES and M DELBRIDGE with Dr Horst Hameister and Dr Hildegard Kehrer-Sawatzki, University of Ulm, Germany.

Characterisation of human RBMX, a candidate for Xlinked mental retardation by J GRAVES and M DEL-BRIDGE with Dr Jozel Gecz, University of Adelaide and DrSeong-Seng Tan, Howard Florey Institute.

Characterisation of X homologues of Y located spermatogenesis genes by J GRAVES and M DELBRIDGE with Dr Michael Mitchell, INSERM, Marseille, France.

The evolution of sex chromosomes in the Agamid lizards by J GRAVES and A GAETH with Assoc. Prof. A George, Dr S Sarre, University of Canberra.

The evolution of sex determination in birds and reptiles by J GRAVES and A GAETH with Assoc. Prof. S Edwards, University of Washington, Seattle, USA.

The Evolution of sex chromosomes in Scincid lizards by J GRAVES and A GAETH with Prof. R Shine, University of Sydney.

Construction of a comparative Y chromosome DNA chip by J GRAVES and N SANKOVIC with GENESCAN Australia, Melbourne.

Sex determination in the tammar wallaby by J GRAVES and N SANKOVIC with Prof. MB Renfree, Dr A Pask, Dr D Park, University of Melbourne.

Marsupial X Chromosome Inactivation by J GRAVES and M WAKEFIELD with C M Disteche, Department of Pathology, University of Washington, Seattle, USA.

Sex determination in birds by J GRAVES with Dr AH Sinclair, Royal Children's Hospital, Melbourne.

Construction of a BAC library for the tammar wallaby by J GRAVES with Dr K Nicholas, University of Melbourne.

Marsupial phylogeny by J GRAVES with Dr M Westerman, La Trobe University.

Marsupial intersex animals by J GRAVES with Dr P Woolley, La Trobe University.

Mapping globin genes in marsupials and monotremes by J GRAVES with Dr RM Hope, University of Adelaide.

Characterisation of ATRY in marsupials by J GRAVES with Dr V Harley, Prince Henry's Institute of Medical Research, Melbourne.

Histone binding and chromatin domains in marsupial X inactivation and development by J GRAVES, M WAKE-FIELD and I GREAVES with Dr D Tremethick and Dr J Gready, John Curtin School of Medical Research.

Genetics of the tammar wallaby by J GRAVES, M WAKEFIELD, M DELBRIDGE, J DEAKIN, A GAE-TH, F GRUETZNER, E GAL'LINO and D CARVAL-HO with Prof. W Cooper, Macquarie University.

#### **Developmental Biology**

Development of the somatosensory system in the wallaby by RF MARK and LR MAROTTE with PME Waite, UNSW.

Chemical atlas of the wallaby brain by LR MAROTTE with Assoc. Prof. KWS Ashwell and Prof. G Paxinos, University of NSW.

Anatomy of the hypothalamus of the developing and adult wallaby by LR MAROTTE with Cheng Gang and Assoc. Prof. KWS Ashwell, University of NSW.

Expression of developmental markers in the brain of the wallaby pouch young by LR MAROTTE with Assoc. Prof. KWS Ashwell, University of NSW.

Expression of developmental markers in the brain of the wallaby pouch young by LR MAROTTE with Dr J Mai, University of Dusseldorf, Germany.

Cone visual pigments of the tammar wallaby by LR MAROTTE with Dr SS Deeb, University of Washington, USA.

Development of thalamocortical synapses in the somatosensory cortex of the wallaby by LR MAROTTE and DL FLETT with DR CA Learney, Massachusetts Institute of Technology, USA.

Expression of Brain Derived Neurotrophic Factor and TrkB in the developing retinocollicular system of the wallaby by LR MAROTTE and M VIDOVIC with Dr S Jhaveri, Massachusetts Institute of Technology, USA.

#### **Ecosystem Dynamics**

Effects of elevated [CO2] on hydraulic architecture of euclypt seedlings by MC BALL with Dr B Atwell, Macquarie University.

Interactive effects of salinity and nutrients: linking physiological processes with patterns in mangrove forest structure by MC BALL with Drs C Lovelock and I Feller, Smithsonian Institution, USA.

Effects of salinity on freeze-induced embolism in mangroves by MC BALL with S Stuart and Dr NM Holbrook, Harvard University, USA.

Strategies of water use in dry rainforest tree species: linking hydraulic architecture and function by MC BALL, B CHOAT with Dr JAM Holtum, James Cook University.

Biomechanics of freezing injury in evergreen tree seedlings by MC BALL, MJ CANNY with Dr J Wolfe, University of New South Wales.

Hyperspectral remote sensing and image analysis of chlorophyll, carotenoid, and anthocyanin levels in leaves of the snow gum, Eucalyptus pauciflora, during winter acclimation and deacclimation by MC BALL, AM GILMORE, K SIEBKE and D BARKER with Dr AB Nicotra, School of Botany and Zoology.

Heat stress induced photo-bleaching in corals by MC BALL, K SIEBKE with Dr P Ralph, University of Technology, Prof. AWD Larkum, University of Sydney and Dr J Wolfe, University of New South Wales.

Modelling the dynamics of vegetation patches with age structured models by B BARNES with Dr H Sidhu, University of NSW.

Dynamical systems approach to carbon modelling by B BARNES with Dr M Raupach, CSIRO Land and Water.

Nitrogen fixation by endophytic bacteria in sugarcane by MJ CANNY with Dr E Ortega, Department of Plant Physiology, University of Havana.

Protection of nitrogenase from O2 in colonies of Gluconacetobacter by MJ CANNY with Dr Z Dong, St Mary's University, Halifax and Dr K Vessey, Department of Plant Science, University of Manitoba.

Management of extracellular ice in frosted herbaceous plants by MJ CANNY with Prof. ME McCully, CSIRO Division of Plant Industry.

Long-term movement of Fynbos and succulent Karoo biomes of Southern Africa by I DAVIES with Dr GF Midgley, National Botanical Institute Cape Town, South Africa.

Landscape patterns in Garrigue and Brolla vegetation of the Garraf National Park, Catalonia, Spain by DAVIES I with Dr S Lavorel, Centre d'Ecologie Fonctionelle et Evolutive, CNRS, France.

Interaction of climate, landscape pattern and fire by I DAVIES with Drs G Cary, S Lavorel, R Keane, R Gardner, National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara, USA.

General spatialised ecological simulator by I DAVIES with Drs J Gignoux, D Hill and A Roche. École Normale Supérieure, Ecologie, and Institut Supérieur d'Informatique, de Modélisation et de leurs Applications, France.

Modelling the responses of Eastern US forests to climate change by I DAVIES with Prof. H Shugart and DL Druckenbrod, University of Virginia, USA.

Long-term population analysis, interpretation and modelling dynamics of rainforests by I DAVIES with Prof. JH Connell, University of California, Santa Barbara, USA.

Suitability of tree taper formula by C DEAN with Dr V LeMay, University of British Columbia, Canada.

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Modelling growth and decay of Eucalyptus regnans by C DEAN with Drs M Brown, Forestry Tasmania, D Ashton, University of Melbourne and J Read, Monash University.

Catchment level modelling of carbon sequestration and fluxes in E. regnans forests and Qld woodland by C DEAN with B Mackey, School of Resources Environment and Society.

Light harvesting and photoprotective energy dissipation in engineered mutants of Arabidopsis thaliana by A GIL-MORE with Assoc. Prof. KK Niyogi and Dr X-P Li, University of California, Berkeley, USA.

Analysis of the excited state behaviour and potential interactions between coral fluorescent proteins and zooxanthellar photosystems by A GILMORE with Dr A Salih and Prof. T Larkum, Electron Microscopy Unit and School of Biological Sciences, University of Sydney.

Analysis of the excited state behaviour and potential interactions between coral fluorescent proteins and zooxanthellar photosystems by A GILMORE with Prof. H Yamasaki and Assoc. Prof. R van Woesik, University of the Ryukyus, Japan.

Fluorescence lifetime analyses of light harvesting and photoprotective energy dissipation in higher plants and in vivo excited state behaviour of fluorescent corals and their zooxanthellar endsymbionts by A GILMORE with Prof. S Itoh, Department of Physics, University of Nagoya, Japan

The influence of elevated CO2 on freeze tolerance of Eucalyptus pauciflora by BR LOVEYS and MC BALL, with Dr B Loveys, CSIRO Plant Industry.

Modelling the relationship between fire frequency and vegetation patterns in the tropical savannas of northern Australia: Case studies using NOAA-AHRR data by B MCBETH with Drs AC Spessa and IC Prentice, Max Planck Institute for Biogeochemistry, Germany.

Estimating pasture productivity using satellite imagery by M RODERICK and I HUME with Dr T McVicar, CSIRO Land and Water.

Rangeland monitoring using satellite imagery by M RO-DERICK with Drs A Holm, University of WA and S Cridland, Environmental Resource Information Network, ACT.

Optimality in the soil-vegetation-atmosphere system by M RODERICK with S Schymanski and Prof. Murugesu Sivapalan, Centre for Water Research, University of WA.

Development of techniques for modelling fire regimes at large spatial scales by SH ROXBURGH with Dr A Spessa, Global Ecology & Paleoclimatology Groups, Max-Planck-Institute for Biogeochemistry, Germany.

Landscape-scale modelling of forest composition, fire regimes and carbon dynamics within Australian ecosystems by SH ROXBURGH with Dr B Mackey, School of Resources Environment and Society. Competition and coexistence in an Australian understorey forest community by SH ROXBURGH with Dr P Chesson, University of California, Davis, USA.

The role of disturbance in maintaining biological diversity by SH ROXBURGH with Drs K Shea, Pennsylvania State University, USA, and JB Wilson, University of Otago, New Zealand.

Temperature tolerance of snow scorpionflies by K SIEB-KE with Dr C Palmer, School of Botany and Zoology.

#### **Environmental Biology**

Using theory of optimal water use to improve the GRASP vegetation model by TN BUCKLEY and GD FARQUHAR with Dr Greg McKeon and Mr J Carter, QLD-DNRM.

Linked hydromechanical and biochemical model of stomatal conductance by TN BUCKLEY and GD FARQU-HAR with Prof. KA Mott, Utah State University.

Modeling subalpine forest communities in a heterogeneous landscape in Wyoming, USA by TN BUCKLEY with Dr DW Roberts, Utah State University and Dr Niklaus Zimmermann, ETH Zürich.

Optimality-based analysis of tree allometry, sustainability of carbon gain, and limits to height growth by TN BUCK-LEY with Dr DW Roberts, Utah State University.

Mechanistic basis of emergent computation in dynamic patchy stomatal conductance by TN BUCKLEY with Prof. KA Mott and Prof. DA Peak, Utah State University.

Carbon and oxygen isotope discrimination in relation to resource acquisition in plants of southwestern Australia by L CERNUSAK with Prof. John Pate, School of Plant Biology, The University of Western Australia.

The influence of elevated CO2 and nutrient regime on leaf temperature in a C3C4 plant community EJ ED-WARDS and JR EVANS with B Loveys, Ecosystem Dynamics Group.

The effect of nocturnal warming on plant carbon gain by EJ EDWARDS with B Loveys and M Ball, Ecosystem Dynamics Group.

Nitrogen discrimination during plant growth under elevated CO2 by JR EVANS with Prof. William Stock, University of Cape Town, South Africa and Prof. Thomas Vogelmann, University of Vermont, USA.

Isotope discrimination and wheat performance by GD FARQUHAR, SC WONG and K GAN with Drs R Richards, A Condon and G Rebetzke, CSIRO Plant Industry.

Studies of isotope dynamics in lupins and eucalypts by GD FARQUHAR and L CERNUSAK with Prof. JS Pate, University of Western Australia.

The role of thylakoid architecture on chloroplast electron transport by GD FARQUHAR and I TREMMEL with Prof. E Weis, Wilhelms University of Muenster Schlossgarten, Germany. Isotope discrimination in tree rings by GD FARQUHAR with MM BARBOUR and Dr A Walcroft, Landcare Research, New Zealand.

Characterisation of NH4+ and ferrous iron transport across the peribacteroid membrane of soybean nodules by B KAISER with David A. Day, The University of Western Australia.

Functional analysis of the high-affinity NH4+ transporter family AMT by BN KAISER with Prof. ADM Glass, The University of British Columbia, Canada.

Metal transport across the peribacteroid membrane of soybean symbiosomes by BN KAISER with Prof. DA Day, University of Western Australia.

The genetics of water-use efficiency by J MASLE and GD FARQUHAR with National Science Foundation Consortium.

The molecular physiology of ammonium transport in rice by J MASLE with Dr Upadhyaya and Dr P Ryan, CSIRO and Dr M Udvardi, Max Plank Institute for Molecular Plant Physiology, Germany.

Waterlogging tolerance of dryland cereal crops by M SCHORTEMEYER with Mr AI Malik, Dr TD Colmer and Prof. H Lambers, University of Western Australia, and Dr TL Setter, Department of Agriculture, WA.

Modelling salt uptake and salinity tolerance of wheat by M SCHORTEMEYER with Prof. H Lambers, University of Western Australia.

The use of phage display technology in Alzheimer's Disease research by J SHAW with Prof. Ralph Martins, The McCusker Foundation for Alzheimer's Disease Research, Department of Psychiatry and Behavioural Science, University of Western Australia.

Examining the hydrogen isotopic composition of plant lipids, with a view to understanding better how the composition reflects environmental change by H STUART-WILLIAMS with K Grice, Curtin Institute of Technology.

#### **Genomic Interactions**

Analysis of Sinorhizobium meliloti grown under acid stress conditions by MA DJORDJEVIC and BG ROLFE with Dr W Reeves, Murdoch University.

Analysis of regulatory effects of tspO mutation upon protein expression in stationary phase in Sinorhizobium meliloti by MA DJORDJEVIC and BG ROLFE with Prof. de Bruijn CNRS Toulouse.

Analysis of nitrogen regulatory proteins in Sinorhizobium meliloti and bacteroid protein expression patterns by MA DJORDJEVIC with Dr Kahn, CNRS Toulouse.

Proteomic analysis of cell surface proteins in Mycoplasma by MA DJORDJEVIC with Dr S. Djordjevic Elizabeth Mc Arthur Agricultural Institute and Dr S. Cordwell APAF (Macquarie University). Nutrient deprivation responses in peat grown cells of Sinorhizobium meliloti by MA DJORDJEVIC with Prof. L Copeland and Ms L Feng Sydney University.

Analytical chemistry of carbohydrates and amino acids by CH HOCART with Dr J. Bertolini CSL, Blood Products Division.

The structural elucidation of a cancer marker by CH HOCART with Dr V Crane, Biotron.

HPLC and GC/MS analysis of amino acids in developing chick pea seeds by CH HOCART with Mr P Chiaiese and Drs L. Tabe and T.J.V. Higgins CSIRO (Plant Industry).

Proteomic analysis of Medicago truncatula root development by U MATHESIUS and BG ROLFE with Prof. Cook UC Davis and J Frugoli, Clemson University.

Regulation of apoptosis by nbl expression in patients with chronic lymphocytic leukaemia and in normal controls. Possible implications for chemotherapy sensitivity by H NAORA with Dr IW Prossor, Ms M McNiven and Ms M Brun, The Canberra Hospital.

Studies on nbl expression in surgically removed cancer tissues by H NAORA with Prof. K Sorimachi, Dokkyo University, Medical School, Japan.

Quorum sensing mechanisms in Sinorhizobium meliloti by BG ROLFE and H-C CHEN with Prof. Bauer, Horticulture and Crop Science Ohio.

Proteome analysis of developing nodule tissue in Medicago by BG ROLFE and MA DJORDJEVIC with Dr E Kondorosi and Prof. A Kondorosi.

The characterisation of a supernodulation mutant of the legume Medicago truncatula by BG ROLFE and U MATHESIUS. with Dr Julia Frugoli (Clemson University, USA) and Prof. Douglas Cook (UCLA Davis, USA).

Plant detection of quorum sensing compounds by BG ROLFE and U MATHESIUS. with Prof. W. Dietz Bauer and Dr Max Teplitski (Ohio State University, USA).

Development of rice Rhizobium inoculant by BG ROLFE and JJ WEINMAN with Bio-Care Technology Pty Ltd NSW.

Molecular genetic analysis of rice-associating Rhizobium strains by BG ROLFE, JJ WEINMAN and MA DJORD-JEVIC with FB Dazzo, MSU, Michigan, USA.

Global analysis of protein levels in Sinorhizobium meliloti by BG ROLFE, JJ WEINMAN and MA DJORDJEVIC with the Australian Proteome Analysis Facility (APAF), Macquarie University.

Molecular taxonomy of snow algae by M SKOTNICKI with Dr H. Ling (CSIRO Antarctic Division).

Genetic diversity and molecular virology of subantarctic plants from Heard and Macquarie Islands by M SKOT-NICKI with Dr P. Selkirk (Macquarie University), Dr J. Whinam (Tasmanian Parks and Wildlife), Dr D. Bergstrom (Antarctic Division), Dr P. McBride (Environment Australia). Genetic diversity and climate change response of Antarctic mosses by M SKOTNICKI with Dr P. Selkirk (Macquarie University), Dr S. Robinson and Ms J. Wasley (University of Wollongong), Dr D. Bergstrom (Antarctic Division), Dr J. Whinam (Tasmanian Parks and Wildlife).

The genetic diversity and climate change response of Antarctic mosses by M SKOTNICKI with Dr R. Bargagli (University of Siena, Italy), Drs R. Lewis-Smith, P. Convey and D. Walton (British Antarctic Survey, Cambridge), Dr P. Broady (University of Canterbury, New Zealand), Dr Yves Frenot (University of Rennes, France), and Prof. S. Chown (University of Pretoria, South Africa).

The biodiversity of subantarctic and Antarctic fungal pathogens by M SKOTNICKI with Drs P. Selkirk and H. Nevalainen (Macquarie University).

The genetic diversity and molecular virology of subantarctic plants from Macquarie Island by M SKOTNICKI with Prof. E. Kitajima (University of Sao Paulo, Brazil).

Compiling a data base of Sinorhizobium meliloti proteins for the international scientific community by GF WEILL-ER and MA DJORDJEVIC with Dr Kahn CNRS Toulouse.

Simulation and Model-based Optimisation in Computational Biology by GF WEILLER with Dr D. P. Kroese and Dr J. M. Keith, University of Queensland.

Genetic programming approach for detecting DNA recombination by GF WEILLER with Dr M Fuchs, SAP, Filiale Walldorf, Germany.

DNA sequence alignment respecting recombination events by GF WEILLER with Prof. R Giegerich and Dr S Kurtz, Faculty of Technology, University of Bielefeld, Germany.

Distance methods for the reconstruction of recombinant phylogenies by GF WEILLER with Prof. R Giegerich, Faculty of Technology, University of Bielefeld, Germany.

Investigations of molecular mechanisms causing cold sterility in rice by JJ WEINMAN and Rolfe BG with Mr RL Williams, NSW Dept of Agriculture, Leeton, NSW, and CRC for Sustainable Rice Production.

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

Molecular control of coral development by EE BALL and DC HAYWARD with Dr DJ Miller and associates (James Cook Univ).

Phylogenetics of developmentally important genes in insects by EE BALL and DC HAYWARD with Dr J W Trueman, Botany and Zoology.

Molecular control of grasshopper development by EE BALL and DC HAYWARD with Patel, NH (University of Chicago).

Comparative development of glial cells in grasshopper and Drosophila by EE BALL with GM Technau (Johannes Gutenberg University). Biology of the SOLH protein in the olfactory system by HD CAMPBELL with Assoc. Prof. Alan Mackay-Sim, Griffith University, Brisbane.

Chromosome mapping of novel mouse and human genes involved in brain, muscle and developmental processes by HD CAMPBELL with Dr GC Webb, Dept of Animal Science, Livestock Systems Alliance, Roseworthy Campus, and Dept of Obstetrics and Gynaecology, University of Adelaide, Queen Elizabeth Hospital, Adelaide.

Chromosome mapping of human genes in relation to genetic disorders by HD CAMPBELL with Dr H Eyre and Dr DF Callen, Centre for Medical Genetics, Dept of Cytogenetics and Molecular 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.

Regulable mouse transgenes by HD CAMPBELL with Dr KI Matthaei, JCSMR and Dr Heidi Scrable, University of Virginia.

The human and mouse homologues of the Drosophila flightless-I gene. Deletion of the FLII gene in the Smith-Magenis syndrome. Transgenic mice carrying the FLII gene by HD CAMPBELL with Dr K-S Chen and Prof. JR Lupski, Baylor College of Medicine, Houston.

Cell and molecular biology of mammalian tweety-related genes by HD CAMPBELL with Dr MF Crouch, GroPep, Ltd, Adelaide.

Dictyostelium discoideum genes by HD CAMPBELL with Dr PR Fisher, La Trobe University, Melbourne.

Studies on FLII in relation to microtubules by HD CAMPBELL with Prof. S. Hamm-Alvarez, John Stauffer Pharmaceutical Sciences Center, University of Southern California.

Studies on the role of FLII in mammalian cells by HD CAMPBELL with Y-H Lee and Dr Michael Stallcup, Department of Pathology, University of Southern California.

RRP20, a novel gene required for pre-18SrRNA processing in Saccharomyces cerevisiae by GD CLARK-WALK-ER and S SENAPIN, with Dr M-C Daugeron, Centre Génétique Moleculaire, CNRS, Gif-sur-Yvette, France.

NADH dehydrogenase genes are encodes by the mitochondrial genome of Debaryomyces occidentalis by GD CLARK-WALKER with C Fernet and Prof. M Claise, Centre Génétique Moleculaire, CNRS, Gif-sur-Yvette, France.

Interaction between the DNA repair protein Pso2 and the mitochondrial genome maintenance protein Mgm101 in Saccharomyces cerevisiae by GD CLARK-WALKER with Dr M Chovanec, Dept of Molecular Genetics, Cancer Research Institute, Bratislava, Slovak Republic.

The nature of rho zero-lethality suppressor genes of Schizosaccharomyces pombe by GD CLARK-WALKER with Dr Nathalie Bonnefoy, Centre Génétique Moleculaire, CNRS, Gif-sur-Yvette, France. Annotation of the mosquito genome project: evolution of supergene families associated to insecticide resistance by C CLAUDIANOS with Dr Hilary Ranson and Prof. Janet Hemingway (University of Liverpool, UK) and Prof. Rene Feyereisen (INRA, France).

Malaria parasite genes involved in infection and immunity by C CLAUDIANOS with Prof. Robert Sinden, Imperial College, UK, Dr Johannes Dessens, Imperial College, UK, Dr Paul Foster, JCSMR, ANU and Prof. Alan Cowman, WEHI, Australia.

The role of neuroreceptors related to AChE in development by C CLAUDIANOS, R SAINT, P SMIBERT, R MALESZKA and HD Campbell with Dr John Oakeshott (CSIRO Entomology, Aus).

Molecular control of locust moulting by DC HAYWARD and EE BALL, with Dhadialla TS (Dow Chemical), Wyatt GR (Queens Univ) and Walker VK (Queens Univ).

Evolution of RXR/USPs in insects by DC HAYWARD, JW TRUEMAN, R MALESZKA and EE BALL, with Bastiani, MJ (University of Utah) and Whiting, M (Brigham Young University).

Role of the pbl gene in Drosophila mesoderm development by R SAINT with Dr Arno Muller, Institut fur Genetik, Heinrich-Heine-Universitaet Duesseldorf, Duesseldorf, Germany.

Analysis of the genome of the coral, Acropora millepora by R SAINT with Dr David Miller, Comparative Genomics Centre, Molecular Sciences Building, James Cook University, Townsville.

Role of the Drosophila dead ringer/retained gene in central nervous system development by R SAINT with Dr Kazunaga Takizawa, Laboratory for Neural Network Development RIKEN Center for Developmental Biology 2-2-3 Chuo Kobe 650-0047, Japan.

Analysis of the Drosophila ortholog of the proto-oncogene FOR/WWOX by R SAINT with Dr Robert Richards, Centre for the Molecular Genetics of Development, University of Adelaide.

#### **Molecular Plant Physiology**

Application of computational chemistry to studying the catalytic mechanism of Rubisco by TJ ANDREWS with Dr J Gready and Dr H Mauser, John Curtin School of Medical Research.

The activation and catalytic mechanism of the plant carbon-fixing enzyme, Rubisco by TJ ANDREWS, HJ KANE and SM WHITNEY with Assoc. Prof. R Lilley, University of Wollongong, Dr P Curmi, University of NSW and Dr A Portis, University of Illinois.

Crystallographic structural studies of Rubisco activase by TJ ANDREWS, HJ KANE and SM WHITNEY with Dr I Andersson, Swedish Agricultural University, Uppsala.

Study of stress caused by unfolded proteins in plastids of transplastomic tobacco by TJ ANDREWS, SM WHIT-

NEY with Dr CS Pike, Dept Biology, Franklin and Marshall College, PA, USA.

Effects of high temperatures on coral photosynthesis and bleaching by MR BADGER and L FRANKLIN with Prof. T Larkum, University of Sydney, and Dr O Hoegh-Guldberg, University of Queensland.

Secretion of \_-glucuronidase in plants, yeast and bacteria by MR BADGER and GD PRICE with Dr R Jefferson, Dr A Killian and Mr T Ngyuen, CAMBIA.

The use of gene transactivation technologies in breeding and genetic analysis of rice by MR BADGER and GD PRICE with Dr R Jefferson, Dr A Killian, Mr X Fu and Ms S Koerniati, CAMBIA.

Investigations of alternative oxidase respiration activity in plants using mass spectrometric techniques by MR BADGER with Prof. DA Day and Dr H Millar, Department of Biochemistry and Molecular Biology, University of Western Australia.

Investigations of CO2 acquisition mechanism in dinoflagellates by MR BADGER, TJ ANDREWS, GD PRICE, SM WHITNEY with Dr DC Yellowlees and Mr W Leggat, Department of Biochemistry and Molecular Biology, James Cook University.

Trehalose metabolism in C4 grasses by O GHANNOUM with Prof. Jann Conroy, University of Western Sydney and Dr Matthew Paul, IACR-Rothamsted, UK.

Analysis of the CO2 Concentrating mechanism in cyanobacteria by GD PRICE and MR BADGER with Dr T Omata, University of Nagoya, Japan.

Development of a cyanobacterial bioreactor by GD PRICE with D Desai, CSIRO-CMIT, Highett, Melbourne.

Molecular and immunological analysis of carboxysomes by GD PRICE with Ludwig M, Department of Biological Sciences, Macquarie University.

Mechanisms influencing the growth and distribution of C4 grasses under rising CO2 concentrations by S VON CAEMMERER and O GHANNOUM with Prof. JP Conroy, University of Western Sydney, Hawkesbury.

Analysis of metabolites in transgenic Flaveria bidentis ( a C4 dicot) with reduced amounts of Rubisco by S VON CAEMMERER with Dr RT Furbank, CSIRO Plant Industry, Canberra.

Construction of transgenic Flaveria bidentis (a C4 dicot) with reduced amounts of mesophyll carbonic anhydrase by S VON CAEMMERER with M Ludwig, Macquarie University and Dr RT Furbank, CSIRO Plant Industry, Canberra.

#### **Photobioenergetics**

Incorporation of Mn-dimer complexes into a synthetic peptide by K AHRLING with Dr Sally Brooker, Department of Chemistry, University of Otago, Dunedin, NZ.

Investigations on light stress in photosynthesis by JM AN-DERSON and WS CHOW with Prof. G Öquist, Department of Plant Physiology, Umea, Sweden.

Role of redox state of cytochrome bf complex in signal transduction in thylakoid membranes by JM ANDER-SON with Prof. E-M Aro, Department of Plant Physiology and Molecular Biology, Turku, Finland.

Photosynthetic and respiratory electron flow in cyanobacteria by WS CHOW with Prof. Y-I Park, Department of Biology, Chungnam National University, South Korea.

Photosynthesis and growth of Nostoc flagelliforme by WS CHOW with Prof. DJ Shi, Department of Photosynthesis, Institute of Botany, Chinese Academy of Sciences, China.

Recovery of Photosystem II from photoinactivation by WS CHOW with Prof. J He, Natural Sciences Academic Group, Nanyang Technological University, Singapore.

Low temperature inhibition of photosynthetic assimilation in grapevines by L HENDRICKSON and WS CHOW with Dr RT Furbank, CSIRO Plant Industry, Canberra.

Structural studies of the interlukin-4 protein by R RAZEGHIFARD with Dr V Hilser, Department of Human Biological Chemistry and Genetics, University of Texas Medical Branch.

Effects of photoacclimation on the oxygen evolving reactions in photosynthesis by T WYDRZYNSKI with Dr J Beardall, School of Biological Sciences, Monash University, Melbourne.

Analysis of Photosystem II in cyanobacterial mutants by T WYDRZYNSKI with Dr J Eaton-Rye, Department of Biochemistry, University of Otago.

Analysis of the substrate water exchange reactions in Photosystem II by T WYDRZYNSKI with Dr W Hillier, Department of Chemistry, Michigan State University.

The Origin of oxygen on earth — the innovation and evolution of photosynthetic water oxidation by T WYDRZYNSKI with Prof. GC Dismukes, Department of Chemistry, Princeton University, and Prof. VV Klimov, Institute for Basic Biological Problems, Russian Academy of Science.

#### **Plant Cell Biology**

Localisation of cytoskeleton related proteins in Arabidopsis and pea by DA COLLINGS with Dr Eric Davies, North Carolina State University, USA.

Peroxisome distribution and function during plant cell division by DA COLLINGS with Dr JDI Harper, Charles Sturt University, Wagga Wagga, NSW.

Peroxisome distribution and function during plant cell division by DA COLLINGS with Dr K Vaughn, USDA-ARS, Southern Weed Science Laboratory, USA.

Localisation of cytoskeleton related proteins in Arabidopsis and pea by DA COLLINGS with Dr Shunnosuke Abe, Laboratory of Molecular Cell Biology, Faculty of Agriculture, Ehime University, Japan.

Studies of the induction of encystment of Phytophthora zoospores by AR HARDHAM with Dr J English, University of Missouri.

Investigations of centrin in oomycete zoospores by AR HARDHAM, R NARAYAN, with Dr JDI Harper, Charles Sturt University.

Development of ScFv recombinant antibodies directed towards the adhesive protein of Phytophthora zoospores by AR HARDHAM, A ROBOLD with Dr P Scott, University of Queensland.

Isolation of avirulence and pathogenicity genes from Phytophthora by AR HARDHAM, D SKALAMERA with Drs D Maclean, A Drenth and S Basnayake, University of Queensland.

Complementation of yeast cell cycle control proteins with potential plant homologues by PCL JOHN with Dr J Hayles and Prof. Paul Nurse, Imperial Cancer Research Fund Laboratories, London, UK.

Investigation of receptor proteins for the plant hormone cytokinin by yeast-3-hybrid method. Co-supervision of MSc student, You Wang by PCL JOHN and S LETHAM with Dr Ren Zhang, Department of Biological Science, University of Wollongong.

Cell cycle control in the initiation of lateral root primordia by PCL JOHN with Prof. J Hamill, Monash University.

Effects of plant cyclin dependent kinase inhibitor proteins on mitosis in live plant cells by PCL JOHN, A CLEARY with Prof. LC Fowke, University of Saskatchewan, Saskatoon, Canada.

Location and activity of plant cyclin dependent kinases by J PCL OHN, K ZHANG with Prof. D Inzé, University of Gent, Belgium.

Structure of plant extracytosolic leucine-rich repeat proteins by DA JONES with Dr B Kobe, University of Queensland.

Localisation and function of the Cf-9 disease resistance protein by DA JONES with Prof. JDG Jones, Sainsbury Laboratory, John Innes Centre, Norwich, UK.

Isolation of the tomato I-3 gene for resistance to the wilt pathogen Fusarium oxysporum pv lycopersici by DA JONES, M HEMMING with Dr B Carroll, Ms S. Basuki, University of Queensland.

Isolation of the tomato I-3 gene for resistance to the wilt pathogen Fusarium oxysporum pv lycopersici by DA JONES, M HEMMING with Mr D McGrath, Dr S Garland, Bowen Horticultural Research Station, Queensland Department of Primary Industry.

Testing the interaction between the tomato Cf-9 resistance gene and the Cladosporium fulvum Avr9 avirulence gene in wheat by M JONES DA, R WILSON with Dr P Langridge, University of Adelaide. Endosperm development by GO WASTENEYS with Dr F Berger, CNRS, France.

Calcium ion activity and microtubule organisation by GO WASTENEYS with Dr Mark Knight, Oxford University, UK.

Root hair development by GO WASTENEYS with Dr ME Galway, St Francis Xavier University, and John Schiefelbein, University of Michigan.

Wall ingrowths in transfer cells by GO WASTENEYS with Mr Mark Talbot, Assoc. Prof. Tina Offler, Dr David McCurdy, University of Newcastle.

MOR1 and microspore asymmetry by GO WASTENEYS with Prof. D Twell, University of Leicester, UK.

Ethylene and hypocotyl development by GO WASTENEYS with Prof. H Kazama, International Christian University, Tokyo, and Prof. H Imaseki, Nagoya University, Japan.

Wall apposition formation in characean algae by GO WASTENEYS with Prof. I Foissner, University of Salzburg, Austria.

Ultrastructural analysis of the cytoplasmic body and nuclear cage mutants by GO WASTENEYS with Prof. I Foissner, University of Salzburg, Austria.

Interactions between katanin p60 and MOR1 proteins by GO WASTENEYS, MC RASHBROOKE with Dr H Höfte, INRA Versailles, France.

The shape of plants by GO WASTENEYS, AT WHIT-TINGTON, with Prof. T Hashimoto, Nara Institute of Biotechnology Japan.

Cellulose production in the Arabidopsis stem by RE WIL-LIAMSON, JM ARMSTRONG and CH HOCART with Dr J Masle, Environmental Biology.

Characterisation of radial swelling mutants by RE WIL-LIAMSON, CH HOCART with Dr TI Baskin, University of Missouri, USA.

#### **Visual Sciences**

Learning and memory in honeybees by SI AUNG, MV SRINIVASAN and SW ZHANG with Prof. J Tautz, Biozentrum of the Universitaet Wuerzburg.

Biogeography of Spiders by AD BLEST with Dr CJ Vink, Lincoln University and Crop and Food Research, New Zealand.

Modelling motion processing (psychophysics and physiology) by MR IBBOTSON with Dr Colin Clifford, University of Sydney.

Motion processing in the primate visual system by MR IB-BOTSON with Dr Mike Mustari, Yerkes National Primate Center, Atlanta.

Recording from motion processing areas in the cat visual cortex (PMLS, AEV) by MR IBBOTSON with Prof. Bogdan Dreher, University of Sydney.

Feedback and lateral interactions in the primate visual cortex by AC JAMES with Dr J Bullier, Centre for Research on Brain and Cognition, CNRS-University of Toulouse, France.

Application of multifocal visual evoked potentials in medical diagnostics by AC JAMES with ObjectiVision, Sydney.

Analysis of gene expression data from oligonucleotide microarrays by AC JAMES with Prof. T Triche, Childrens' Hospital of Los Angeles and Keck School of Medicine, University of Southern California, USA.

Image recognition in the tammar wallaby by JAN HEM-MI with Andrea Griffin, Department of Psychology, Macquarie University, Sydney.

Spatio-temporal variations in chlorophyll fluorescence during the phases of CAM by T MADDESS and K SIEB-KE with Rascher U (Bioshpere 2 Centre, Columbia University and Darmstadt University of Technology), Lüttge U (Darmstadt University of Technology) and Osmond B (Bioshpere 2 Centre, Columbia University).

A ten year retrospective study of the use of contrast thresholds of spatial frequency doubling stimuli to predict glaucomatous change by T MADDESS with I Goldberg (University of NSW).

Spatio-temporal patterns of ternary cellular automata by T MADDESS with Y Nagai (Kokushikan University, Tokyo, Japan), Ankiewcz A (RSPhysSE, ANU).

Spatio-temporal patterns of ternary cellular automata by T MADDESS with Y Nagai (Kokushikan University, Tokyo, Japan), Ankiewcz A (RSPhysSE, The Australian National University).

Simultaneous VEP and ERG recordings of multifrequency stimuli by T MADDESS with MP Davey (Canberra Hospital).

Binary and ternary textures containing higher order spatial correlations by T MADDESS and AC JAMES with Nagai Y (Kokushikan University, Tokyo, Japan), A Ankiewcz (RSPhysSE, ANU).

The genetics of social regulation of reproduction in honeybees by R MALESZKA with B Oldryod (University of Sydney).

Dissection of molecular and cellular mechanisms underlying neural plasticity in the fruit fly and the honeybee by R MALESZKA with Ramaswami M (University of Arizona).

Colour variation and spectral sensitivity in fiddler crabs by W PIX, J HEMMI and J ZEIL with Justin Marshall and Misha Vorobiev, VTHC, University of Queensland.

Panoramic imaging systems by MV SRINIVASAN and JS CHAHL with T. Seidl, 360net, London, UK.

Time discrimination in honeybees by MV SRINIVASAN and SW ZHANG with Dr K. Cheng, MacQuarie University, Sydney.

Time discrimination in honeybees by MV SRINIVASAN and SW ZHANG with Dr M. Spetch, University of Calgary, Canada.

Moth Olfaction and Host plant Volatile Organic Compound Analysis Experiments by G STANGE with B Osmond and L Abrell Biosphere 2 Chemistry Unit, Columbia University, Oracle, AZ, and Mechaber W, Guerenstein P, Arizona Research Laboratories Division of Neurobiology, University of Arizona, Tucson, AZ.

Vision and remote sensing: using nature's technology to examine the health of The Great Barrier Reef and Moreton Bay by J ZEIL and M BALL with Justin Marshall. VTHC, University of Queensland.

Natural motion signals by J ZEIL with Johannes Zanker, University of London, England.

#### **Electron Microscopy Unit**

Ion distribution in salt tolerant durum wheat genomes by CX HUANG with Dr Rana Munns, CSIRO Plant Industry.

CryoSEM studies of dissolved element distribution and air embolism in roots by CX HUANG with ME McCully, CSIRO Plant Industry.

Onychorphoran neuroanatomy and phylogeny by S STOWE with Prof. Nicholas Strausfeld (Univ. Arizona) and Dr David Rowell (ANU).

### **Research School of Chemistry**

#### **Biochemical Reactions and Molecular Recognition**

Activators and inhibitors of ryanodine receptor calcium ion channels by Prof. C.J. EASTON with Prof. A. Dulhunty and Dr M. Casarotto, John Curtin School of Medical Research, ANU; and Dr M. Miller, Biotron, Canberra.

Chemistry of scymnol by Prof. C.J. EASTON, Ms M. GEBARA-COGHLAN and Ms X. NGUYEN 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 and Mr P.G. DUMANSKI with Mr R. Faulkner, Australian Vinyls Pty Ltd, Melbourne and Dr G.W. Simpson, CSIRO Molecular Science, 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. BAR-RATT, Ms L.Y.F. CHOW, Ms N. LORIMER, Mr S.B. McNABB, Mr A.J. MORTIMER, Dr J.S. SIMPSON, Mr Z. WATTS, and Dr A. WRIGHT with Dr M.J. Davies, Heart Research Institute, Sydney; Dr R. O'Hair, University of Melbourne; Dr D. Grice, Griffith University; and Prof. A. Rauk, University of Calgary, Canada.

Lipid chemistry by Prof. C.J. EASTON and Mr J.B. KEL-LY with Professors A. Ferrante and A. Poulos, Adelaide Medical Centre for Women and Children.

Lipid modified coordinating ligands by Prof. C.J. EAS-TON and Dr P.A. COGHLAN with Dr J. Altin, Division of Biochemistry and Molecular Biology, ANU; and Lipotek Pty Ltd, Canberra.

Supramolecular chemistry of cyclodextrins by Prof. C.J. EASTON, Ms L. BARR, Ms M. CIESLINSKI, Ms N. LORIMER, Mr H. ONAGI and Dr J.S. SIMPSON with Prof. S.F. Lincoln, Ms J.S. Lock and Mr B.L. May, University of Adelaide.

The development of new generation anti-infective agents by Professors M.G. BANWELL and C.J. EASTON, Drs S.A. BENNETT, M.R. NAIRN, J.K. ROBINSON, D.J. SINCLAIR, M.K. SMITH, and L. XIA 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.

#### **Bioinorganic and Medicinal Chemistry**

Determination of activation parameters for the reaction between coenzyme B12 and cyanide by Dr N.E. BRA-SCH and Mr A.G. CREGAN with Prof. R. van Eldik and Dr M.S.A. Hamza, University of Erlangen-Nuremberg, Germany.

Re-investigation of the reaction between methylcobalamin and cyanide by Dr N.E. BRASCH, Messrs S.J. BRODIE and A.G. CREGAN with Prof. R. van Eldik, University of Erlangen-Nuremberg, Germany.

#### **Computational Quantum Chemistry**

Multireference G2 and G3 theories by Prof. L. RADOM with Prof. M.S. Gordon, Iowa State University, USA.

Radical addition reactions by Prof. L. RADOM with Prof. H. Fischer, University of Zurich, Switzerland.

Thermochemistry of metal oxides and hydroxides by Prof. L. RADOM and Dr M.B. SULLIVAN with Dr B.J. Smith, Walter and Eliza Hall Institute, Melbourne; Prof. J.M.L. Martin, Weizmann Institute, Israel; and Dr L.A. Curtiss, Argonne National Laboratories, USA.

Acidities of alkali metal hydroxides by Prof. L. RADOM, Dr M.B. SULLIVAN, Dr A.P. SCOTT and Mr T. BÜS-GEN with Prof. S.R. Kass, University of Minnesota, USA.

Reactions catalysed by vitamin B12 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. Oxidative damage to proteins by Prof. L. RADOM, Prof. C.J. EASTON, Mr G.P.F. WOOD, Dr M.L. COOTE and Dr R. JACOB with Dr M. Davies, Heart Research Institute, Sydney; Assoc. Prof. R.A.J. O'Hair, University of Melbourne; and Prof. A. Rauk, University of Calgary, Canada.

Structures and stabilities of weak complexes by Prof. L. RADOM and Dr A.P. SCOTT with Prof. A. Legon, University of Exeter, UK.

Cleavage of alkoxy radicals by Prof. L. RADOM and Dr D.J. HENRY with Prof. A. Rauk, University of Calgary, Canada; Professsor R.J. Boyd, Dalhousie University, Halifax, Canada; and Prof. S.L. Boyd, Mount St Vincent University, Canada.

Interaction of calcium dications with molecules of biological interest by Prof. L. RADOM and Ms I. CORRAL with Prof. M. Yanez and Prof. O. Mo, Autonoma University of Madrid, Spain.

#### **Disordered Materials**

Diffuse scattering from benzil, C14H10O2 by Prof. T.R. WELBERRY 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 with K.J. Schenk, Institut de Cristallographie, Université de Lausanne, Switzerland.

Diffuse scattering in zeolites by Prof. T.R. WELBERRY with Dr B. Campbell, Department of Physics & Astonomy, Brigham Young University, Utah, USA.

High-pressure X-ray scattering of oxides with a nanoscaled local structure by Prof. T.R. WELBERRY with Dr J. Kreisel, Laboratoire Matériaux et Génie Physique, ENS de Physique de Grenoble, France, Prof. A.M. Glazer, Clarendon Laboratory, Oxford, UK; and Dr P.A. Thomas, Department of Physics, University of Warwick, UK.

#### **Organometallic and Coordination Chemistry**

Synthesis of methimazolyl phosphines and arsines by Prof. A. F. HILL with Prof. J. D. Woollins, Department of Chemistry, University of St Andrews, Scotland, UK.

Imidazolylidene complexes of rhodium(I) and iridium(I) by Prof. A. F. HILL with Dr Thomas Welton, Department of Chemistry, Imperial College of Science, Technology and Medicine, London, UK.

# Inorganic Stereochemistry and Asymmetric Synthesis

Microbial phosphonate uptake and metabolism: enlisting microorganisms to deliver antimicrobials effectively by Prof. 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

Parallel accumulation of Chemiluminescence for Analytical applications by Prof. E. KRAUSZ, Dr Trevor Smith, University of Melbourne; and Assoc. Prof. Neil Barnett, Deakin University.

Spectroscopy of PSII protein assemblies by Prof. E. KRAUSZ and Dr S. PETERSON with Dr R. Pace Department of Chemistry, ANU; Dr M. Seibert, NREL, Golden Colorado.

Spectroscopy of The Thermophillic PSII extracted from Synechococcus Vulcanus by Dr S. PETERSON, Prof. E. KRAUSZ with Dr R. Pace Department of Chemistry, ANU; Dr J.-R. Shen, Riken Institute, Hyogo, Japan

Spectroscopy of Chromium(III) Hole-burning materials by Prof. E. KRAUSZ with Dr H. Riesen, ADFA.

Up-conversion and spectroscopy in rare earth systems by Prof. E. KRAUSZ with Dr M. Riley, University of Queensland; and Dr S. Lüthi, Gemfire, Stanford.

### Liquid State Chemical Physics

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.

Derivation of potential models for phase equilibria by Dr J.P. DELHOMMELLE with Dr P. Millie, Laboratoire Francis Perrin, France.

Fluctuation theorem by Prof. D.J. EVANS, Mr E. MIT-TAG, Drs E.M. SEVICK and G.M. WANG with Dr D.J. Searles, Griffith University, Brisbane.

Non-equilibrium hard sphere simulations by Dr J. PETRAVIC with Dr O.G. Jepps, Department of Chemical Engineering, University of Queensland.

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.

Transport properties of ionic liquids by Dr J. PETRAVIC with Dr J. Delhommelle, Équipe de Chimie et Biochimie Théoriques, Université Henri Poincaré, Vandœuve-lès-Nancy, France.

#### **Nuclear Magnetic Resonance**

Defining the structure of a protein involved in the onset of breast cancer by Dr M.A. KENIRY with Prof. C.C. Benz and Dr G. Scott, Buck Institute for Age Research, Novato California. Supported by a travel grant from the International Union Against Cancer.

#### **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.

Structural and biosynthetic studies on antheridiogens from fern gametophytes by Prof. L.N. MANDER with Dr H. Yamane, Biotechnology Research Center, University of Tokyo, Japan.

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.

Structural studies on biologically active extractives from Indonesian plant species by Prof. L.N. MANDER and Mr A.J. HERLT with Drs R. Rumampuk and P. Tarigan, Kimia Pascasarjana Laboratory, Padjadjaran University, Bandung, Indonesia. Studies on fruit development by Prof. L.N. MANDER and Mr B. TWITCHIN with Dr P.S. Blake, Horticulture Research International, East Malling, UK.

Studies on gibberellin receptors by Prof. L.N. MANDER, Dr E.J. BECK and Mr J.R. CROW with Dr P.M. Chandler, CSIRO Division of Plant Industry, Canberra.

Studies on growth inhibition by Prof. L.N. MANDER and Mr B. TWITCHIN with Drs L.T. Evans and R.W. King, CSIRO Division of Plant Industry, Canberra; and Prof. R.P. Pharis, University of Calgary, Canada.

Studies on the genetics of Pisum by Prof. L.N. MANDER and Mr B. TWITCHIN with Dr J.J. Ross, Department of Plant Science, University of Tasmania, Hobart.

#### Protein Crystallography and Engineering

Structural studies of the PII and GlnK proteins by Drs D.L. OLLIS and P.D. CARR with Drs S.G. Vasudevan and Y. Xu, James Cook University, Queensland.

Structure function studies with esterases by Dr D.L. OL-LIS with Dr J. Oakshot, CSIRO Department of Entomology, Canberra.

#### **Protein Synthesis and Evolution**

Cleavage of DNA by chromium(V) complexes by Dr N.E. DIXON with Prof. P.A. Lay and Dr A. Levina, School of Chemistry, University of Sydney.

Crystallisation of the DnaB helicase and DnaB•DnaC complex by Drs N.E. DIXON, P.M. SCHAEFFER, Ms K.V. LOSCHA, and Mr M. MULCAIR with Drs A. Oakley and M.C.J. Wilce, University of Western Australia.

Expression, isolation and crystallisation of the Bacillus subtilis DnaC helicase and DnaI proteins by Dr N.E. DIXON and Ms K.V. LOSCHA with Prof. R.G. Wake, Drs D.B. Langley and J.M. Guss, School of Molecular and Microbial Biosciences, University of Sydney.

Geminivirus DNA replication mechanisms by Dr N.E. DIXON with Dr A. Rezaian, CSIRO Division of Plant Industry, Glen Osmond, SA.

In vitro protein synthesis by Drs N.E. DIXON, M.J. HEADLAM, K. OZAWA and Prof. G. OTTING with Drs E. Liepinsh, S. Pursglove and L. Guignard, Department of Medical Biochemistry and Biophysics, Karolinska Institute, Stockholm; Dr M. Pavlov and Prof. M. Ehrenberg, University of Uppsala, Sweden.

Mass spectrometry of protein-protein and protein-DNA complexes by Drs N.E. DIXON, P.M. SCHAEFFER, Ms K.V. LOSCHA and Mr S. HAMDAN with Dr J.L. Beck, Mr A. Kapur, Mr R. Gupta, Mr S.J. Watt, and Prof. M. M. Sheil, Department of Chemistry, University of Wollongong.

Properties of proteins circularized by intein-mediated reactions by Drs N.E. DIXON, P. PROSSELKOV and Prof. G. OTTING with Dr N.K. Williams, Institute for Biomedical Research and Dr J.M. Matthews, School of Molecular and Microbial Biosciences, University of Sydney; Dr J.L. Beck, Mr S.J. Watt, and Prof. M.M. Sheil, Department of Chemistry, University of Wollongong; Dr E. Liepinsh, Department of Medical Biochemistry and Biophysics, Karolinska Institute, Stockholm, 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 Organization, Sydney.

Structure and mechanism of action of proline aminopeptidase by Drs N.E. DIXON, P.M. SCHAEFFER and Ms P.E. LILLEY with Prof. H.C. Freeman and Dr J.M. Guss, School of Molecular and Microbial Biosciences, University of Sydney.

Structure of a circularised protein by Drs N.E. DIXON and P. PROSSELKOV with Drs K. Alexandrov and A. Niculae, Department of Physical Biochemistry, Max-Planck-Institute for Molecular Physiology, Dortmund, Germany.

Structures and functions of Escherichia coli replisomal proteins by Drs N.E. DIXON, P. PROSSELKOV, P.M. SCHAEFFER, Ms K.V. LOSCHA, Ms A.-Y. PARK, and Prof. G. OTTING with Drs C.M. Elvin, K. Kongsuwan, and G. Wijffels, CSIRO Division of Livestock Industries, Brisbane; Drs A. Oakley and M.C. Wilce, University of Western Australia.

Structures of complexes of the proofreading exonuclease subunit of DNA polymerase III by Drs N.E. DIXON, P.D. CARR, D.L. OLLIS, M.A. KENIRY, Prof. G. OT-TING, Mr S. HAMDAN and Ms A.-Y. PARK with Dr E. Liepinsh, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden.

Structures of the Escherichia coli DnaB helicase protein and the DnaB•DnaC complex by Drs N.E. DIXON, P.M. SCHAEFFER and Ms K.V. LOSCHA with Prof. J.M. Carazo, Drs L.E. Donate, M. Barcéna, and Ms Y. Robledo, Centro Nacional de Biotecnologia, Universidad Autonoma, Madrid, Spain.

#### Solid State Inorganic Chemistry

Structural instabilities induced by the electronic band structure of FeF2 by Drs F. BRINK, L. NORÉN and R.L. WITHERS with Dr T. Larsson, Outokumpo Copper R&D, Sweden.

Neutron diffraction studies of the incommensurately modulated Ni1+xInyTe2 system 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. Problem crystal structure refinements by Prof. A.D. RAE with Prof. A.T. Baker, University of Technology, Sydney.

Problem crystal structure refinement involving zones of different symmetry by Prof. A.D. RAE with Dr A. Linden, University of Zurich, Switzerland.

Problem crystal structure refinement involving zones of different symmetry by Prof. A.D. RAE with Dr H.O. Sorensen, University of Copenhagen, Denmark.

Atomic ordering in the doped, rare earth, cobaltates Ln1xSrxCoO3-d by Dr R.L. WITHERS with Drs D. Goosens and M. James, Australian Nuclear Science and Technology Organisation, Menai, NSW.

Modulated structures in the metastable Ni7±xS6, and mixed Ni6±x(S1-ySey)5, systems by Drs Y. LIU, L. NORÉN and R.L. WITHERS with Prof. G. van Tendeloo and Mr J. Hadermann, University of Antwerp, Belgium; and Mr F.J. Gárcia-Gárcia, Stockholm University, Sweden.

#### 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. REY-NOLDS 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.

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.

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.

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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 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 2002 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); Dr H. de Bruyn (Sydney University); Dr D. Martin (University of Queensland); Dr C. Buckley (Curtin University of Technology); Dr G. Dennis (UNSW); Dr A. Whittaker, University of Queensland); Dr G. War (University of Sydney); Dr J. Ruggles (University of Queensland); Dr K. Doolan (University of Western Sydney).

#### Structural Biology and Biophysics by NMR

Application of a high-yield in vitro protein expression system by Prof. G. OTTING, Drs N.E. DIXON and K. OZAWA with Drs L. Guignard and S. Pursglove, Karolinska Institute, Stockholm, Sweden.

Application of an intein-based system for protein cyclization by Prof. G. OTTING, Drs N.E. DIXON, P. PROS-SELKOV with Dr N.K. Williams, University of Sydney; Drs D.R. Littler and P.M.G. Curmi, University of New South Wales; Dr E. Liepinsh, Karolinska Institute, Stockholm, Sweden; Drs A. Sharipo and I. Line, University of Latvia, Riga, Latvia.

Determination of the three-dimensional structure of AmpD by Prof. G. OTTING with Drs E. Liepinsh and L. Guignard, Karolinska Institute, Stockholm, Sweden; and Drs B. Joris, C. Généreux, and D. Dehareng, University of Liège, Belgium.

Determination of the three-dimensional structure of human CLP by Prof. G. OTTING with Drs E. Liepinsh and O. Radmark, Karolinska Institute, Stockholm, Sweden.

Determination of the three-dimensional structure of pig Cox-17 by Prof. G. OTTING with Drs E. Liepinsh and R. Sillard, Karolinska Institute, Stockholm, Sweden.

Determination of the three-dimensional structure of the DAPIN domain by Prof. G. OTTING with Dr E. Liepinsh, Karolinska Institute, Stockholm, Sweden; Drs A. Sharipo and R. Babals, University of Latvia, Riga, Latvia; and Dr E. Staub, metaGen Pharmaceuticals, Berlin, Germany.

Determination of the three-dimensional structure of the PCOLCE NTR domain by Prof. G. OTTING with Drs G. Pintacuda and E. Liepinsh, Karolinska Institute, Stockholm, Sweden; and Prof. L. Patthy, Hungarian Academy of Sciences, Budapest, Hungary.

Determination of the three-dimensional structure of the R3H domain by Prof. G. OTTING with Drs E. Liepinsh and L. Guignard, Karolinska Institute, Stockholm, Sweden; and Drs A. Sharipo and A. Leonchiks, University of Latvia, Riga, Latvia.

Determination of the three-dimensional structure of WIF-1 by Prof. G. OTTING with Dr E. Liepinsh, Karolinska Institute, Stockholm, Sweden; and Prof. L. Patthy, Hungarian Academy of Sciences, Budapest, Hungary.

Long-range angle restraints from dipole-CSR cross-correlation measurements by Prof. G. OTTING with Dr G. Pintacuda, Karolinska Institute, Stockholm; and Ms K. Hohenthanner and Prof. N. Müller, University of Linz, Austria.

Protein-labelling with paramagnetic ions by Prof. G. OT-TING with Dr G. Pintacuda, Karolinska Institute, Stockholm.

Structure restraints from measurements of cross-correlated relaxation by Prof. G. OTTING with Prof. G. Bodenhausen, Ecole Normale, Paris, France; Prof. C. Griesinger, Max-Planck-Institute Göttingen, Germany; Prof. I. Bertini, University of Florence, Italy; Prof. R. Kaptein, University of Utrecht, Netherlands; and Dr J. Boyd, Oxford University, England.

#### 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, Vic.

The development of new generation anti-infective agents by Professors M.G. BANWELL and C.J. EASTON, Drs S.A. BENNETT, M.R. NAIRN, J.K. ROBINSON, D.J. SINCLAIR, M.K. SMITH and L. XIA with Dr P.J. O'Hanlon, GlaxoSmithKline, Harlow, UK.

The development of novel carbohydrate-like drugs by Prof. M.G. BANWELL, Drs J. RENNER and P. GUAN with Drs R.H. Don and V. Ferro, Progen Industries Ltd, Brisbane.

The synthesis of sialic acid analogues by Prof. M.G. BAN-WELL and Mr X.H. MA with Dr J. Lambert, 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**

Chemical reaction dynamics by Prof. 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 + CH4 by Prof. M.A. COL-LINS with Assoc. Prof. D.H. Zhang, National University of Singapore.

Nonabiabatic dynamics and coupled potential energy surfaces by Prof. M.A. COLLINS with Prof. D. Yarkony, Johns Hopkins University, USA.

Quantum scattering of hydrogen and methane on a nickel surface by Prof. M.A. COLLINS with Dr C. Crespos and Prof. G.-J. Kroes, University of Leiden, Netherlands.

#### **Coordination and Spectro-electrochemistry**

Characterisation of unwarranted combustion deposits in aero-engines by Drs G. A. HEATH, L. NOREN and Mr P.A. GUGGER with Dr M. Sterns, Department of Chemistry, ANU; Mr G. Bailey, Australian War Memorial Memorial; Dr V. Otiengo-Alego, University of Canberra; and Mr A. Romeyn, Australian Transport Safety Bureau, Canberra.

Computational modelling of electrochemical responses by Dr P.J. MAHON with Ms J.C. Myland and Prof. K.B. Oldham, Trent University, Ontario, Canada.

Corrosion analysis and conservation treatments by Drs G.A. HEATH, P.J. MAHON and R.D. WEBSTER with Prof. D.C. Creagh and Dr V. Otiengo-Alego, University of Canberra.

Redox-modulation 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.

Spectro-electrochemical investigation of conjugated bisporphyrin radical cations and anions by Dr G.A. HEATH with Dr D. P. Arnold, Queensland University of Technology, Brisbane.

#### **Queen Elizabeth II Fellows**

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.

Weathering and photostability of benzoylated wood by Dr R.D. WEBSTER and Dr S. SCHMID with Prof. P.D. Evans, Department of Wood Science, University of British Columbia, Canada; and Prof. N.L. Owen, Brigham Young University, USA.

Corrosion of copper in potable water systems by Dr R. D. WEBSTER with Dr A. Lowe and Mr M. Stoll, Department of Engineering, ANU; and Dr V. Otiengo-Alego, University of Canberra.

### **Research School of Earth Sciences**

Research projects in Oman and Namibia by Dr R. ARM-STRONG with Prof. D. Gray, University of Melbourne and Dr B. Goscombe, University of Adelaide.

Determining the trace element and isotopic compositions of melt inclusions by Dr V. BENNETT with Dr V. S. Kamenentsky, University of Tasmania.

Determining Fe oxidation states by Mössbauer spectroscopy by Drs A.J. BERRY and H.StC. O'Neill with Drs S.J. Campbell and K.D. Jayasuriya, University of New South Wales.

Development of large-scale numerical models of the Earth's crust, mantle and hydrosphere by Dr J. BRAUN with collaborators at the University of Melbourne and the RMIT.

The geochemistry, classification and petrogenesis of granites from the New England Batholith, Eastern Australia by Dr C. BRYANT with Prof. B. Chappell Macquarie University.

Comparison of different proxies of past ocean chemistry by Drs E. CALVO and C. PELEJERO with Dr W. Howard from the Cooperative Research Centre for the Southern Ocean Environment, University of Tasmania.

Development of stable isotopic studies on biomarkers by Drs E. CALVO and C. PELEJERO with Dr K. Grice from Petroleum and Environmental Organic Geochemistry Centre, Curtin University, Perth.

Stable isotopic studies on biomarkers by Drs E. CALVO and C. PELEJERO with Dr W. Howard, University of Tasmania and Dr K. Grice, Curtin University.

Dating intrusions from the Antapaccay porphyry coppergold deposit in southern Peru by laser ICP-MS by Drs I. H. CAMPBELL and C. ALLEN with Mr. B. Jones, University of Tasmania.

The age of detrital zircons from sandstone collected from the Stawell gold mine in Victoria by Drs I. H. CAMP-BELL and C. ALLEN with Dr Richard Squire, Melbourne University.

Application of x-ray tomography facilities to characterise fracture and pore geometries in deformed rocks by Prof. S.F. COX and Dr E. Tenthorey with Mr. K Ruming, University of Newcastle, and Dr M. Knackstedt, RSPhysS&E, ANU.

New insights into mantle evolution from complementary microbeam studies of melt inclusions by Dr S. EGGINS with J. Woodhead, University of Melbourne.

Tectonics of the Neoproterozoic — Early Palaeozoic margin in eastern Australia by Dr C.M. FANNING with Associate Prof. C. Fergusson, University of Wollongong and Prof. R. Henderson, James Cook University.

Testing of the hypothesis of active neotectonism through quantifying bedrock erosion rates in the Mt. Painter region of the Flinders Ranges, South Australia, using cosmogenic nuclides by Dr D. FABEL with Prof. M. Sandiford, University of Melbourne.

The timing of Carboniferous-Permian volcanic rocks in the Tamworth belt NSW by Mr. C.M. FANNING with Prof. J. Roberts, University of New South Wales.

The timing of magmatic events in Bolivia by Mr. C.M. FANNING with Dr S. Boger, Monash University.

A new stable-isotope microanalytical facility by Dr M. GAGAN with Prof. P. De Deckker and Dr B. Opdyke, Geology Department, ANU, Drs I. Goodwin and R. Drysdale, University of Newcastle, and Prof. R. Henderson, James Cook University.

Coral reconstructions of the Holocene climate of the equatorial central Pacific by Dr M. GAGAN with Prof. C. Woodroffe, University of Wollongong.

Stable isotope systematics of cassowary eggshell from Papua New Guinea by Dr M. GAGAN with Prof. C. Murray-Wallace, University of Wollongong.

Stable isotope and trace element ratios in Late Pleistocene tufa deposits from northwestern Queensland by Dr M. GAGAN with Dr R. Maas, La Trobe University.

Stable isotope ratios in the Tower Hill lacustrine sediments by Dr M. GAGAN with Prof. P. Kershaw, Monash University.

40Ar-38Ar dating by Ms. L. GLASS with Dr D. Phillips, University of Melbourne.

The environmental effects of the late Devonian Woodleigh impact event by Dr A. GLIKSON with Dr M.V. Glikson, University of Queensland.

The palaeobiology and geochemistry of early Proterozoic black shales, Hamersley Basin, Western Australia by Dr A. GLIKSON with Dr P. Haines, University of Tasmania.

The petrology and geochemistry of the Woodleigh impact structure, Western Australia by Dr A. GLIKSON with Drs S. Golding and T. Uysal, University of Queensland.

Appointed as an Emeritus Prof. D.H. GREEN continued collaborative research with Dr T.J. Falloon and Prof. A.J. Crawford.

Mantle melting by Prof. D.H. GREEN with Dr T.J. Falloon and Prof. A.J. Crawford, University of Tasmania.

Stable isotopes in marsupials: reconstruction of environmental change in Australia by Prof. R. GRÜN and Dr M. Gagan with Dr R. Wells, Flinders University and Dr D. Bowman, Northern Territory University.

The age of the Cuddie Springs site by Prof. R. GRÜN with Drs P. White and J. Field, University of Sydney.

The age of South Australian sites with faunal remains including Naracoorte Cave and the Rocky River Site on Kangaroo Island by Prof. R. GRÜN with Dr R. Wells, Flinders University. The onset of dune formation in the Stretzlecki Desert by Prof. R. GRÜN with Prof. R. Twidale, University of Adelaide.

The thermal stability of paramagnetic centres from cores of the Otway basin by Prof. R. GRÜN with Prof. A. Gleadow, University of Melbourne.

A mission to very early earth: when did conditions suitable for life emerge on earth? by Prof. T. M. HARRISON in collaboration with Prof. R.T. Pidgeon, Curtin University in research for ARC grant.

Prof. T.M. HARRISON, member, Advisory Committee, Australian Crustal Research Centre, School of Geosciences, Monash University and member, Science Advisory Council, Tectonics Special Research Centre, The University of Western Australia.

Tectonic Reconstruction of the evolution of the Alpine-Himalayan Orogenic Chain by Prof. T.M. HARRISON with Prof. G. Lister, Monash University.

Trace element distribution in high temperature metamorphic minerals present during partial melting by Dr J. HERMANN with Mr. I. Buick, La Trobe University.

Noble gas studies in diamonds by Dr M. HONDA with Dr D. Phillips, University of Melbourne.

Geochronology of Fiordland, New Zealand by Dr T. IRE-LAND with Prof. G. Clarke and Dr J Hollis, Sydney University.

Marine electromagnetic studies by Dr T. LILLEY with Dr A. White, Flinders University and Dr G. Heinson, Adelaide University.

Late Quaternary sea levels: the South Australian Gulf regions in a global context by Professors M.T. McCUL-LOCH and R. Grün and Dr N. Spooner with Dr C. Murray-Wallace, University of Wollongong.

Sea level changes during interglacial periods by Prof. M.T. McCULLOCH with Dr P. Hearty, James Cook University.

Trace element geochemistry of fish otoliths by Prof. M.T. McCULLOCH with Prof. M. Kingsford, James Cook University.

Aspects of Proterozoic crustal evolution in Australia and the evolution of the Mount Painter province, South Australia by Dr S. McLAREN with Drs R. Powell and M. Sandiford, University of Melbourne.

The timing and extent of Palaeozoic reactivation in the western Arunta block, by Drs S. McLAREN and W.J. Dunlap with Dr M. Sandiford, University of Melbourne, and Drs I. Scrimgeour, D. Close and C. Edgoose, Northern Territory Geological Survey.

Fluid inclusion analysis by Dr J. MAVROGENES with Drs P. Williams and T. Baker, James Cook University.

Improved Sr thermal ionisation strategies by Dr W. MÜLLER with Dr R. Maas, La Trobe University.

Rb-Sr microsampling dating of fibrous minerals in strain shadows around pyrite by Dr W. MÜLLER with Dr D. Durney, Macquarie University.

Single-grain IR laser 40Ar/39Ar dating of white micas from the Iceman's intestine by Dr W. MÜLLER with Dr J. Wartho, Curtin University.

Dr M. NORMAN, collaborative studies with Prof. John Foden, Adelaide University, Dr V. Kamenetsky, Dr G. Davidson, Dr A. Rae, Prof. R. Large and Mr. P. Robinson, University of Tasmania, Dr J. Webb and Mr. C. Ihlenfeld, La Trobe University and Dr D. Belton and students, University of Melbourne.

Regolith dating by Dr B. PILLANS with Prof. A. Chivas, University of Wollongong and Prof. R. Bourman, University of South Australia.

Systematics in arc volcanic glasses and melt inclusions by Mr. SUN with Prof. R.J Arculus, Department of Geology, ANU and Dr V.S. Kamenetsky, University of Tasmania.

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 evolution of the Lachlan Fold Belt as recorded in zircon preserved in igneous and sedimentary rocks by Dr I. S. WILLIAMS and Prof. B.W. Chappell, Macquarie University, with Prof. A.J.R. White, formerly Victorian Institute of Earth and Planetary Sciences.

Using granites to date deformation in the Wyangla region by Dr I. S. WILLIAMS with Dr P. Lennox, University of New South Wales.

Using 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.

Using melt inclusions in flood volcanic picrites to constrain the nature of mantle processes leading to flood volcanism by Dr G. YAXLEY with Dr V. Kamenetsky, University of Tasmania.

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

#### **Computer Sciences Laboratory**

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, Oregon, USA), Prof. Anil Nerode (Cornell University, Ithaca, USA).

Modular and hierarchical control of hybrid systems by Dr Jen DAVOREN and Dr Thomas MOOR with Mr Alexander Itigin (University of Stuttgart, Stuttgart, Germany), Dr Joerg Raisch (Max-Planck-Institute, Magdeburg, Germany).

Logical foundations of hybrid dynamical systems by Dr Jen DAVOREN and Dr Thomas MOOR with Mr Vaughan Coulthard (CSL ANU, Canberra, Australia), Dr Rajeev Goré (CSL ANU, Canberra, Australia).

Logical foundations of hybrid dynamical systems by Dr Rajeev GORÉ with Dr Jen Davoren (University of Melbourne, Melbourne, Australia).

Formal correctness proof of a program logic calculus for the deductive verification of java programs by Dr Rajeev GORÉ with Dr Bernhard Beckert and Prof. Peter Schmitt (University of Karlsruhe, Karlsruhe, Germany).

Expressive power and complexity of temporal logics for model-checking by Dr Rajeev GORÉ with Dr Jen Davoren (University of Melbourne, Melbourne, Australia), Dr Stephane Demri (University of Cachan, Cachan, France)

Kernels for structured data by Prof. John LLOYD with Mr T. Gärtner (Fraunhofer Institut, Sankt Augustin, Germany), Dr Peter Flach (University of Bristol, Bristol, United Kingdom).

Planning under uncertainty via model-checking by Dr John SLANEY, Dr Sylvie THIÉBAUX with Prof. Froduald Kabanza (University of Sherbrooke, Québec, Canada).

Kernel methods by Dr Alex SMOLA with Dr Chiranjib Bhattacharya (Indian Institute of Science, Bangalore, India), Dr Adam Kowalczyk (Telstra Research Laboratories, Melbourne, Australia), Dr Bernhard Schölkopf (Max-Planck-Institute, Tübingen, Germany), Prof. John Shawe-Taylor (Royal Holloway College, London, United Kingdom).

Computer vision by Dr Alex SMOLA with Dr Bernhard Schölkopf (Max-Planck-Institute, Tübingen, Germany), Dr Bill Triggs (INRIA,Grenoble, France), Prof. John Shawe-Taylor (Royal Holloway College, London, United Kingdom).

Model-based diagnosis and reconfiguration by Dr Sylvie THIÉBAUX with Prof. Froduald Kabanza (University of Sherbrooke, Québec, Canada), Prof. Marie-Odile Cordier (University of Rennes, Rennes, France), Dr Alessandro Cimatti (IRST/ITC, Trento, Italy), Dr Piergiorgio Bertoli (IRST/ITC, Trento, Italy).

#### **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.

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.

Safe iterative identification and control redesigns by Prof. Brian ANDERSON, Dr Alexander LANZON, with Prof. Michel Gevers (Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Dr Andrea Lecchini (Université Catholique de Louvain, Louvain-la-Neuve, Belgium). Model and controller reduction by Prof. Brian ANDER-SON with Dr Andras Varga (German Aerospace Center, Wessling, Germany).

Collaboration in mobile robotics and vision by Dr David AUSTIN with Prof. Henrik Christensen (Royal Institute of Technology, Stockholm, Sweden).

Hybrid motion/force control by Dr Roy FEATHER-STONE with Prof. Oussama Khatib (Stanford University, Stanford, USA).

Humanoid robot simulation and control by Dr Roy FEATHERSTONE with Dr Hirohisa Hirukawa (Industrial Systems Institute, Tsukuba, Japan).

Image based rendering and new view synthesis by Prof. Richard HARTLEY with Dr P Anandan (Microsoft Research, Redmond, USA), Dr Richard Szeliski (Microsoft Research, Redmond, USA).

Learning for adaptive visual assistants (LAVA) by Prof. Richard HARTLEY with Prof. John Shawe-Taylor (Royal Holloway College, London, United Kingdom), Prof. Cordelia Schmidt (Rhone Alpes, Grenoble, France), Dr Bill Triggs (INRIA, Grenoble, France).

Critical configurations for 3D reconstruction from images by Prof. Richard HARTLEY, with Dr Fredrik Kahl (Lund University of Technology, Lund, Sweden).

Two view auto-calibration by Prof. Richard HARTLEY with Dr Robert Kaucic (General Electric Research, Schenectady, New York, USA).

Robust control of energy momentum wheels supported on active magnetic bearings by Dr Alexander LANZON with Prof. Panagiotis Tsiotras (Georgia Institute of Technology, Atlanta, USA).

Joint identification and control redesigns by Dr Alexander LANZON with Dr Paresh Date (Brunel University, London, United Kingdom).

Weight adjustments in H-infinity control design by Dr Alexander LANZON, Prof. Brian ANDERSON with Dr Xavier Bombois (Delft University of Technology, Delft, The Netherlands).

Uniqueness of central H-infinity controllers by Dr Alexander LANZON, Prof. Brian ANDERSON with Dr Xavier Bombois (Delft University of Technology, Delft, The Netherlands).

On the formulation and solution of robust performance problems by Dr Alexander LANZON with Dr Michael Cantoni (University of Melbourne, Australia).

Optimisation methods for design and analysis of digital systems by Prof. John MOORE with Dr Weyong Yan (Curtin University of Technology), Prof, K Teo (Hong Kong Polytechnic University).

Modular and hierarchical control of hybrid systems by Dr Thomas MOOR, Dr Jen DAVORENwith Mr Alexander Itigin (University of Stuttgart, Stuttgart, Germany), Dr Joerg Raisch (Max-Planck-Institute, Magdeburg, Germany). Optimisation algorithms for grasping problems in robotics and for computer vision by Prof. John MOORE with Prof. Uwe Helmke (University of Wuerzburg, Wuerzburg, Germany).

Field robotics by Prof. Alexander ZELINSKY with Prof. Ray Jarvis (Monash University, Melbourne, Australia) 2001-2002; Prof. Hugh Durrant-Whyte (University of Sydney, Sydney, Australia.

Hand gesture interfaces by Prof. Alexander ZELINSKY with Dr Steven Wark (Human Systems Integration, Defence Science Technology Organisation, Edinburgh, Australia), Dr Michael Broughton (Defence Science Technology Organisation, Edinburgh, Australia), Mr Luke Fletcher (RSISE, Canberra, Australia).

Smart cars project by Prof. Alexander ZELINSKY with Mr Lars Nilsson (Volvo Technology, Gothenburg, Sweden), Mr Magnus Rilbe (Volvo Technology, Gothenburg, Sweden).

#### **Department of Telecommunications Engineering**

Adaptive beamforming by Dr Thushara ABHAYAPALA with Dr Darren Ward (Imperial College, London, United Kingdom).

Collaborative research, development and commercialisation agreement (Phase 6) by Prof. Rod KENNEDY, Dr Thushara ABHYAPALA with (Fox Television Stations Inc, California, USA), (Philips Laboratories, New York, USA).

Iterative equalisation by Prof. Rod KENNEDY with Prof. Zhi Ding (University of California, California, USA).

Acoustic source tracking in reverberant environments using particle filtering methods by Prof. Bob WILLIAM-SON with Dr Darren Ward (Imperial College of Science, London, UK).

# John Curtin School of Medical Research

Ubiquitin-specific proteases in cancer by Dr R BAKER with Assoc Prof DA Gray, Ottawa Regional Cancer Centre, University of Ottawa, Ottawa, Ontario, Canada.

Phylogenetic studies of the ubiquitin-specific protease family by Dr R BAKER with Dr LS Jermiin School of Biological Sciences, University of Sydney, NSW.

Functional studies of yeast deubiquitinating enzymes by Dr R BAKER with Dr D Finley Harvard Medical School, Boston, MA, USA.

Determination of genetic factors responsible for multidrug resistance in small cell lung carcinoma by Dr J BAN-YER 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 Ffrench, Westfield Research Laboratories, Sydney Children's Hospital, Sydney, NSW.

The role of Syntaxin subtypes in synaptic transmission by Dr J BEKKERS with Dr C Morgans, Neurological Sciences Institute, Oregon Health Sciences University, Portland, OR, USA.

The neurophysiology of a Galanin receptor knockout mouse with an epileptic phenotype by Dr J BEKKERS with Drs A Jacoby and T Iismaa, Garvan Institute, Sydney.

The influence of the dendritic tree on the firing properties of cerebellar Purkinje cells by Dr J BEKKERS with Prof M Häusser, University College London, UK.

Structural analysis of glutathione S-transferases by Prof. P BOARD with Dr M Parker St Vincents Medical Research Institute, Melbourne, Vic.

Parkinson's Disease, Pesticides and glutathione transferase polymorphisms by Prof. P BOARD with Dr D LeCouteur, Department of Pharmacology, University of Sydney and Canberra Clincal School, The Canberra Hospital.

Function of the Zeta class GSTs by Prof. P BOARD with Dr MW 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 HV Aposhian, 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.

Structural studies into the mechanism of dihydrofolate reductase by Dr MG CASAROTTO with Prof G Roberts, Centre for Mechanisms of Human Toxicity, University of Leicester, UK; Dr J Basran, Department of Biochemistry, University of Leicester, UK.

Chitinase and Chitin Binding Proteins Dr MG CASA-ROTTO with Dr C Vorgias, Biology Department, Athens University, Greece; Prof H Schrempf, Universitat Osnabruk, FB Biologie/Chemie, Osnabruk Germany.

Peptide activators of the ryanodine receptor Dr MG CASAROTTO with Prof I Toth, Pharmacy Department, University of Queensland.

Effects of drugs that block Vpu ion channels studied with NMR techniques Dr MG CASAROTTO with Prof T Watts, Biomembrane Structure Unit, University of Oxford.

Effects of drugs that block Vpu ion channels studied Dr MG CASAROTTO with NMR techniques with Dr W Fischer, Biomembrane Structure Unit, Department of Biochemistry, University of Oxford, UK.

The role of NO in regulation of EAE by Dr B CHARL-TON 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, Dr P Cooper.

Adjuvant activity of gamma inulin by Dr B CHARLTON with Dr P Fuentes, Universitat Autonoma de Barcelona, Barcelona, Spain; Dr G Guillen, Centre for Genetic Engineering & Biotechnology, Havana, Cuba; Dr DO Willenborg, Neurosciences Research Unit, The Canberra Hospital, Canberra, ACT; Dr N Petrovski, Director, National Health Sciences Centre, The Canberra Hospital, Canberra, ACT.

Identification of novel membrane proteins by searching for patterns in hydropathy profiles by Dr JD CLEM-ENTS with Dr RE Martin, School of Biochemistry and Molecular Biology, Faculty of Science.

Presynaptic and postsynaptic mechanisms underlie paired pulse depression at single GABAergic boutons in rat collicular cultures by Dr JD CLEMENTS with Prof R Grantyn, Developmental Physiology, Johannes Muller Institute of Physiology, Humboldt University Medical School, 10117 Berlin, Germany.

The role of nitric oxide in infectious and autoimmune disease by Dr WB COWDEN with Dr K Rockett, Institute of Molecular Medicine, Oxford, UK.

The activity and mechanism of action of novel glycoprotein processing inhibitor anti-rejection agents by Dr WB COWDEN with Prof A Hibberd, Hunter Valley Hospital Transplant Unit, Newcastle, NSW.

Effects of DHPR Peptide Fragments on Ca Sparks by Prof. AF DULHUNTY with Prof R Fink, University of Heidelberg, Heidelberg Germany.

Activation of malignant hyperthermic pig muscle by Prof. AF DULHUNTY with Prof E Gallant, University of Minnesota, USA.

Bioavailability of peptides that activate ryanodine receptors by Prof. AF DULHUNTY with Prof I Toth and Dr P Mollinar, University of Queensland.

Structure of ryanodine receptors by Prof. AF DUL-HUNTY with Dr M Parker, St Vincents Institute of Medical Research, Melbourne.

Actions of peptides on skinned muscle fibres by Prof. AF DULHUNTY with Dr G Lamb, La Trobe University.

The characterisation of allergic networks by Dr P FOS-TER with Dr M Rothenberg, Childrens Hospital Medical Centre, University of Cincinnati USA.

The role of IL-13 in asthma and inflammation by Dr P FOSTER with Dr A Mackenzie, Cambridge University.

Models of chronic asthma by Dr P FOSTER with Prof Kumar, University of NSW.

Effects of conotoxins on sodium currents by Prof. PW GAGE with Prof D Adams, Department of Physiology and Pharmacology, University of Queensland.

Structure of the GABA-A receptor by Prof. PW 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. PW GAGE with Prof T Cunningham and Dr H Naif, Westmead Hospital NSW.

Structure of Vpu ion channels studied by Prof. PW GAGE with NMR techniques with Prof T Watts, Oxford, UK.

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 M Prior, Psychology Department, Melbourne University, Melbourne, Vic.

Role of glycosaminoglycans in the cellular uptake of viruses by Dr C FREEMAN with Prof T Bergstrom, Dept of Clinical Virology, University of Göteborg, Sweden.

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.

Role of heparanase in the pathogenesis of proteinuria by Dr C FREEMAN with Prof D Power and Dr V Levidiotis, Austin Hospital, Melbourne.

Heparanase as an anti-tumour target by Dr C FREEMAN with Dr N Pavlakis, Royal North Shore Hospital, Sydney, NSW; Drs J Joyce and D Hanahan, Hormone Research Unit, University of California at San Francisco, California, USA.

A program of screening for ENU-mutations affecting lymphocyte response to antigen by Prof. C GOODNOW with Dr R Cornall and Prof J Bell, Oxford University, UK.

Identifying genes for immunity and tolerance by Prof. C GOODNOW with Drs J Cyster, L Laniet, A Weiss, University of California, San Francisco, USA.

Mechanisms regulating B Cells in diabetes by Prof. C GOODNOW with Dr N Petrovsky, The Canberra Hospital, Australia.

Mutations affecting male fertility by Prof. C GOOD-NOW with Dr M O'Bryan, Monash Institute of Reproduction and Research, Melbourne, Australia.

Mutations affecting the memory gland by Prof. C GOODNOW with Dr C Ormandy, Garvan Institute of Medical Research, Melbourne, Australia.

Role of Ikaros in blood cells by Prof. C GOODNOW with Dr S Smale, University of California Los Angeles, USA; Dr A Perkins, Monash University, Melbourne, Australia.

Gz coupling to dopamine D2-like receptors in vivo by Prof. I HENDRY with Dr CD Blaha, Department of Psychology, Macquarie University.

Nerve growth factor retrograde axonal signalling by Prof. I 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 HENDRY with Dr I McLennan, Department of Anatomy, University of Otago.

Cell-cell communication in the wall of mouse mesenteric arteries by Prof. C HILL and Dr S SANDOW with Prof C Garland and Dr K Dora, University of Bath, UK.

Expression of gap junctions and connexins in hamster arteries by Prof. C HILL and Dr S SANDOW with Prof SS Segal and Dr R Looft-Wilson, Yale University School of Medicine.

Gap junctions; the critical link in EDHF action by Prof. C HILL and Dr S SANDOW with Dr HC Parkington, Dr M Tare, Dr H A Coleman, Monash University.

Molecular mechanisms of cell invasion and angiogenesis by Dr M HULETT with Prof CN Chesterman, Prof. BH Chong, Assoc. Prof. PJ Hogg, and Dr LM Khachigan, University of New South Wales, Sydney, NSW; Dr RK Andrews and Prof. MC 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 Women's and Children's Hospital, Adelaide, SA; Prof. PM Hogarth, The Austin Research Institute, Melbourne, Vic.; L Maxwell, The Canberra Hospital, Canberra, ACT.

Leukocyte Fc receptors and HRG by Dr M HULETT with Prof. PM Hogarth and Dr B Wines, The Austin Research Institute, Melbourne, Vic.

Pathophysiological Significance of Reverse signalling through membrane TNF by Dr G KARUPIAH with Dr J Sedgwick, DNAX Research Institute, Palo Alto, USA.

Genetic regulation of the early innate response to poxvirus infection by Dr G KARUPIAH with Dr A Scalzo, Department of Microbiology, University of Western Australia.

Modulation of the immune response by virus-encoded cytokine homologs by Dr G KARUPIAH with Dr A Alcami, Division of Virology, Department of Pathology, University of Cambridge, UK.

Chemokines and Immunity to Viral Infections by Dr G KARUPIAH with Drs J Farber and P Murphy, NIAID, National Institutes of Health, Bethesda, USA.

Virus-mediated inhibition of ion channels in respiratory epithelia by Dr G KARUPIAH with Profs D Cook, J Young and Dr Kunzelmann, Department of Physiology, University of Sydney, NSW. Pathogenesis of Influenza Pneumonia and Flavivirus Encephalitis by Dr G KARUPIAH with A/Prof. N King, Department of Physiology, University of Sydney, NSW.

Protective immune responses in mice against Japanese encephalitis virus and infection-enhancing serocomplex flaviviruses by Dr M LOBIGS with Dr RA Hall and Prof. J ackenzie, 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 LO-BIGS with Dr F Momburg, German Cancer Research Center, Heidelberg, Germany.

The role of IL-5 in smooth muscle hyperreactivity of the gut by Dr KI MATTHAEI and Prof. IG YOUNG 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 Dr KI MATTHAEI and Prof. IG YOUNG with Dr M Rothenberg, Division of Pulmonary Medicine, Allergy & Immunology, Children's Hospital Medical Centre, Cincinnati, Ohio USA.

The role of IL-5 in eosinophil precursor differentiation by Dr KI MATTHAEI and Prof. IG YOUNG with Prof J Denburg, Department of Medicine, McMaster University, Hamilton Ontario, Canada.

The control of inflammatory disease in vivo by Dr KI MATTHAEI with Dr S Breit, Centre for Immunology, St Vincents Hospital, Darlinghurst, Sydney, NSW.

The role of mast cells in vivo by Dr KI MATTHAEI with Prof S Krilis, Department of Immunology, Allergy & Infectious Diseases, The St George Hospital, Kogarah NSW.

Murine filariasis infections in cytokine deficient mice by Dr KI MATTHAEI with Prof A Hoerauf, Department of Helminthology, Bernhard Nocht Institute of Tropical Medicine, Hamburg, 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 p-glycoprotein during acute viral infections by Dr A MÜLLBACHER with Dr R Johnston, Peter Mac-Callum Cancer Centre, Melbourne, Vic.

The role of granzymes in viral infection by Dr A MÜLL-BACHER 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 Institut 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 LO-BIGS with Dr M. Simon, Max Planck Institut für Immunbiologie, Freiburg, Germany.

Hep C and liver damage by Drs A MÜLLBACHER and M LOBIGS with A/Prof ML Bassett, Gastroenterology Unit, The Canberra Hospital, Woden, ACT.

Role of histidine-rich glycoprotein in tumour invasion and angiostatin formation by Prof. C PARISH with Dr P Hogg and Professor 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.; Profs C Chesterman and B Chong, School of Pathology, University of New South Wales, Sydney, NSW.

Inhibition of vascular restenosis by PI-88 by Prof. C PAR-ISH with Dr L Khachigian, School of Pathology, University of New South Wales, Sydney, NSW.

Novel complement activation pathways by Prof. C PAR-ISH with Professor M Walport and Dr M Botto, Imperial College School of Medicine, London, UK.

Development of a liposome-based TB vaccine by Prof. C PARISH with Dr W Britton, Centenary Institute, Sydney.

Eosinophil-induced tumour regression by Prof. C PAR-ISH with Dr M Rothenberg, University of Cincinnati, Cincinnati, USA.

3D structure of mammalian heparanase by Prof. C PAR-ISH, Drs C FREEMAN and M HULETT with Dr M Parker, St Vincents Hospital, Melbourne, Vic.

Heparanase as an anti-tumour target by Prof. C PARISH, Drs C FREEMAN and M HULETT with Dr R Anderson, Peter MacCallum Cancer Institute, Melbourne, Vic.

Design of viruses for the biological control of vertebrate populations by Prof. IA RAMSHAW with Drs R. Jackson, P.Kerr, Division of Wildlife and Ecology, CSIRO, Canberra, ACT.

Evaluation of HIV vaccines by Prof. IA RAMSHAW with Dr S Kent, University of Melbourne, Melbourne, Vic.

Design of HIV-1 vaccines by Prof. IA RAMSHAW with Dr D Boyle, CSIRO, Australian Animal Health Laboratory, Geelong, Vic.

Evaluation of new HIV-1 vaccines by Prof. IA RAM-SHAW with Dr R Ffrench, Westmead Hospital, Westmead, NSW.

Mucosal immunity and HIV vaccines by Prof. IA RAM-SHAW with Drs M Corb and D Fuller, Powderject Vaccines, USA. Development of a novel TB vaccine by Prof. IA RAM-SHAW with Dr W Britton, Centenary Institute of Cancer Medicine and Cell Biology, Sydney, NSW.

Role of spinal interneurones in control of movement by Prof. SJ REDMAN with Dr T Jessell, Columbia University, New York; Dr L Ziskind-Conhaim and Prof M Jackson, Department of Physiology, University of Wisconsin; Drs A Todd And D Maxwell, University Glascow; Dr R Brownstone, Dalhousie University, Halifax; Dr M Goulding, Salk Institute, San Diego.

Calcium buffering in nerve terminals by Prof. SJ RED-MAN with Dr T Jessell with Dr M Jackson, Department of Physiology, University of Wisconsin.

Properties of interneurons in the amygdala by Dr P SAH with Dr H Monyer, University of Heidlberg, Germany.

Morphology of neurons in the amygdala by Dr P SAH with Dr R Callister, Department of Anatomy, University of Newcastle.

Control of GM-CSF gene transcription in T cells by Dr MF SHANNON with Dr A Holloway, Discipline of Biochemistry, University of Tasmania.

Structure function studies of the transcription factor c-Rel by Dr MF SHANNON with Dr T Parks, Cellegy Ltd, San Francisco, USA.

The role of chromatin remodelling in the development of effector and memory T cells by Dr F SHANNON and Dr S RAO with Dr B Stockinger, National Institute of medical research, London.

The role of c-Rel in CD28 signaling in T cells by Dr F SHANNON and Dr S RAO with Dr S Gerondakis, Walter and Eliza Hall Institute of Medical Research, Melbourne.

NF-kB regulatory networks in T cells by Dr F SHAN-NON and Dr S RAO with Dr S Gerondakis, Walter and Eliza Hall Institute, Melbourne; Dr G Denyer, School of Biochemistry, University of Sydney.

Regulation of pig proislet xenograft destruction and assessment of the potential for xenozoonoses by Dr CJ SIME-ONOVIC with Prof A Gibbs, School of Botany and Zoology, ANU; Clin Assoc Prof JD Wilson, Department of Endocrinology, The Canberra Hospital, Woden, ACT; Dr P McCullagh, Faculty of Veterinary Science, The University of Sydney, Camden, NSW.

Role of chemokines in the rejection of islet tissue allografts and xenografts by Dr CJ SIMEONOVIC with Dr WA Kuziel, Section of Molecular Genetics and Microbiology, The University of Texas at Austin, Austin, Texas, USA.

Immunomodulatory effects of QFA (Coxiella burnetii, Phase 1 treatment of mice by Dr CJ SIMEONOVIC with Dr A Baxter, The Centenary Institute of Cancer Medicine and Cell Biology, Sydney, NSW.

T Cell populations in 2Ma vs 2Mb transgenic NOD mice by Dr RM SLATTERY with Dr D Godfrey, Monash University, Melbourne. The role of thymic stroma in 2Ma vs 2Mb transgenic NOD mice by Dr RM SLATTERY with Prof R Boyd, Monash Medical Centre, Melbourne.

The use of the crelox system in analysis of the role of IE in self-tolerance by Dr RM SLATTERY with Dr BF de St Groth, Centenary Institute, Sydney.

The development of cataracts in H-2kb NOD transgenic NOD mice by Dr RM SLATTERY with Dr D Serreze, Jackson Laboratories, Bar Harbor, USA.

The role of NKT cells in B2ma and B2mb NOD mice by Dr RM SLATTERY with Dr A Baxter, Comparative Genomics Centre, James Cook University, Townsville.

Tissue specific deletion of the Bc1 -x gene in studies of autoimmunity by Dr RM SLATTERY with Dr J Allison, Melbourne University.

Interaction of action potentials with inhibitory synaptic events by Dr G STUART with Dr M Häusser, University College London.

HIV Clinical trials by Dr SA THOMSON with Australian HIV Vaccine Consortium, Headed by Dr D Cooper, Natl Centre for Epidemiology and Clinical Research, University of New South Wales, Sydney, NSW.

HIV SAVINE by Dr SA THOMSON with D Fuller, PowderJect (USA), Madison, Wisconsin, USA; Dr S Kent, Department of Microbiology, University of Melbourne, Melbourne, VIC; Dr RA Ffrench, Pediatric Research Labs, Sydney Children's Hospital, Westmead, NSW.

Hepatitis C SAVINE by Dr SA THOMSON with Dr RA 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 SA THOMSON with Prof W Britton and Dr G Shoebridge, Centenary Institute, Camperdown, NSW.

Papilloma virus and cervical cancer polyepitope vaccine by Dr SA THOMSON with Assoc Prof B Tindle, Sir Albert Sakzewski Virus Research Centre, Brisbane Qld.

Nasopharyngeal carcinoma polyepitope by Dr SA THOMSON with Dr R. Khanna, Queensland Institute of Medical Research, Brisbane Qld.

Solving the crystal structure of a H2AZ containing nucleosome by Dr DJ 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 DJ TREM-ETHICK with Dr B May, Department of Biochemistry, University of Adelaide, SA.

Presynaptic calcium binding proteins in deaf versus normal mice by Dr B WALMSLEY and Dr A BERNTSON with Prof R Fyffe, Wright State University, Ohio, USA. The role of auditory activity in the development of release probability by Dr B WALMSLEY and Dr S OLESKEVI-CH with Prof Takahashi, University of Tokyo, Japan.

Spontaneous activity in the auditory pathway of deaf mice: an in vivo electrophysiological study by Dr B WALMS-LEY and Dr S OLESKEVICH with Prof R Shepherd and Dr T Paolini, University of Melbourne, Australia.

Comparison of short-term synaptic depression in a calyceal versus by Dr B WALMSLEY and Dr S OLESKEVICH with multiple-bouton synapse with Prof B Burke, NIH, Washington, USA

Glucocorticoid receptor in adrenocortical steroid-induced hypertension by Prof. JA WHITWORTH with Dr T Cole, Dept Biochemistry, University of Melbourne, Melbourne VIC.

Free radicals in the pathogenesis of hypertension by Prof. JA WHITWORTH with Dr K Croft, Dept Medicine, University of WA, Perth WA.

The role of cholinergic stimulation and prostaglandins in cortisol-induced hypertension in humans by Prof. JA WHITWORTH with A/Prof. J Kelly and Dr G Mangos, Dept Medicine, St George Hospital, Kogarah NSW.

Genetic determinants in hypertension by Prof. JA WHIT-WORTH with Prof. B Morris, Basic and Clinical Genomics Laboratory University of Sydney, Sydney NSW.

Glucocorticoid binding protein and Chronic Fatigue Syndrome by Prof. JA WHITWORTH with Dr D Torpy, Royal Adelaide Hospital, Adelaide SA.

# Research School of Pacific and Asian Studies

#### **Division of Economics**

International Food Safety Standards and Processed Food Exports from Developing Countries by Prof. P. ATHU-KORALA with Rajesh Mehta, Research Information Systems, Delhi, Ashok Gulati, International Food Policy Research Institute, Washington DC, and Sisira Jayasuria, University of Melbourne.

Trade and Investment in Economic Transition in Vietnam by Prof. P. ATHUKORALA, book written with J. Riedel, P. Nitze, School of Advanced International Studies, Johns Hopkins University, Washington DC.

Measuring contagion in the East Asian currency crisis by Dr M. DUNGEY with Prof. V. L. Martin, University of Melbourne.

Contagion in Russian and LTCM financial crises by Dr M. DUNGEY with Dr B. Gonzalez-Hermosillo, International Monetary Fund, Dr R. Fry, ANU and Queensland University of Technology, and Prof. V. L. Martin, University of Melbourne.

The effect of terms of trade on exchange rate volatility by Dr M. DUNGEY with Dr P. Cashin, International Monetary Fund.

Measurement and decomposition of welfare changes in computable general equilibrium modeling by Prof. G. FANE with Dr H. Ahammad, ABARE, Canberra.

Anti-poverty programs in Indonesia by Prof. G. FANE with Dr Daly, University of Canberra.

Total factor productivity growth in East Asia by Prof. G. FANE with Dr P. N. Weerasinghe, Central Bank of Sri Lanka.

Management of financial crises by Dr P. GAI with Hyun Song Shin, London School of Economics.

National conference 'Towards Opportunity and Prosperity' by Prof. R. GARNAUT with Institute of Applied Economic and Social Research at Melbourne University.

National conference on Australia–China relations by Prof. R. GARNAUT with University of New South Wales.

AusAID project on Philippine Economy by Prof. H. HILL with Prof. Arsenio Balisacan.

Impact of reforms on rural poor in India by Prof. R. JHA with Prof. R. Ray, University of Tasmania.

DFID project on nutrition by Prof. R. JHA with Prof. R Gaiha, University of Delhi and Dr K. Imai, University of London.

Migration and pollution issues by Prof. R. JHA with Prof. J. Whalley, University of Warwick, UK.

Vertical fiscal externalities by Prof. R. JHA with Prof. R. Boadway, Queen's University, Canada, and Prof. I. Horika, Aoyama Gakuin University, Japan.

Global dimensions of demographic change by Prof. W. McKIBBIN with Dr Bryant, Brookings Institution, USA.

Economics for an integrated world by Prof. W. McKIB-BIN with Prof. P. Wilcoxen, University of Texas, Austin, USA.

Monetary and fiscal policy rules in the European Union by Prof. W. McKIBBIN with Prof. R. Neck, University of Klagenfurt, Austria.

Monetary and fiscal policy rules in the European Union by Prof. W. McKIBBIN with G. Haber, University of Klagenfurt, Austria.

Policy responses to global risk shocks by Prof W. McKIB-BIN with Prof. D. Vines, Oxford University, UK.

Greenhouse Gas Policy in Australia by Prof. W. McKIB-BIN with Mr D. Pearce, Centre for International Economics, Canberra.

Wealth accumulation, wealth distribution and social welfare reform in China by Dr X. MENG with Prof. Shi Li, Institute of Economics, the Chinese Academy of Social Sciences.

Impact of one child policy on pension reform in China by Dr X. MENG with Prof. Fang Cai, Institute of Population Studies, the Chinese Academy of Social Sciences. Research on program evaluation of Food for School project in Bangladesh by Dr X. MENG with J. Ryan, Food Policy Research Centre, Washington DC and ANU.

Evaluation of the impact of economic policy research by Dr J. RYAN with Director General of IFPRI, Dr P. Pinstrup-Andersen (project funded by the International Food Policy Research Institute).

Ownership and technical efficiency: a cross-section study on the Third Industrial Census of China by Dr M. WEN with Dr Dong 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. S. King, University of Melbourne.

#### **Division of Pacific and Asian History**

Capacity building in relation to the protection of suspects and detainees in China by Dr B. BAKKEN, scholar exchange program Scandinavia/Australia.

Cooperation with Raoul Wallenberg Institute for Human Rights, Lund, Sweden by Dr B. BAKKEN.

Violence in Asia by Dr B. BAKKEN with Nordic Institute of Asian Studies, Copenhagen, ANU and other Australian institutions.

Policing in China project by Dr B. BAKKEN with The Open University of Hong Kong.

Transformations in collective identity in the South Pacific by Dr C. BALLARD with the Centre de Recherche et de Documentation sur l'Océanie of the French Centre National de la Recherche Scientifique.

Locating the Commonwealth: community, environment and local governance regimes in reform era Indonesia by Dr C. BALLARD with Dr C. Warren and Dr J. McCarthy, Murdoch University, Dr A. Lucas and Dr J. Schiller, Finders University, Dr G. Acciaoli, University of Western Australia and Dr L. Visser, University of Amsterdam.

Papuaweb (<u>www.papuaweb.org</u>) a research and documentation project by Dr C. BALLARD with Mr M. Cookson, PAH, and Dr J. Mansoben, Universitas Cenderawasih and Dr A. Sumule, Universitas Papua, Papua, Indonesia.

Rock art dating project, Vanuatu by Dr C. BALLARD with Dr M. Wilson, ANH, RSPAS and the Vanuatu Cultural Centre.

Qing dynasty history and the Yuan Ming Yuan by Prof. G.R. BARMÉ with Ms L. Conner, New York, USA.

Digital Encyclopaedia Project by Prof. G.R. BARMÉ with colleagues at the Long Bow Group in Boston and the East Asia Center, Indiana University, USA.

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. Collaborative project on 20th century Chinese intellectual history by Prof. G.R. BARMÉ with Dr G. Davies, Monash University (joint ARC project).

Collaborative research on the Chinese internet and intellectual activity in contemporary China by Prof. G.R.BAR-MÉ with Dr G. Davies, Monash University.

A History of Papua New Guinea by Prof. D. DENOON with Dr A. Kituai, University of Papua New Guinea.

History of the decolonisation of Papua New Guinea by Prof. D. DENOON with representatives from DFAT.

The history and anthropology of tattoo by Dr B. DOUG-LAS with Dr E. Gover and an international team based at Goldsmiths College, University of London.

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.

The environmental history of two Chinese lakes, Erhai and Chaoho, by Prof. J.M.D. ELVIN with Prof. J. Dearing and Drs D. Crook and R. Jones, Liverpool University, UK and Dr Shen Ji and colleagues of Nanjing University, PRC.

The ambiguous allure of the west: aesthetics and power in the Making of Thai identities by Dr P. JACKSON with Dr R. Harrison, School of Oriental and Asian Studies, University of London.

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 Ends of Empire project, 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.

Overseas Chinese water frontier in Souteast Asia, 1700– 1900 by Dr T. LI with Prof. C. Trocki, Queensland University of Technology and Dr N. Cooke, ANU.

The Mekong River region by Prof. G. McCORMACK with President and Vice-President of Osaka Foreign Studies University, Profs Akagi and Nishimura.

The Ogasawara Forum 2002 by Prof. G. McCORMACK (coordinator) with Dr N. Guo, University of Otago.

Social sciences translation and publication project in Vietnam by Prof. D. MARR (Head) with Prof. Phan Huy Li, Hanoi National University, Advisory Group.

Multiculturalism in an age of globalisation by Prof. T. MORRIS-SUZUKI with Prof. T Iyotani et al, Hitotsubashi University, Tokyo, Japan.

Americanisation and East Asia by Prof. T. MORRIS-SU-ZUKI 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. Cross border networks in East Asia by Prof. T. MORRIS-SUZUKI with Prof. S. Kang, Tokyo University.

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, collaboration with the National Museum for a planned exhibition, 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**

Cosmopolitan militaries project by Dr L. ELLIOT with scholars from University of Oxford, University of Aberdeen, Cambridge University, Columbia University, London School of Economics, University of Manchester, University of Wales Aberystwyth, Kings College London, Italian National Research Council, Australian Defence Force Academy.

Sources of legitimacy for intervention in multilateral security crises by Dr L. ELLIOT with United Nations University.

Asia–Pacific security dynamics by Mr G. FRY with Prof. Soeya, Keio University.

Joint application for a European Union/DEST pilot program in international student exchanges by Dr C. REUS-SMIT with colleagues at the University of Queensland and the University of Melbourne.

#### Department of Political and Social Change

The dynamics and management of internal conflict in Asia, Aceh study group project by Dr E. ASPINALL (acting principal researcher), with the East–West Center, Washington, DC.

Civil society and political change in Asia project by Dr E. ASPINALL with East–West Center, Honolulu.

Malaysian Economics and Politics in the New Century by Dr C. BARLOW, co-editor with Prof. F. Loh, Universiti Sains Malaysia.

International study of palm oil production, marketing and politics by Dr C. BARLOW as Visiting Scholar, Wolfson College, University of Oxford, June–September collaborating with various colleagues.

The dynamics and management of internal conflicts in Asia, Aceh Study Group project by Dr H. CROUCH (member), with the East–West Center, Washington, DC.

Advisory role on civil society and political change in Asia, Dr H. CROUCH ('Senior scholar') with the East–West Center, Honolulu.

the dynamics and management of internal conflicts in Asia, Aceh Study Group project by Dr C. COLLIER, principal researcher, Southern Philippines, with the East– West Center, Washington, DC. Philippine communist insurgency by Dr C. COLLIER with R. Rutten, University of Amsterdam.

Consultancy to write monthly reports on Australian agriculture and agricultural policy by Assoc. Prof. A. GEORGE MULGAN from the Norinchukin Research Institute.

Two projects on governance and one on wealth distribution in Vietnam by Prof. B. KERKVLIET (co-organiser) with colleagues at the ANU and the Institute of Southeast Asian Studies in Singapore.

Book project on civil society and political change in Asia, by Prof. B. KERKVLIET (participant) with the East– West Center, Honolulu and Washington, DC.

Visiting fellowship Dr R. MAY at MacMillan Brown Centre for Pacific Studies.

Muslim autonomy in Mindanao by Dr R. MAY, Associate, P Gowing Memorial Research Center, Marawi City, Philippines.

Regime change and regime maintenance in Asia and the Pacific project by Dr R. MAY with various institutions in Australia and overseas.

Papua New Guinea election studies 1997–2002 by Dr R. MAY with Department of Political and Administrative Studies, University of Papua New Guinea.

Asia Pacific security outlook (annual) by Dr R. MAY with Japan Center for International Exchange, Tokyo, and East–West Center, Hawaii, member of APSO Project Team.

Adjunct faculty Dr R. MAY, Center for Civil Military Relations, Naval Postgraduate School, Monterey, US

Documenting endangered language project by Ms R. SAOVANA-SPRIGGS with the General Linguistics Department, Kiel University.

Proposed workshop program for the 'Follow-Up Bougainville Women's Summit' by Ms R. SAOVANA-SPRIGGS with with Centre for Refugees, NSW University, Bougainville Women For Peace and Freedom Office in Sydney, Bougainville Women Inter-Church Forum.

Editor, book of a collection of Bougainville women's papers about their experiences in peacemaking and peacebuilding in Bougainville in the last ten years by Ms R. SAOVANA-SPRIGGS with the Bougainville Women For Peace and Freedom Office in Sydney and in Arawa, Bougainville Island.

Economic reform in India by Dr R. SHAND with Dr Shashanka Bhide, National Council of Applied Economic Research, New Delhi.

Study of the economics of regional cooperation in the Indian Ocean Rim region by Dr R. SHAND with Prof. K. Kalirajan, National Graduate Institute for Policy Studies, Tokyo.

#### **Division of Society and the Environment**

#### **Department of Anthropology**

Indigenous Agricultural Systems in the new Indonesia: impacts of estate monocultures, globalization and decentralization by Prof. H. BROOKFIELD with Associate Prof. L Potter and Mr S Badcock, University of Adelaide.

Lecture series by Dr A. KIPNIS with University of Sydney Anthropology program.

Anthropology lecture series by Dr A. KIPNIS with Qinghua University (Taiwan).

ARC Linkage Grant by Dr A. McWILLIAM with Australian Agency for International Development.

Australian/French joint project, 'Recontres culturelles dans le Pacifique' by Prof. M. MOSKO with Prof. M. Jolly, Prof. D. Tryon, Dr C. Ballard, Dr B. Douglas, Prof. B. Lal.

Collaborative work by Prof. M. MOSKO with Prof. S. Tcherkezoff, Dr L. Brutti, Dr J. M Chazine, Dr F. Douraire-Marsandon, Dr P. van der Grijp, Dr I. Merle, Dr S. Revolon, Dr F. Tzerikaianta at CREDO/CNRS Marseilles and Paris.

Australia–Vietnam visitor exchange program fellow, Dr P. TAYLOR, with the Academies of the Social Sciences and Humanities in Australia and the Vietnam National Centre for the Social Sciences and Humanities.

The signing of Departmental/School exchange agreements by Dr N. TAPP (with Dr A. Kipnis) with Peking University and Yunnan University.

The signing of a memorandum of cooperation by Dr N. TAPP with Hong Kong University.

Dispatch of Dr G Wijeyewardene collection of books by Dr N. TAPP to the University of Yunnan, in collaboration with the University Library and Mrs M Wijeyewardene who donated the books.

#### **Department of Archaeology and Natural History**

Further research into dry-air freeze-drying of artefacts and structures in Antarctica by Mr W. AMBROSE with Dr I. Godfrey, Western Australian Maritime Museum, Fremantle.

Archaeology of French Polynesia by Prof. A.J. ANDER-SON with Dr E. Conte, French University of the South Pacific, Prof. P. Kirch, University of California Berkeley, Dr D. Kennett, University of Oregon and Dr M. Weisler, University of Otago.

Archaeology of Palau by Prof. A.J. ANDERSON with Dr S. Wickler, Tromso University.

Archaeology of Niue by Prof. A.J. ANDERSON with Dr R. Walter, University of Otago.

Archaeology of the Philippines by Prof. A.J. ANDER-SON with Dr E. Dizon, National Museum of the Philippines and Dr V. Paz, Philippines University. On bone dating by Prof. A.J. ANDERSON with Dr T. Higham, Oxford Radiocarbon Accelerator Unit, University of Oxford.

Archaeology of Kiritimati Island by Prof. A.J. ANDER-SON with Dr P. Wallin and Dr H. Martinsson-Wallin, Kon-Tiki Museum, Oslo.

Southern margins project by Prof. A.J. ANDERSON with Mr G. O'Regan, Ngai Tahu Development Corporation, New Zealand.

On tribal boundary issues by Prof. A.J. ANDERSON with Dr Te M Tau, Te Runanga o Ngai Tahu.

Retrospective monitoring of rangeland vegetation change using phytolith analysis by Dr D. BOWDERY with Dr B. Witt, School of Natural and Rural Systems Management, University of Queensland, Gatton Campus.

Archaeology of agriculture in the New Guinea Highlands: the record of the last 2000 years in the Kuk swamp, Mt Hagen by Emeritus Prof. J. GOLSON with Dr T.P. Bayliss-Smith, Department of Geography, Cambridge University, UK.

Reconstruction of global environments, BIOME6000, by Prof. G.S. HOPE with Prof. S. Harrison, Max Planck Institute of Geoecology, Jena Germany.

Glacial environments of New Guinea by Prof. G.S. HOPE with Dr Peterson, Monash University, Dr Prentice, University of New Hampshire, Dr Hantoro, LIPI Geoteknologi, Bandung and Dr S Haberle, RMAP, RSPAS.

Peatlands of montane NSW by Prof. G.S. HOPE with Dr P. Kodela, Royal Botanical Gardens, Sydney, Dr R. Good, New South Wales National Parks, Mr A. Wade, Actew-AGL.

Sphagnum and Australasian peatlands by Prof. G.S. HOPE with Dr J. Whinam, Tasmanian National Parks and Wildlife Service.

Tropical peatland and fire by Prof. G.S. HOPE with Dr U. Chockalinggam, Centre for International Forestry Research (CIFOR), Indonesia.

Contemporary cave use in East Timor by Dr S. O'CON-NOR with Dr S. Pannell, Rainforest CRC, James Cook University, Cairns.

Style, ethnicity and function in Aboriginal glass artefacts by Dr S. O'CONNOR with Dr P. Veth, Research Unit, AIATSIS.

Origin of manufacture of glass beads in East Timor archaeological sites by Dr S. O'CONNOR with Dr B. Gratuze, Institut de Recherche sur les Archéomatériaux, Centre Ernest Babelon, CNRS-ORLEANS, France.

Pottery sourcing in East Indonesia by Prof. M. SPRIGGS with Prof. W. Dickinson, University of Arizona.

Vanuatu faunal sequences by Prof. M. SPRIGGS with Dr D. Steadman, Florida Museum of Natural History, and Dr J. Mead, Arizona State University. Prehistoric human remains from Vanuatu by Prof. M. SPRIGGS with Dr F. Valentin, CNRS, and Universite de Paris 1 and Universite de Paris 10.

Dating of shell artifacts from Buka Island, Northern Solomons by Prof. M. SPRIGGS with Dr S Wickler, University of Tromso, Norway.

Palaeoenvironmental research in the Philippines by Dr J. STEVENSON with Dr Vistor Paz and Dr F. Siringan, University of the Philippines.

Palaeobotanical research in the Philippines by Dr J. STE-VENSON with Dr D. Madualid and Dr L. Bulalacao, National Museum of the Philippines.

Microclimatic monitoring of northern Australian rock shelters by Dr A. WATCHMAN with Mr V. Daniel, Australian Museum.

Dating travertine deposits in Jordan by Dr A. WATCH-MAN with Prof. M. De Dapper, Ghent University.

Dating of giant mural paintings in Baja California Sur by Dr A. WATCHMAN with Dr M. Hernadez Llosas, University of Buenos Aires, Argentina, M. de la Luz Gutierrez, Instituto Nacional de Antropologia y Historia, Mexico, and Dr R. Sparks, Rafter Radiocarbon Facility, NZ.

Dating the El Hosh petroglyphs in Egypt by Dr A. WATCHMAN with Dr D. Huyge, Royal Museum of Belgium, Brussels and Dr A. McNichol, Woods Hole Oceanographic Institution.

Dating of rock art in the Victoria River district, Northern Territory, by Dr A. WATCHMAN with Dr C. Chippindale, Cambridge University and Dr J. Flood, University of Sydney.

Investigating the rock art of Port Keats region by Dr A. WATCHMAN with Dr G. Ward, Australian Institute of Aboriginal and Torres Strait Islander Studies, Mr K. Mulvaney, Aboriginal Sacred Sites Protection Authority and Mr M. Crocombe, Kanamkek-Yile Ngala Museum.

Dating the Barrier Canyon style of rock paintings in Utah by Dr A. WATCHMAN with C. Patterson, Metropolitan State University, Denver.

Dating rock varnishes in Nevada by Dr A. WATCHMAN with Dr E. Ritter, National Park Service, California, and Dr A. Woody, State Museum of Nevada, Reno.

Analysis of rock painting pigments from Malta by Dr A. WATCHMAN with Dr A. Pace, Museum Department Malta.

#### **Department of Human Geography**

Poverty mapping in Papua New Guinea by Dr B. ALLEN with Dr J. Gibson, Economics Department, Waikato University, New Zealand.

The impact of ENSO events on food security in Papua New Guinea by Dr B. ALLEN with Dr S. Bang, Papua New Guinea Agricultural Research Institute, Lae. Agrodiversity in shifting cultivation systems in Papua New Guinea by Dr B. ALLEN with Mr J. Sowei, Papua New Guinea Research Institute, Port Moresby.

Mapping malaria in Papua New Guinea by Dr B. ALLEN with Dr I. Mueller, Papua New Guinea Institute of Medical Research, Goroka.

Information for rural development and planning in Papua New Guinea by Dr RM. BOURKE with Mr V. Kampori, Mr J. Leleng, Mr R. Harden, Mr S. Sipiau and Mr R. Kera, PNG Department of National Planning and Monitoring.

Information for rural development and planning in PNG by Dr R.M. BOURKE with Dr G. Wiles, Dr S. Bang and Ms N. Omat, PNG National Agricultural Research Institute.

Information for rural development and planning in PNG by Dr R.M. BOURKE with Mr M. Kanua, Mr M. Rahman and Mr G. Gumembi, PNG Department of Agriculture and Livestock.

Sustainability of agriculture in Bougainville Province by Dr R.M. BOURKE with Mr P. Koles, Mr G. Wayen and Mr B. Simiha, Bougainville Provincial Administration, PNG.

Food Security for PNG by Dr R.M. BOURKE with Dr S. Bang and Dr G. Wiles, PNG National Agriculture Research Institute.

Community economies project by Prof. K. GIBSON with Prof. J. Graham, Department of Geosciences, University of Massachusetts.

Community economies project by Prof K. GIBSON with Dr J. Cameron, School of Environmental Planning, Griffith University.

Yesterday and Apocalypse Now: authoring indigenous history on film by Dr D.C. McKAY with Ms P. Perez, Ateneo de Manila University.

#### **Department of Linguistics**

Description of East Timor languages by Dr J. BOWDEN with Prof. N. Himmelmann, University of Bochum, and Associate Prof. J. Hajek, University of Melbourne.

On the Pacific and regional distributed sound archive by Dr J. BOWDEN with academics from University of Sydney and University of Melbourne.

Kalam ethnobiology by Prof. A. PAWLEY with Dr S. Majnep, Simbai, PNG, Dr R. Gardner, Auckland Museum, and Dr R. Hide, RSPAS.

Papuan comparative linguistics by Prof. A. PAWLEY with Prof. W.A. Foley, University of Sydney and Dr M Ross.

Diachronic fate of grammatical constructions by Dr M. ROSS with Prof. B. Comrie, Max Planck Institute for Evolutionary Anthropology, Leipzig.

#### **Non-Divisional Groups**

#### **Internet Publications Bureau**

Coordination by Dr T. M. CIOLEK of activities of the Asian Studies WWW Virtual Library, with 43 scholars and librarians from Australian and overseas universities.

#### **Pacific Manuscripts Bureau**

Joint copying project by Mr E. MAIDMENT, 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.

Specific archival preservation projects by Mr E. MAID-MENT, including microfilming Sepik patrol reports of Kenneth Thomas and the Samoan journal of Rev E.G. Neil in collaboration with Dr B. Craig, Foreign Ethnology Curator, South Australian Museum.

Microfilming South Seas evangelical mission baptism registers by Mr E. MAIDMENT with the Centre for the Study of Australian Christianity, Menzies College, Macquarie University.

Microfilming cuttings from the Chilean press on Rapanui (Easter Island) by Mr E. MAIDMENT in collaboration with Dr G. McCall, Centre for South Pacific Studies, University of NSW.

Identifying and microfilming rare Pacific scientific serials by Mr E. MAIDMENT with the CSIRO Black Mountain Library and the Queensland Herbarium Library; University of NSW Social Sciences Library survey of the Hallstrom Pacific Collection.

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

Discussions by Dr A. CASSON with ICRAF and Forest Watch Indonesia about proposed research on the Indonesian Government's current forest management strategies.

Collaboration by Dr A. CASSON with WWF Papua on the development of forest policy in Irian Jaya.

Small islands under pressure in Milne Bay Province (PNG) by Dr C. FILER with Conservation International and University of PNG.

Development of research proposal for study on relationship between indigenous forest management practices and provincial forest policy formation in West Papua by Dr C. FILER with State University of Papua, and for study of integrated rural land use planning in Milne Bay Province with Conservation International.

Finalisation of research proposal by Dr C. FILER for study of 'Small Islands Under Pressure in Milne Bay Province' (PNG) with Conservation International and University of PNG.

Meetings by Dr C. FILER with University of PNG Vice-Chancellor and staff, and staff of Divine Word University (PNG), regarding partnership with ANU.

Discussions by Dr C. FILER with WWF South Pacific regarding collaboration on marine conservation research. Contribution by Dr S. FOALE of video material of environmental impact surveys to CSIRO Fisheries.

Discussions by Dr S. FOALE with University of Queensland on management of Tetepare Island, Solomon Islands.

Design for a social science research training curriculum for employees of research institutions and government bureaucracies throughout Vietnam by Dr F. MAJID-COOKE with International Institute of Asian Studies, Amsterdam, Pennsylvania State University and ANU.

Meeting by Dr E. PETERSEN with potential collaborators at the International Food Policy Research Institute, Washington D C, North Carolina State University, Raleigh, and the Asian Development Bank, Manila.

Multilateral governance of fisheries (seminar) by Dr E. PE-TERSEN at Resources For the Future, Washington DC.

Economic policy, institutions and fisheries development in the Pacific (seminar) by Dr E. PETERSEN at Imperial College at Wye, England.

Comparing irrigation systems in Thailand and Ecuador, research partnership by Dr A. WALKER with Institute for Research and Development and Centre d'Etude du chinisme Agricole, du Genie Rural et des Eaux et Forets.

Comparing irrigation systems in Thailand and Ecuador by Dr A WALKER with Institute for Research and Development and Centre d'Etude du chinisme Agricole, du Genie Rural et des Eaux et Forets.

Consultative discussions by Dr A. WALKER with staff from Montpelier, France about research collaboration with French institutes working on resource management.

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

Policy making in Papua New Guinea workshop by Dr S. DINNEN with National Research Institute, Port Moresby.

Forum on PNG forests by Dr S. DINNEN (co-convener) with Greenpeace (Australia and PNG) and Resource Management on the Asia–Pacific, ANU.

Peace-building in Fiji by Dr S. RATUVA with Ecumenical Center for Research, Education and Advocacy in Fiji.

#### Strategic and Defence Studies Centre

Paper in Asia Policy series on 'Australia, Asia and the US Alliance' by Prof. P. DIBBS with the University of Melbourne.

Lectures on 'Continental Strategy' by Prof. D. HORNER to the Australian Command and Staff College.

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

#### **Applied Mathematics**

Geostatistical analysis of tomographic data by Dr C.H. ARNS with Prof. D. Stoyan, University of Freiberg, Germany. Signatures of spatial morphology in ordered and disordered media by Prof. S. HYDE, Dr M.A. KNACKST-EDT, Dr V. ROBINS and Mr G. SCHRÖDER with Dr K. Mecke, Max-Planck-Institut für Metallforschung, Stuttgart, Germany.

Correlating microstructure to elastic properties of porous materials by Dr M.A. KNACKSTEDT with Dr E. Garboczi, National Institute of Standards and Technology, USA.

Integral geometric measures of real complex media by Dr M.A. KNACKSTEDT and Dr C.H. ARNS with Dr K. Mecke, University of Stuttgart and Max-Planck-Institut für Metallforschung, Germany.

Imaging, visualising and modelling tissue engineered constructs by Dr M.A. KNACKSTEDT, Dr T.J. SENDEN and Dr A. SAKELLARIOU with Prof. B. Milthorpe, University of New South Wales; Dr D. Hutmacher, National University of Singapore.

Tomographic imaging of dental materials Dr M.A. KNACKSTEDT, Dr T.J. SENDEN and Dr A. SAKEL-LARIOU with Prof. M. Swain, University of Sydney; Nicky Kilpatrick, Department of Dentistry, Royal Children's Hospital, Parkville, Victoria.

Characterisation of porus media by Dr M.A. KNACKST-EDT, Dr A.P. SHEPPARD and Dr R.M. SOK with Prof. W.B. Lindquist, State University of New York at Stonybrook, USA.

Interpretation of laboratory core measurements: (MAK, ASA, TJS, APS, RMS, CHA) by Dr M.A. KNACKST-EDT, Dr A. SAKELLARIOU, Dr T.J. SENDEN, Dr A.P. SHEPPARD, Dr R.M. SOK and Dr C.H. ARNS with Prof. W.V. Pinczewski, University of New South Wales; Mr G. Bunn and Mr C. Smith, BHP Billiton.

Computational topology for the analysis of scientific data by Dr V. ROBINS with Dr E. Bradley, University of Colorado, Boulder, USA.

Nanomechanics of lipid membranes by Dr T.J. SENDEN with Prof. J.-M. di Meglio, Paris VII, France.

Novel single molecule detection using force microscopy by Dr T.J. SENDEN with Dr J. Gooding, University of New South Wales.

Liquid penetration into paper products and coatings by Dr T.J. SENDEN and Mr R. ROBERTS with Dr M.B. Lyne, International Paper Pty Ltd and Dr W. Schrof, BASF Ludwigshafen, Germany.

Network modelling of multi-phase flow in porous media by Dr R.M SOK and Dr A. P. SHEPPARD with Prof. W.V. Pinczewski and Dr L. Paterson, Australian Petroleum CRC.

Pore-scale network models for sedimentary rock by Dr R.M SOK and Dr A. P. SHEPPARD with Prof. W.V. Pinczewski, Australian Petroleum CRC; Prof. W.B. Lindquist, State University of New York at Stonybrook, USA.

#### **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, USA; Prof. K. Bartschat, Drake University, USA.

Electron-molecule scattering by Prof. S.J. BUCKMAN with Prof. H. Tanaka, Sophia University, Japan and Prof. H. Cho, Chungnam National University, Korea.

Positron scattering from atoms and molecules by Prof. S.J. BUCKMAN with 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, Mexico.

(e,2e) experiments on water by Dr S.J. CAVANAGH with Prof. B. Lohmann, Griffith University.

Threshold double photoionization from water and sulfur dioxide by Dr S.J. CAVANAGH with Prof. G.C. King, University of Manchester, UK and Prof. P. Bolognesi, IMAI del CNR, Rome, Italy.

Atomic force microscopy of fission fragment irradiated quartz, fullerite, apatite and natural opal by Prof. L.T. CHADDERTON with Prof. G. Espinosa and Prof. S.A. Cruz, Metropolitan Autonomous University, Mexico.

Phase changes in transition metal dichalcogenides due to GeV Heavy Ion, and MeV Fullerene Ion Bombardments: Transmission Electron Microscopy and Surface Force Microscopy by Prof. L.T. CHADDERTON with Dr A. Dunlop, SESI, École Polytechnique, Paliseaux, France.

Radiation effects on polymers and 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. CHAD-DERTON 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. Jonckeere, University of Freiberg, Germany; Dr A Wendt, British Antarctic Survey, UK.

Studies of plasma effects, and electronic and nuclear vicinage 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, Mexico.

Theory and practice of organic radical formation and motion in GeV ion-irradiated polymers by Prof. L.T. CHADDERTON and Prof. E. GAMALY (AM) with Prof. S.A. Cruz, Metropolitan Autonomous University, Mexico.

Studies of ultrafast coherent dynamics of localised modes in many-body systems by Prof. L.T. CHADDERTON and Dr S.Y. KUN (TP) with Prof. W. Greiner, University of Frankfurt, Germany and Prof. S. Haas, University of Strasbourg, France.

Radioactivity in the fine structure of precious opal; exploration and artificial opal synthesis by Prof. L.T. CHAD-DERTON and Dr A. STEWART (AM) with Dr B. Senior, Senior and Associates, Canberra and Dr R. Jonckeere, University of Freiberg, Germany.

Multiple atomic ionization by Dr A. KHEIFETS with Prof. I. Bray, Murdoch University; Prof. B. Joulakian, University of Metz, Germany; Prof. R. Dörner, Frankfurt University, Germany; Prof. Y. Azuma, Photon Factory, Tsukuba, Japan and Dr A. Dorn, Max-Plank Institute for Nuclear Physics, Heidelberg, Germany.

Rotational distributions in ozone photolysis by Prof. B.R. LEWIS with Prof. R.J. Donovan, Dr H.A. Sheard et al., University of Edinburgh, Scotland.

Analysis of REMPI spectra by Prof. 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, USA and Dr R.A. Copeland, SRI International, USA.

Coupled-channel calculations of linewidths for the b state of N2 by Prof. B.R. LEWIS and Dr S.T. GIBSON with Prof. H. Lefebvre-Brion, Université de Paris-Sud, Orsay, France and Prof. J.-M. Robbe, Université de Lille, France.

Anomalous isotopic predissociation by Prof. B.R. LEWIS and Dr S.T. GIBSON with Prof. G. Stark, Wellesley College, USA and Dr J.B. West, Daresbury Laboratory, UK.

Review of molecular oxygen by Prof. B.R. LEWIS and Dr S.T. GIBSON with Prof. M.L. Ginter, University of Maryland, USA and Dr J.S. Morrill, Naval Research Laboratory, Washington, USA.

XUV laser spectroscopy of isotopic nitrogen by Prof. B.R. LEWIS and Dr K.G.H. BALDWIN (LPC) with Prof. W. Ubachs, Vrije Universiteit, Amsterdam, The Netherlands.

Development of ultra-high resolution VUV laser sources by Prof. B.R. LEWIS, Dr K.G.H. BALDWIN (LPC) and Dr M. Kono with Prof. B.J. Orr, Macquarie University.

Collaborative experiments on the ionization of laser-excited atoms by Dr J.C.A. LOWER with Dr A. Dorn, Max-Planck-Institute for Nuclear Physics, Germany.

Development of particle detector and fast data collection technologies by Dr J.C.A. LOWER with Prof. H. Schmidt-Böcking, University of Frankfurt, Germany.

Electron ionization of rare gases by Prof. R.P. McEACHRAN with Mr M.A. Hayes and Prof. B. Lohmann, Griffith University; Mr D.A. Biava and Prof. D.H. Madison, University of Missouri-Rolla, USA; Prof. C.T. Whelan, Old Dominion University, USA; Prof. H.P. Saha, University of Central Florida, USA and Dr E. Engel & Prof. R. Dreizler, University of Frankfurt, Germany.

Electron excitation of atoms by Prof. R.P. McEACHRAN with Dr R. Srivastava, Roorke University, India and Prof. A.D. Stauffer, York University, Canada.

Sherman function for krypton by Prof. R.P. McEACHRAN with Mr M.R. Went, Profs. B. Lohmann and W.R. MacGillivray, Griffith University.

Positron excitation of argon by Prof. R.P. McEACHRAN with Prof. A.D. Stauffer, York University, Canada.

Positron scattering from xenon by Prof. R.P. McEACHRAN with Dr L.A. Parcell, MacQuarie University and Prof. A.D. Stauffer, York University, Canada.

Positron ionization of atoms by Prof. R.P. McEACHRAN with Dr R.I. Campeanu and Prof. A.D. Stauffer, York University, Canada.

The electron-hydrogen vibrational excitation cross section by Dr R.E. ROBSON with Prof. M.A. Morrison, University of Oklahoma, USA and Dr R. White, James Cook University.

Negative mobility phenomena in weakly ionised plasmas by Dr R.E. ROBSON with Prof. Z. Petrovic, Institute of Physics, Belgrade, Serbia.

Eigenvalue methods in low temperature plasma physics transport theory by Dr R.E. ROBSON with Prof. Y. Sakai, Hokkaido University, Japan.

A comparative study of the scattering of electrons and neutrons at high momentum transfer by Dr M. VOS with Prof. E. Gray, Griffith University and Prof. Dr C.A. Chatzidimitriou-Dreismann, Technical University, Berlin, Germany.

Electron correlations in solids by Dr M. VOS, Dr A. KHEIFETS and Prof. E. WEIGOLD with Dr F. Aryasetiawan, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan and Dr M. Usuda, Japan Atomic Energy Research Institute, Japan.

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.

(e,2e) collisions in He by Prof. E. WEIGOLD with Profs. H. Schmidt-Böcking, S. Hagmann and A. Knapp, University of Frankfurt, Germany. (e,2e) processes with polarized electrons and targets by Prof. E. WEIGOLD and Dr J.C.A. Lower with Dr J. Berakdar, Max Planck Institut für Microstruktur Physik, Germany and Dr S. Mazevet, Los Alamos Laboratory, USA.

#### **Director's Unit**

Densification of HARE-deposited film with e-beam irradiation by Ruth JARVIS with S. Garcia-Blanco, University of Glasgow, Scotland.

Harmonic generation in nonlinear photonic crystals by Prof. Yu. KIVSHAR with Dr M. de Sterke, University of Sydney and Prof. S.M. Saltiel, University of Sofia, Bulgaria.

Nonlinearity-induced conformational dynamics of biopolymers by Prof. Yu. KIVSHAR with Prof. P.L. Christiansen, Technical University of Denmark.

A book for academic press: Optical solitons: from waveguides to photonic crystals by Prof. Yu. KIVSHAR with Prof. G. Agrawal, University of Rochester, USA.

A book for Springer-Verlag: The Frenkel-Kontorova model: concepts and methods of nonlinear physics by Prof. Yu. KIVSHAR with Prof. O.M. Braun, Institute of Physics, Kiev, Ukraine.

Stability analysis of solitary waves by Prof. Yu. KIVSHAR with Prof. D.E. Pelinovsky, McMaster University, Canada.

Nonlinear photonic crystals: concepts and applications by Prof. Yu. KIVSHAR with Dr M. Scalora, US Air Force Research Laboratories, USA.

Nonlinear localised spin waves by Prof. Yu. KIVSHAR with Prof. H. Benner, Technical University of Darmstadt, Germany.

Dynamics of the Dispersion-managed solitons in fiber transmission systems by Prof. Yu. KIVSHAR and Dr E. OSTROVSKAYA with Prof. D. Anderson and Profesor M. Lisak, Chalmers University of Technology, Sweden and Dr A. Berntson, Ericsson, Sweden.

Topological states in atomic-molecular Bose-Einstein condensates by Prof. Yu. KIVSHAR and Dr E. OSTRO-VSKAYA with Dr P. Julienne, National Institute of Standards and Technology, USA.

Multimode spatial optical solitons by Prof. Yu. KIVSHAR and Dr E. OSTROVSKAYA with Prof. C. Denz, University of Münster, Germany.

Parametric optical conversion due to cascaded nonlinearities by Prof. Yu. KIVSHAR and Dr A. SUKHORUKOV with Prof. S.M. Saltiel, University of Sofia, Bulgaria.

Self-written optical waveguides in polymerized materials by Prof. Yu. KIVSHAR and Dr A. SUKHORUKOV with Prof. S. Kawata, Osaka University, Japan.

Spatial optical solitons in waveguide arrays by Prof. Yu. KIVSHAR and Dr A. SUKHORUKOV with Prof. Y. Silberberg, Weizmann Institute of Science, Israel.

Holey optical fibres by Prof. J.D. LOVE with Prof. R. Stolen, Virginia Tech University, USA.

Multimode fibres & devices by Prof. J.D. LOVE with Prof. D. Abrahams, University of Manchester, UK.

Chapter for the 'Handbook of Optoelectronics' by Prof. J.D. LOVE with Institute of Physics, UK.

Fibre pigtailing to buried channel waveguides by Prof. J.D. LOVE with Dr S. Huntington, University of Melbourne; Dr S. Law, University of Sydney and Mr D. Thorncraft, Bishop Innovations, Sydney.

Transition loss in bent fibres and waveguides by Prof. J.D. LOVE and Dr A. ANKIEWICZ with Dr F. Payne, Bookham Technology, UK; Dr S. Huntington, University of Melbourne and Mr J. Katsifolis, La Trobe University.

Dynamics of ring-dark solitary waves by Dr D. NESHEV with Prof. A. Dreischuh, University of Sofia, Bulgaria and Dr G. G. Paulus, Max-Planck Institute for Quantum Optics, Garching, Germany.

Optical vortices with non-integer topological charges by Dr D. NESHEV with Prof. L. Torner, Universitat Politecnica de Catalunya, Spain and Prof. M. Vasnetsov, National Academy of Sciences of Ukraine.

#### **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, Netherlands.

Ultrafast photodetector materials by Ms C. CARMODY, Dr H.H. TAN and Prof. C. JAGADISH with Mr A. Gaarder, Dr S. Anand and Dr S. Marcinkevicius, Royal Institute of Technology, Stockholm, Sweden.

Self assembled monolayers on semiconductor surfaces by Ms C. CARMODY and Prof. C. JAGADISH with Dr B. Raguse and Dr V. Braach-Maksvytis, CSIRO Telecommunications and Industrial Physics.

H storage by C and BN nanotubes by Dr Y. CHEN with Prof. E. Gray, Griffith University.

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. S. Campbell, ADFA, University of New South Wales.

Ion beam processing of zinc oxide by Ms V. COLEMAN, Dr P.N.K. DEENAPANRAY, Dr H.H. TAN, Dr S.O. KUCHEYEV, Prof. J.S. WILLIAMS and Prof. C. JAGADISH with Prof. M. Yano and Prof. M. Inoue, Osaka Institute of Technology, Japan.

Analysis of semiconductor and insulating thin films by XPS by Dr P.N.K. DEENAPANRAY, Dr L. FU and Prof. C. JAGADISH with Dr Bin Gong and Prof. R. Lamb, University of New South Wales.

Ion beam mixing of metallic thin films on ceramic substrates by Prof. R.G. ELLIMAN with Dr A. BALOGH The Australian National University Annual Report 2002

and Mr W. Berkey, Darmstadt University of Technology, Germany.

Optical and physical properties of semiconductor nanocrystals by Prof. R.G. ELLIMAN with Prof. Suk-Ho Choi, Kyung Hee University, Korea.

Light emission from silicon nanocrystals – the effect of impurities by Prof. R.G. ELLIMAN with Prof. G. Ross, INRS-Energie et Materiaux, Canada.

Heavy-ion beam analysis of materials by Prof. R.G. ELLI-MAN and Ms T.D.M. WEIJERS with Dr H. Timmers, ADFA and Dr S. Butcher, Macquarie University.

Heavy-ion stopping in solids by Prof. R.G. ELLIMAN and Ms T.D.M. WEIJERS with Prof. H. Whitlow, University of Lund, Sweden and Dr H. Timmers, ADFA.

Optoelectronic devices by Dr L. FU, Dr H.H. TAN, Dr M. BUDA and Prof. C. JAGADISH with Dr F. Karouta, Eindhoven University of Technology, Netherlands.

Optical spectroscopy of semiconductor quantum structures and devices by Mr Q. GAO, Ms P. LEVER, Ms C. CARMODY, Ms V. COLEMAN, Ms K. STEWART, Dr L. FU, Dr P.N.K. DEENAPANRAY, Dr M. BUDA, Dr H.H. TAN and Prof. C. JAGADISH with Mr P. Reece, Dr B.Q. Sun, Dr M. Zhang and Prof. M. Gal, University of New South Wales.

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.

Cathodoluminescence studies of semiconductor epitaxial layers and quantum structures by Mr S.O. KUCHEYEV, Ms V. COLEMAN, Ms P. LEVER, Ms K. STEWART, Dr P.N.K. DEENAPANRAY, Dr H.H. TAN, Prof. J.S. WILLIAMS and Prof. C. JAGADISH with Prof. M.R. Philips, 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, Netherlands.

Semiconductor nanocrystal formation and characterisation by Dr M.C. RIDGWAY with Dr P. Fichtner, University Federal do Rio Grande do Sol, Brasil.

Irradiation-induced defect characterisation with perturbed angular correlation by Dr M.C. RIDGWAY and Dr A.P. BYRNE (NP) with Dr R. Vianden, University of Bonn, Germany.

EXAFS characterisation of amorphous semiconductors by Dr M. RIDGWAY, Dr G. AZEVEDO and Mr C. GLOVER with Dr K.M. Yu, Lawrence Berkeley National Laboratory, USA and Dr G.J. Foran, ANSTO.

Formation of dilute GaAsxN1-x and GaxMn1-xAs alloys by ion implantation by Dr M. RIDGWAY, Dr G. AZEVEDO and Mr C. GLOVER with Dr O. Dubon, University of California, Berkeley, USA and Dr K.M. Yu, Lawrence Berkeley National Laboratory, USA. Nanocavity evolution in Si under ion irradiation by Dr M. RIDGWAY, Prof. J.S. WILLIAMS, Dr G. AZEVEDO and Mr C. GLOVER with Dr H. Bernas, Dr M.-O. Ruault and Dr F. Fortuna.

Tuning of detection wavelength of quantum dot infrared photodetectors by Ms K. STEWART, Dr L. FU, Dr M. BUDA, Dr H.H. TAN and Prof. C. JAGADISH with Dr A. Stiff-Roberts and Prof. P. Bhattacharya, University of Michigan, USA.

Thermionic cooling in semiconductors by Dr H.H. TAN and Prof. C. JAGADISH with Prof. R. Lewis, University of Wollongong.

Microindentation of semiconductors by Prof. J.S. WIL-LIAMS, Ms J.E. BRADBY and Ms B. HABERL with Prof. M.V. Swain and Dr P. Munroe, University of Sydney.

Metal gettering to cavities by Prof. J.S. WILLIAMS, Dr J. WONG-LEUNG, Dr M. PETRAVIC and Mr M.J. CONWAY with Dr A. Kinomura, ONRI, Japan.

Open volume defects in silicon by Prof. J.S. WILLIAMS, Dr J. WONG-LEUNG, Dr M. PETRAVIC and Mr M.J. CONWAY with Prof. B. Stritzker and Dr J. Lindner, University of Augsburg, Germany.

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. Fitzgerald, Research School of Earth Sciences and Prof. D.J.H. Cockayne, Oxford University, UK.

Removal of metals from solar materials by Dr J. WONG-LEUNG and Prof. J.S. WILLIAMS with Dr A. Kinomura, ONRI, Osaka, Japan and Dr D. Macdonald and Prof. A. Cuevas, FEIT.

Defects in semiconductors by Dr J. WONG-LEUNG, Dr P.N.K. DEENAPANRAY and Prof. C. JAGADISH with Prof. B.G. Svensson, Dr M. Linnarsson, Dr A. Kuznetsov, Dr A. Hallen, Mr M. Janson, Ms H. Kortegaard-Nielsen and Dr P. Leveque, Royal Institute of Technology, Stockholm, Sweden.

#### Laser Physics Centre

High resolution XUV laser spectroscopy of isotopic nitrogen by Dr K.G.H. BALDWIN and Prof. B.R. LEWIS (AMPL) with Prof. W. Ubachs and Prof. W. Hogervorst, Vrije Universiteit, Amsterdam, Netherlands.

Development of ultra-high resolution VUV laser sources by Dr K.G.H. BALDWIN and Prof. B.R. LEWIS (AM-PL) with Prof. B.J. Orr, Macquarie University.

Optical beams in nonlocal nonlinear media by Dr W. KROLIKOWSKI with Dr O. Bang, Technical University, Denmark; Prof. J. Wyller, Norway Agricultural University, Norway and Prof. J. Rasmussen, Riso National Laboratory, Denmark. Localised structure in second harmonic generation by Dr W. KROLIKOWSKI with Prof. M. Saffman, University of Wisconsin, USA.

Photorefractive solitons by Dr W. KROLIKOWSKI with Prof. C. Denz, University of Münster, Germany.

Passive mode-locking of the Novel Yb:YAB Laser Crystal by Dr M. LEDERER with Dr J. Dawes, Macquarie University.

Quantum computing using the nitrogen-vacancy centre in diamond by Prof. N.B. MANSON and Dr M. SELLARS with Prof. M. Scully and Prof. P. Hemmer, T & M University, USA; Dr D. Pulford, DSTO, Canberra and Prof. S. Prawer, University of Melbourne.

Laser induced forward transfer with Fs-laser pulses by Dr A. RODE with Dr O. Uteza and Prof. M. Sentis, CNRS, Universite Aix-Marseille II, France.

Laser decomposition of BN-nanostructures by Dr A. RODE with Dr D. Golberg, National Institute for Material Science, Tsukuba, Japan.

Magnetic properties of laser-deposited carbon nanofoam by Dr A. RODE with Dr J. Giapintzakis, Institute of Electronic Structure and Lasers, Crete, Greece and Dr D. Tomanek, Michigan State University, USA.

Sub-picosecond laser deposition of optical films by Dr A. RODE with Prof. B.N. Chickov, Laser Zentrum Hannover e.V., Germany.

Synthesis and third-order nonlinear optical properties of end-functionalized oligophenylenevinylenes by Dr A. SAMOC, Dr M. SAMOC and Prof. B. LUTHER-DAV-IES with Dr M.S. Wong, Baptist University of Hong-Kong.

Nonlinear optical properties of soluble oligomers of PPV by Dr A. SAMOC, Dr M. SAMOC and Prof. B. LUTHER-DAVIES with Dr M.S. Wong, Baptist University, HongKong.

Optical properties of polymer fiber preforms by Dr A. SAMOC, Dr M. SAMOC and Prof. B. LUTHER-DAV-IES with Dr G.D. Peng and Mr T. Whitbread, University of New South Wales.

Nonlinear optics and nanophotonics by Dr M. SAMOC with Prof. P. N. PRASAD, State University of New York at Buffalo, USA.

nonlinear properties of evaporated films of disperse red by Dr M. SAMOC with Prof. M. O. TJIA, Bandung Institute of Technology, Indonesia.

Diode laser frequency stabilisation via locking to spectral hole by Dr M. SELLARS with Prof. R. Cone and Dr G. Pryde, Montana State University, USA.

#### **Nuclear Physics**

Intrinsic and rotational bands in 180Ta by Dr R.A. BARK and Prof. G.D. DRACOULIS with Prof. G. Sletten, Niels Bohr Institute, University of Copenhagen, Denmark and Euroball Collaboration, Strasbourg, France. Ion implanter for radioisotopes by Dr A.P. BYRNE with Dr H. Timmers and Associate Prof. D.H. Chaplin, AD-FA, University of New South Wales.

Superallowed fermi decays by Dr A.P. BYRNE with Associate Prof. P.H. Barker University of Auckland, New Zealand.

PAC studies of materials by Dr A.P. BYRNE and Dr M.C. RIDGWAY (EME) with Dr R. Vianden and F. Ruske, University of Bonn, Germany.

Dependence of breakup and fusion Of 6,7Li on target mass by Dr M. DASGUPTA and Dr D. HINDE with Prof. P. Gomes and Dr R. Anjos, University of Niteroi, Brazil.

Fusion and incomplete fusion In 6,7Li + 209Bi Reactions by Dr M. DASGUPTA and Dr D. HINDE with Dr N. Carlin and Prof. A. Szanto de Toledo, University of Sao Paulo, Brazil.

Modelling breakup and fusion processes by Dr M. DAS-GUPTA and Dr D. HINDE with Dr K. Hagino, Kyoto University, Japan.

Measuring fusion and breakup with light nuclei by Dr M. DASGUPTA, Dr D. HINDE and Dr A. MUKHERJEE with Dr H. Timmers, ADFA, University of New South Wales.

High-K isomers by Prof. G.D. DRACOULIS with Prof. P.M. Walker, University of Surrey, UK; Dr D.M. Cullen, University of Liverpool, UK.

High-K isomers in hafnium by Prof. G.D. DRACOULIS with Dr F.G. Kondev and Dr R. Janssens, Argonne National Laboratory, USA and Dr D. Hartley, University of Tennessee, USA.

Systematics of isomer structure in the N = 74 region by Prof. G.D. DRACOULIS with Dr A.M. Bruce, University of Brighton, UK.

Laser spectroscopy of deformed isomers by Prof. G.D. DRACOULIS 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. DRA-COULIS with Prof. A.R. Poletti, University of Auckland, NZ.

Deep-inelastic excitation of High-K states by Prof. G.D. DRACOULIS, Dr R.A. BARK and Dr A.P. BYRNE with Dr S.M. Mullins, National Accelerator Centre, South Africa.

Realistic shell model calculations for trans-lead nuclei by Prof. G.D. DRACOULIS, Dr A.P. BYRNE and Dr G.J. LANE with Prof. A. Covello, University of Naples, Italy.

Neutron rich trans-lead nuclei using radioactive beams by Prof. G.D. DRACOULIS, Dr G.J. LANE and Dr A.P. BYRNE with Prof. P.M. Walker, University of Surrey, UK and G. de France, GANIL, France. Spectroscopy of neutron deficient lead and thallium nuclei by Prof. G.D. DRACOULIS, Dr G.J. LANE, Dr A.P. BYRNE and Dr A.M. BAXTER (Faculties) with Dr A.O. Macchiavelli, Lawrence Berkeley National Laboratory, USA.

Shape co-existence in very neutron-deficient Pb nucleus by Prof. G.D. DRACOULIS, Dr G.J. LANE, Dr A.P. BYRNE and Dr T. KIBÉDI with Dr J. Gerl, GST, Germany and Dr A. Andreyev, University of Liverpool, UK.

Fusion barrier calculations by Dr D. HINDE and Dr M. DASGUPTA with Dr I. Gontchar, Omsk State University, Russia.

Sub-barrier breakup by Dr D.J. HINDE, Dr M. DAS-GUPTA and Dr C. MORTON with Prof. B.R. Fulton, University of York, UK.

Damage in compound semiconductors induced by high energy ions by Dr M.C. RIDGWAY (EME) and Dr A.P. BYRNE with Prof. W. Wesch, Universitaet Jena, Germany.

Nuclear moments and structure changes in exotic nuclei by Dr A.E. STUCHBERY with Dr P.F. Mantica, Michigan State University, USA.

Excited-state *G*-Factor measurements with radioactive ion beams by Dr A.E. STUCHBERY with Dr P.F. Mantica, Michigan State University, USA.

Evidence for proton excitations in  $^{130,132,134,13}$ 6Xe isotopes from measurements of G Factors of 2<sub>1</sub> And 4<sub>1</sub> States 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 and Dr A. Macchiavelli, Lawrence Berkeley National Laboratory, USA.

Competing core and single particle excitations in the  $2_1$ State Of  $^{44}$ Ca by Dr A.E. STUCHBERY with Prof. N. Benczer-Koller, Rutgers University, USA; Dr C. Beausang, Yale University, USA.

Electric field gradient in ferromagnetic iron measured with beta-detected modulated adiabatic passage on oriented nuclei by Dr A.E. STUCHBERY with Associate Prof. D.H. Chaplin and Dr W.D. Hutchinson, ADFA, University of New South Wales and Dr S. Ohya, Niigata University, Japan.

Hyperfine interactions spectrometer by Dr A.E. STUCH-BERY and Dr A.P. BYRNE (Faculties) with Associate Prof. D.H. Chaplin, ADFA, University of New South Wales and Prof. H.H. Bolotin, University of Melbourne.

High-spin states in nuclei with A=120 near the proton dripline by Dr A.N. WILSON with Dr J.F. Smith, Manchester University, UK; Dr C.J. Chiara, Washington University St Louis, USA and Dr E.S. Paul, Liverpool University, UK.

Superdeformation in light Pb isotopes by Dr A.N. WIL-SON, Prof. G.D. DRACOULIS, Dr G.J. LANE, Dr A.P. BYRNE, and Dr P.M. DAVIDSON with Dr A.O. Macchiavelli, Dr P. Fallon, Dr R. Clark and Dr A. Görgen, Lawrence Berkeley National Laboratory, USA.

#### **Optical Sciences Centre**

quantized separations of phase-locked soliton pairs in fiber lasers by Prof. N. AKHMEDIEV with Dr J.M. Soto-Crespo, Instituto de Optica, Madrid, Spain and Dr Ph. Grelu, Universite de Bourgogne, France.

Pulse stabilization by high order dispersion management by Prof. N. AKHMEDIEV with Prof. I. Gabitov Los Alamos National Laboratory, USA; Prof. J. Kang, Johns Hopkins University, USA.

#### **Plasma Research Laboratory**

Soft X-ray measurements on H-1NF by Dr B.D. BLACK-WELL and Dr J. HOWARD with Associate Prof. A.D. Cheetham, University of Canberra.

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, USA.

High brightness ion source by Prof. R.W. BOSWELL and Mr O. SUTHERLAND with FEI Company, MA, USA.

Helicon assisted reactive evaporation (HARE) by Prof. R.W. BOSWELL and Dr C. CHARLES with Prof. D. MacKenzie and Prof. M. Bilek, University of Sydney.

Plasma deposition of palladium by Dr C. CHARLES and Prof. R.W. BOSWELL with Dr A.L. Thomann and Dr P. Brault, University of Orleans-CNRS, France.

Helicon source modelling by Dr C. CHARLES and Prof. R.W. BOSWELL with Prof. M. Lieberman, University of Berkeley, USA and Associate Prof. Suwon Cho, Kyonggi University, Korea.

Spectroscopic studies of the plasma divertor in W7-AS by Dr J. HOWARD with Dr R. Konig and Mr J. Chung, Max Planck Institute for Plasma Physics, Germany.

Measurement of electric field in H-1NF using laser induced fluorescence techniques by Dr J. HOWARD with Prof. B.W. James and Mr D Anduczyk University of Sydney.

Electron cyclotron heating of plasma in stellarators by Dr M.G. SHATS with Dr K. Nagasaki, Kyoto University, Japan.

Confinement studies in stellarators by Dr M.G. SHATS with Prof. K. Toi, National Institute for Fusion Science, Japan.

Turbulent structures and transport in plasmas by Dr M.G. SHATS with Prof. P.H. Diamond and Dr D. Rudakov, University of California, USA.

#### **Theoretical Physics**

Modelling plasma turbulence using the DALF3 Code by Dr R. BALL and R.L. DEWAR with Dr H. Sugama, National Institute for Fusion Science, Japan; Dr A. Kendl and Dr B.D. Scott, Max Planck Institute for Plasma Physics, Garching, Germany and Mr R.W. Brown, APAC.

Low-order dynamical models for non-linear fluid behaviour in quasi two-dimensional plasmas by Dr R. BALL and R.L. DEWAR with Dr F.L. Waelbroeck, University of Texas, USA.

Levels of 11N by Prof. F.C. BARKER with Dr V. Guimarães, University of Sao Paulo, Brazil.

Diproton decay half-life of 45Fe by Prof. F.C. BARKER with Prof. B.A. Brown, Michigan State University, USA.

Neutron-rich light nuclei by Prof. F.C. BARKER with Dr N.A. Orr, University of Caen, France.

Combinatorics and solvable models by Prof. M.T. BATCHELOR with Dr J de Gier, Melbourne University; Prof. B. Nienhuis and Mr S. Mitra University of Amsterdam, Netherlands.

Quantum spin ladders by Prof. M.T. BATCHELOR with Mr M. Maslen and Dr X-W Guan (MSI), Dr J de Gier, Melbourne University and K. Sakai, Institute for Solid State Physics, Tokyo.

Random walks and carbon nanotubes by Prof. M.T. BATCHELOR with Dr B. Henry, University of New South Wales.

Stromalite morphogenesis by Prof. M.T. BATCHELOR with Dr R. Burne, Geology and Dr B. Henry, University of New South Wales.

Integrable structure of conformal field theory by Prof. V.V. BAZHANOV with Prof. S.L. Lukyanov and Prof. A.B. Zamolodchikov, Rutgers University, USA.

Algebraic properties of solvable models by Prof. V.V. BAZHANOV with Prof. S.M. Khoroshkin, Institute for Experimental and Theoretical Physics, Russia.

Fluctuations in mesoscopic systems by Dr M.P. DAS with Dr F. Green, University of New South Wales.

Two-dimensional interacting coulomb systems by Dr M.P. DAS with Prof. K.I. Golden, University of Vermont, USA.

Correlations and metal-insulator transition by Dr M.P. DAS with Prof. D. Neilson, University of New South Wales.

Quantum chaos in the Ideal-MHD spectrum for stellarators by Prof. R.L. DEWAR with Prof. C. Nuehrenberg, Max Planck Institute for Plasma Physics, Teilinstitut Greifswald, Germany.

Centre of excellence application: complex systems science by R.L. DEWAR and M.T. BATCHELOR et al with Prof. S. Benkadda, University of Provence, France; Prof. P.H. Diamond, University of California, San Diego, USA and Prof. C. Grebogi, University of Sao Paulo, Brazil. Effects of phonons on magnetic impurities by Dr M. GU-LACSI with Dr A.R. Bishop, Los Almos National Laboratory, USA and 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, USA and Dr J. Gubernatis, Los Almos National Laboratory, USA.

Ring exchange interactions in two-dimensional lattices by Dr M. GULACSI with Prof. Zs. Gulacsi, University of Debrecen, Hungary.

Impurity effects in mesoscopic systems by Dr M. GU-LACSI with Prof. A. Rosengren and Mr A. Juozapavicius, Royal Insitute of Technology, Stockholm, Sweden.

Muliple ionization by Dr A. KHEIFETS with Prof. I. Bray, Murdoch University; Prof. B. Joulakian, University of Metz, France; Prof. R. Dörner, Frankfurt University, Germany; Prof. Y. Azuma, Photon Factory, Tsukaba, Japan and Dr A. Dorn, Max-Planck Institute for Nuclear Physics, Heidelberg, Germany.

Electron correlations in solids by Dr A. KHEIFETS with Dr F. Aryasetiawan, National Institute of Advanced Industrial Science and Technology, Tsukaba, Japan.

Slow phase randomisation in microscopic systems and nanostructures by Dr S.Y KUN (TP/DU) with Prof. Y. Abe, Yukawa Institute for Theoretical Physics, Kyoto, Japan and Prof. K. Nakamura, Osaka City University, Japan.

A new probe for coherent many-body dynamics: nonergodic molecules in continuim by Dr S.Y KUN (TP/DU) and Prof. L.T. CHADDERTON (AMPL) with Dr A.V. Vagov, University of Sheffield, UK and Prof. W. Greiner, Goethe University, Frankfurt, Germany.

Schrödinger cat states in highly excited strongly interacting many-body systems by Dr S.Y KUN (TP/DU) and Prof. L.T. CHADDERTON (AMPL) with Dr L. Benet, University of Mexico (UNAM), Mexico; Prof. W. Greiner, University of Frankfurt, Germany and Dr F. Haas, CNRS and Louis Pasteur University, Strasbourg, France.

Experimental test of quantum chaos in highly-excited many-body systems by Dr S.Y KUN (TP/DU) and Prof. L.T. CHADDERTON (AMPL) with Dr C. Beck, Dr F. Haas, Dr P. Papka, Dr V. Rauch, CNRS and Louis Pasteur University, Strasbourg, France.

Modeling inward rectifier potassium channels by Prof. S. KUYUCAK with Dr T. Takahashi, National Institute for Physiology, Japan.

Study of ion selectivity in KcsA Potassium channel by Prof. S. KUYUCAK with Dr A. Baumgaertner, Forschungs Zentrum Juelich, Germany.

Antiproton scattering by Dr B.A. ROBSON with Prof. Zhang Yu-shun, Institute of High Energy Physics, Beijing, P.R. China.

The electron-hydrogen vibrational excitation cross section by Dr R.E. ROBSON with Prof. M. Morrison, University The Australian National University Annual Report 2002

of Oklahoma; Dr R. White, Physics, James Cook University.

Negative mobility phenomena in weakly ionised plasmas by Dr R.E. ROBSON with Prof. Z. Petrovic, Institute of Physics, Belgrade.

Eigenvalue methods in low temperature plasma physics transport theory by Dr R.E. ROBSON with Prof. Y. Sakai, Hokkaido University, Japan.

Role of parallel flow in the formation of internal barrier by Dr S. SEN with Prof. A Fukuyama and Dr M. Uchida, University of Kyoto, Japan.

Ion temperature gradient and parallel velocity shear instabilities in the negative magnetic shear mode by Dr S. SEN with Prof. D.R. McCarthy, Southeastern Louisiana University, USA and Prof. A. Punjabi, Hampton University, USA.

Formation of transport barrier by radio frequency waves by Dr S. SEN with Prof. R.A. Cairns, University of St Andrews, UK.

A novel method of transport barrier formation on STOR-M Tokamak by Dr S. SEN with Prof. A. Hirose and Prof. C. Xiao, University of Saskatchewan, Canada.

Spintronics by Dr W. XU with Prof. P. Vasilopoulos, Concordia University, Canada; and Prof. C.S. Tang, National Centre for Theoretical Sciences, Taiwan.

Interaction between semiconductor nanostructures and intense laser fields by Dr W. XU with Prof. L. B. Lin, Sichuan University, China.

## **Research School of Social Sciences**

A comparative study of restorative justice in Australia and Japan by Dr E. AHMED with colleagues at Toyo University (Tokyo).

Australia/Japan restorative justice survey by Dr E. AHMED with Prof. J. Braithwaite (ANU) and Assoc. Prof. H. Tsutomi (University of Shizuoka, Japan).

Cross national school behaviour (Australia, Bangladesh, India, Israel, Italy and South Africa) by Dr E. AHMED with Prof. K. Rigby (University of South Australia).

Organisation culture by Dr E. AHMED with Prof. H. Begum (University of Dhaka, Bangladesh).

Evaluating trade practices enforcement actions by Dr P. AINSWORTH and Prof. J.B. BRAITHWAITE with Dr C. Parker (University of Melbourne).

Training in Europe: Its causes and consequences by Prof. A. BOOTH with W. Arulampalam (University of Warwick) and M.L. Bryan (University of Essex).

Modelling and forecasting mortality by Dr H. BOOTH with Dr L. Smith (NCEPH/ACPR), J. Maindonald (Statistical Consulting Unit, Graduate School) and L. Tickle (Macquarie University). Modelling and forecasting mortality by Dr H. BOOTH with Dr L. Smith, ACPR/NCEPH and Dr T. Breusch (Negotiating the Lifecourse (ANU)).

Probabilistic population forecasts for Australia by Dr H. BOOTH with Dr L. Smith, (ACPR/NCEPH).

Reintegrative shaming experiments (RISE) by Prof. J.B. BRAITHWAITE and Dr H. STRANG with Prof. L. Sherman (University of Pennsylvania).

The cash economy project: international comparisons by Dr V. BRAITHWAITE with Prof. F. Schneider (University of Linz).

Domination, social democracy, social support and crime: A politics of hope by Prof. J.B. BRAITHWAITE with T. Pratt and F. Cullen (University of Cincinnati).

Economic morality and citizenship by Dr V. BRAITHWAITE with Prof. S. Karstedt, (Keele University).

Food and housing insufficiency among the poor in the United States (panel data from USDA and SIPP data) by Dr R. BREUNIG with C. Gunderson (U.S. Department of Agriculture).

Intra Household Models and the U.S. Food Stamp Program by Dr R BREUNIG with I. Dasgupta (Nottingham University).

Non-prametric panel data methods by Dr R. BREUNIG with N. Roy (University of Victoria, Canada).

The ethics of taxationa and government policy in the family by Dr R BREUNIG with Prof. P. Apps (University of Sydney) and Prof. R. Rees (University of Munich).

Intra-organisational evaluation: Are there 'least evaluable units'? by MS L. BUTLER and Dr J. GLÄSER with Dr T. Spurling (CSIRO).

Oxford Handbook of Legal Studies, a multi-authored survey of legal scholarship since 1960 by Prof. P. CANE coedited with Prof. M. Tushnet (Georgetown University Law Center), due to be published August 2003.

Implementation issues concerning the application of income related loans to higher education by Prof. B. CHAP-MAN with Ms Jane Nicholls (Office of Senator Kim Carr).

Income related loans for R&D Subsidies by Prof. B. CHAPMAN with Amanda Dadd (Productivity Commission).

Income related loans for the provision of income support for training artists by Prof. B. CHAPMAN with Prof. David Throsby (Macquarie University).

Restoring criminal sanctions: using the tax system to collect fines by Prof. B. CHAPMAN with Prof. A. Freidberg (University of Melbourne), Prof. J Quiggin (University of Queensland) and Dr D. Tait (University of Canberra).

The effects of divorce on the welfare of children by Prof. B. CHAPMAN with Dr Matthew Gray (Australian Institute of Family Studies). The impact of increased HECS charges on students by Prof. B. CHAPMAN with Ms Gillian Beer and Professor Ann Harding (University of Canberra).

The theory of income related loans by Prof. B. CHAP-MAN with Prof. J. Quiggin (University of Queensland).

The use of the tax system to encourage loans to business by Prof. B. CHAPMAN with Fred Argy (private consultant).

Assessing the immigrant/native-born wealth gap in the United States by Dr D. COBB-CLARK with Dr V. Hildebrand (McMaster University, Canada).

Sexual harrassment in the US military by Dr D. COBB-CLARK with Dr H. Antecol (Claremont-McKenna College).

The econometrics of evaluation by Dr D. COBB-CLARK with Dr T. Crossley (McMaster University, Canada).

Social accountability in sustainable agriculture by Dr S. COURVILLE with Fair Trade Labelling Organisation international, Social Accountability International, International Federation of Organic Agriculture Movements and Sustainable Agriculture Network, Rainforest Alliance.

Cognitive science on the belief formation project by Prof. M. DAVIES with collaborator Professor Max Coltheart, Dr. Robyn Langdon and Dr. Nora Breen (Macquarie Centre).

Coordination among heterogeneous voters by Dr D. DHARMAPALA with Dr E. Lehmann (University of Paris II).

Corporate tax enforcement and managerial value diversion by Dr D. DHARMAPALA with Prof. M. Desai (Harvard University).

Penalty enhancement for hate crimes by Dr D. DHAR-MAPALA with Prof. N. Garoupa (New University of Lisbon).

Words that kill? Economic perspectives on hate speech and hate crime by Dr D. DHARMAPALA with Prof. R. McAdams (University of Illinois).

The international study of sexual risk behaviour by Dr A. EVANS with Prof. G. Dalla Zuanna (University of Padova).

German parties use of the internet for campaigning in the federal election 2002 by Dr R. GIBSON with Dr A. Roemmel (University of Mannheim).

Mobility in the urban labor market: a panel data analysis for Mexico by Dr X. GONG with Prof. A. van Soest and Dr E Villagomez.

Persistence in youth labor market histories by Dr T. GORGENS with Dr D. Doiron (University of New South Wales).

Unemployment duration and search methods: the case of young Australians 1989–1994 by Dr T. GORGENS with Dr D. Doiron (University of New South Wales).

Cyber criminals on trial by Prof. P. GRABOSKY with Dr Russell G. Smith and Dr Gregor Urbas (Australian Institute of Criminology).

For richer or for poorer: women, men and marriage by Dr E. GRAY with Assoc. Prof. J. Baxter (University of Queensland).

Motivators of corporate environmental performance by Prof. N. GUNNINGHAM with Prof. R. Kagan and Dr D. Thornton (University of California, Berkeley).

Sexuality and gender in Southeast Asia by Prof. T.H. HULL and Dr I. UTOMO with Dr M. Budiharsana (Ford Foundation, Jakarta), Dr R. Lee (De LaSalle University, Bangkok), Dr N.D. Anh (Institute of Sociology, Hanoi), Dr W. Im-Em (Mahidol University, Bangkok), Dr D. Muhadjir (Centre for Population and Policy Research, Gadjah Mada University, Yogyakarta, Indonesia), Dr Tom Boellstorff (University of California, Irvine, USA), Dr Dede Oetomo, (Airlangga University, Surabaya, Indonesia), Mr Primus Lake (Nusa Cendana University, Kupang, Indonesia), Ms Esthi Susanti Hudiono (Hotline Surya, Surabaya, Indonesia), Prof. Azwar Agoes (Sriwidjaya University, Palembang, Indonesia).

Growth dynamics of megacities in South-East and East Asia by Prof. G. JONES with teams in each of the following cities — Jakarta, Bangkok, Manila, Ho Chi Minh City, Taipei and Shanghai who will study the dynamics of population growth and changing employment in the core metropolitan areas and in surrounding zones.

Settlement intentions of immigrant IT workers by Dr S. KHOO with Dr A. Mak (University of Canberra).

Temporary business migration to Australia by Dr S. KHOO and Prof. P. McDONALD with Prof. G. Hugo (University of Adelaide) funded by ARC grant.

Young people of migrant background by Dr S. KHOO with Dr R. Birrell (Monash University).

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) funded by Department of Immigration and Multicultural and Indigenous Affairs.

Non-intended impacts of evaluation-based research funding on knowledge production by Drs G. LAUDEL, J. GLÄSER and Ms L. BUTLER with Dr S. Hinze (Fraunhofer-ISI, Karlsruhe, Germany).

Female labour force participation in South Africa; Immigration to South Africa by Dr D. LUCAS with Prof. I. Kalule-Sabiti (Population Unit, University of the North West) and Prof. Amoateng (Human Sciences Research Council, Cape Town).

Iran fertility transition survey (IFTS) 2002 by Prof. P. McDONALD and Dr M. ABBASI-SHAVAZI (Tehran University) with Dr B. Delavar and M. Hosseini Chavoshi (Department of Family Health of the Iran Ministry of Health). Perceived influences upon Australian family formation decisions by Prof. P. McDONALD with Dr G. Carmichael (NCEPH) and Dr A. Whittaker (University of Melbourne) funded by ARC grant.

The negotiating the life course survey with Prof. P. Mc-DONALD, Dr A. EVANS and Dr E. GRAY with Dr D. Mitchell (ANU) and Dr J. Baxter (University of Queensland) funded by ARC grant.

National and supranational economic policy to correct disequilibrium under EMU by Ms I. MAHER with Prof. I. Begg (Southbank University (UK)), Prof. D. Mayes (Central Bank, Finland) and D. Hodson (Southbank University).

Democracy in east and south east asia by Dr I. 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 I 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).

Negotiating the life course by Dr D. MITCHELL with Prof. P. McDonald (ANU) and Dr J. Baxter (University of Queensland).

Inventories and the business cycle by Prof. A.R. PAGAN with Prof. L. Maccini (Johns Hopkins University).

Transnational activism, power and democracy — contextualizing networks in Asia by Dr N. PIPER co-edited with Dr A. Uhlin (Soedertoerns Hoegskola/Stockholm).

Wife or worker? Asians marriage and migration by Dr N. PIPER co-edited with Dr M. Roces (University of New South Wales).

History of Australian political science by Prof. M. SAW-ER with Dr M. Crozier (University of Melbourne).

Women and electoral representation in Australia and Canada by Prof. M. SAWER with Prof. L. Trimble (University of Alberta).

Meta-regulation by MR C. SCOTT with Prof. J. Braithwaite (ANU), Dr C. Parker (University of Melbourne) and Prof. N. Lacey (London School of Economics).

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 (London School of Economics, Florence) and Dr M. Lodge (London School of Economics).

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). Peacemaking and peacebuilding program by Prof. C. SHEARING with Prof. J. Cartwright and Ms M. Jenniker (University of the Western Cape).

Safe and just communities project by Prof. C. SHEAR-ING with Dr J. Wood (University of Toronto) and Dr Q. Font (National University of Rosario).

The role of interpersonal trust and social capital in public sector governance in South Korea by Ms H. Hwayeon SHIN with Prof. Tonghee Park (Ewha Woman's University, Seoul, South Korea).

Judicial, popular and legislative involvement in human rights protection by Dr A. STONE with Prof. T. Campbell (Charles Sturt University) and Prof. J. Goldsworthy (Monash University).

Determinants and consequences of child labour in Nepal by Dr P. THAPA with Prof. Ranjan Ray (University of Tasmania).

Conceiving and implementing national integrity systems assessments (NISA) by Dr J. UHR with Prof. C. Sampford (Key Centre for Ethics, Law Justice and Governance at Griffith University).

Strengthening parliaments by Dr J. UHR with Prof. R. Hazell (Constitution Unit, University College, London).

Entrepreneurial innovation by Dr R. VAITHAINATH-AN with Luca Rigotti, (Fuqua School of Business, Duke University) and Matthew Ryan (ANU).

Private parallel health insurance in Australia: A cautionary tale and lessons for Canada by Dr R. VAITHAINATH-AN with Jerry Hurley (McMaster University, Canada), Tom Crossley (McMaster University, Canada), and Deborah Cobb-Clark (RSSS, ANU) published as Centre for Health Economics and Policy Analysis Working paper # 01-12.

Students' attitudes to difference regulatory regimes and responses to noncompliance in the area of social security by Dr M. WENZEL with I. Thielmann (University of Trier, Germany).

The assessment of asserted increase in 'certainty' arising from the introduction of the Tax Value Method (MTV) by Dr M. WENZEL with Prof. G. Cooper (University of Melbourne).

Human resource development policy in Malaysaia by Profs G. WITHERS, D. LAMBERTON and G. JONES with Prof. J. Hewson, E. Davis, R. Neumann, H. Lange, Dr P. Saul and Dr G. Saliba (Macquarie Graduate School of Management), Mr C.Murphy (Econtech, Canberra), Prof. S. Marginson (University of Melbourne), Prof. R. Lansbury (University of Sydney), Dr C. Joseph, (Monash University) and Dr T. Todd (University of Western Australia).

Characteristics of population migration and mobility in Fujian Province and their policy implications by Y. ZHU with S.D. Gong, J. Chen, L. Jiang, D.F. Zhang, X.F. Chen, and X.L. Wu (Provincial Population Census Office, Fujian Province, China). UNU-CDI research project on the UN's democratisation role geared to the needs of the Political Affairs Division of the UN Secretariat by Centre for Democratic Institutions.

## Centre for Resource & Environmental Studies

Totemism and the social context of plants and animals in NSW by Dr DB ROSE, Diana JAMES and Christine WATSON with National Parks and Wildlife Service, NSW and Indigenous participants: Brad Steadman, Trisha Ellis, Dave Tout, the late Guboo Ted Thomas, Ann Thomas, Mary Duroux, Mervyn Penrith, Warren Foster, Randall Mumbulla, Steve Meredith, and Phil Sullivan.

Analysis of possible rules for interstate water trading by the ACT by Dr J.C.V. PEZZEY with Mr Peter Donnelly (Environment ACT).

Augmented sustainability measures for Scotland by Dr J.C.V. PEZZEY with Prof. N.D. Hanley (University of Glasgow).

Basin-wide mapping of sediment and nutrient exports in dryland regions of the MDB by Prof. A. JAKEMAN, Dr B. CROKE, Mr L. Newham with C. Moran, J. Olley, I. Prosser, H. Lu (CSIRO) funded by MDBC.

Capacity measurement in fisheries by Dr R. Quentin GRAFTON with Dale Squires at University of California, San Diego.

Climate and Culture, co-organised with RSSS (History) for the National Academies Forum, sponsors: Bureau of Meteorology, National Museum of Australia, Australian Academy of Science, Australian Academy of Technological Sciences and Engineering, Australian Academy of Social Sciences and Australian Academy of the Humanities; presented: 'Migrants and Nomads' (to be revised as Chapter 4 in the book of the project, *A change in the weather: Climate and Culture in Australia 2003*, forthcoming, (Tim Sherratt, Tom Griffiths and Libby ROBIN (eds.).

Climate change impacts on snow conditions in Australia: a report for the Victorian Department of Natural Resources and Environment, Victorian Greenhouse Office, Parks Victoria, New South Wales National Parks and Wildlife Service, Planning New South Wales, Australian Greenhouse Office and Australian Ski Areas Association, published by CSIRO Atmospheric Research, Aspendale, Victoria, Australia by Dr Jason SHARPLES with K.J. Hennessy, P.H. Whetton, I.N. Smith, J.M. Bathols, M.F. Hutchinson and J.J Sharples.

Community management of forests by Dr R. Quentin GRAFTON with Harry Nelson, University of British Columbia, Canada.

Conservation biology of Palm Cockatoos and Vulturine Parrots at Crater Mountain, Papua New Guinea by Dr Robert HEINSOHN with Dr A Mack and Dr D. Wright (Wildlife Conservation Society, New York).

Conservation of Palm Cockatoos and evolutionary ecology of Eclectus Parrots on Cape York Peninsula by Dr Rob-

ert HEINSOHN with Dr S Garnett (Qld Dept of Environment).

Decision support systems for coral reef management by Dr Roger BRADBURY with J McManus (U Miami), Ernesto Arias-González (U Merida, Mexico), L David, (U Phillipines), R Seymour, (UCL), B Durnota (Monash), S Wooldridge (AIMS), P PEREZ (RSPAS).

Environmental taxes by Dr R. Quentin GRAFTON with Stein Ivar Steinshamn and Leif sandal, Norwegian School of Economics and Business Administration, Bergen.

Equitable groundwater management for the development of atolls and small islands by Prof. Ian WHITE with Dr P. Perez (CIRAD, France), Mr A. Falkland (Ecowise Environmental), Mr T. Meteutera (Public Utility Board, Kiribati) and Mr E. Metai (Public Works Department, Kiribati).

Hydraulic properties of swelling clay-gel soils: electrolyte and temperature effects. Prof. Ian WHITE with Dr D.E. Smile (CSIRO).

Hydrological analysis for the spatially explicit integration of agroforestry into Australia's farming systems by Ms J.L. TICEHURST and Prof. AJ. JAKEMAN with Dr H. Cresswell (CSIRO) and Dr N. McKenzie (CSIRO).

Interactions between sulfur, nitrogen, and iron cycles in the sustainable management and use of acid sulfate soils by Prof. Ian WHITE with Dr O.T. Demead (CSIRO), Assoc. Prof. M.D. Melville (UNSW), Prof. T.D. Waite, Dr B.C. Macdonald (UNSW), Mr M. Tunks (Tweed Shire Council) and Mr R. Beattie (NSW Sugar Industry).

Jervis Bay biodiversity monitoring ecological burning experiment by Dr D. LINDENMAYER with Dr R. Cunningham (CRES), Mr C. McGregor (CRES), Mr M Crane (CRES), Mr D. Micheal (CRES), and Mr P. Smith (Dept of Land & Water).

The Tumut Fragmentation Experiment by Dr D. LINDENMAYER with Dr R. Cunningham (CRES), Mr D. Rawlins (CRES), Mr C. McGregor (CRES), Mr M. Pope (CRES), Dr M. McCarthy (Uni of Melbourne), Prof. H. Nix (CRES), Prof. H. Possingham (Uni of QLD), Dr R. Lacy (Chicago Zoological Society), Ms C. Donnelly (ANU), Dr R. Peakall (ANU), Mr J. Fischer (CRES), Dr H. Tyndale-Biscoe (CSIRO), and Dr A. Taylor (Monash).

CHESS — The Central Highlands environmental systems study (Integrated landscape and forest modelling in the Central Highlands of Victoria) by Dr D. LINDEN-MAYER with Dr B. Mackey (ANU), Dr M. McCarthy (Uni of Melbourne), Mr R. Incoll (CRES), Dr M. Gill (CSIRO), Dr R. Cunningham (CRES), Ms C. Donnelly (ANU) and Dr J. Lindesay (ANU).

Long-term monitoring of vertebrate fauna in the Central Highlands of Victoria by Dr D. LINDENMAYER with Dr R. Cunningham (CRES), Mr R Incoll (CRES), Mr C. MacGregor (CRES), Mr M. Crane (CRES), Dr A. Taylor (Monash), and Mr D. Michael (CRES). The Australian National University Annual Report 2002

A new textbook on the importance of off-reserve lands and matrix management for biodiversity conservation by Dr D. LINDENMAYER with Prof. J Franklin (Uni of Washington).

A removal experiment for examining dispersal and fragmentation effects on small mammals by Dr D. LINDEN-MAYER, Dr R. Cunningham (CRES), Mr C. McGregor (CRES), Mr M. Crane (CRES), Mr D. Micheal (CRES), Dr R. Peakall (ANU), Ms M. Ruibal (CRES), and Mr S. Banks (Monash).

A large-scale study of the effectiveness of landscape restoration for biodiversity conservation by Dr D. LINDEN-MAYER with Dr R. Cunningham, Mr C. McGregor, Mr M. Crane and Mr D. Micheal (CRES), and Mr P. Smith (Dept. of Land & Water).

Australian Gliders by Dr D. LINDENMAYER with Dr A Taylor Monash University.

Investigation into landscape research models by Dr D. LINDENMAYER and Mr J. FISCHER with Dr S. McIntyre (CSIRO Sustainable Ecosystems, Brisbane).

Study of theory and practice of interdisciplinarity in environmental history by Dr S. DOVERS with Prof. Eric Pawson (University of Canterbury), to be published in Environment and History.

IwRAM phase 2 by Prof. A. JAKEMAN, Dr B. CROKE, with R. Letcher (iCAM), S. Cuddy (iCAM), R. Argent (visiting fellow iCAM) as well as partners in Thailand (Royal Project Foundation plus other government departments and universities) funded by ACIAR.

LandScape: Gold & Water, an interdisciplinary project combining art and text that explores the ecological and social changes across the mining and rural landscapes in part of the central-west of New South Wales by Mr George MAIN with Ms Mandy Martin and others, funded by Land and Water Australia.

Long-term ecological records of marine environments, populations and communities by Dr Roger BRADBURY with J Jackson (Scripps), E Sala (Scripps), J Pandolfi (Smithsonian), T Hughes (JCU), H Lotze (Dalhousie).

National PhD workshop on environmental history by Dr Libby ROBIN and others with participants from all over Australia including distinguished visitor, David Lowenthal (University College London) (sponsored by NIE), co-organised with RSSS (History), staff from UTS and Monash University, in addition to ANU.

Negotiation support system for groundwater management in small islands by Prof. Ian WHITE with Dr P. Perez (CIRAD, France).

Productivity analysis in fisheries by Dr R. Quentin GRAFTON with K.J. Fox at University of New South Wales, Diane Dupont at Brock University Canada, and Daniel Gordon at University of Calgary Canada.

Protecting Spencer Gulf by Dr Roger BRADBURY with J Prosser (SARDI), G Hugo (U Adelaide), R Fowler (U South Australia).

Social capital by Dr R. Quentin GRAFTON with Stephen Knowles and Dorian Owen at University of Otago, New Zealand.

Sustainability in Adelaide project by Prof. Patrick TROY with colleagues from University of Western Sydney and University of South Australia.

The effect of subsistence on collapse and institutional adaptation in population-resource societies by Dr J.C.V. PEZZEY with Dr J.M. Anderies (CSIRO Sustainable Ecosystems, Canberra).

The impact of changing agroforestry mosaics on catchment water yield and quality in southeast Asia by Dr B. CROKE with D. Post (CSIRO), M. van Noordwijk (ICRAF) funded by ACIAR.

The role of the matrix for birds in Australian grazing landscapes with implications for the applicability of the focal species approach by Mr J. FISCHER and Dr D.B.LINDENMAYER with Mr J. Watson (University of Oxford, UK) and Dr D. Freudenberger (CSIRO Sustainable Ecosystems, Canberra).

Wingecarribee catchment contaminant budget project by Prof. R. WASSON, Dr B. CROKE, Dr S. BEAVIS, with J. Olley (CSIRO), B. Young (CSIRO), C. Ferguson (UN-SW), R. Benjamin (Ecowise), D. Page (Ecowise) funded by Sydney Catchment Authority.

Assessment of potential impacts of climate change on snow across the Australian snow fields by Prof. M HUTCHINSON with Dr Peter Whetton and Dr Kevin Hennessy of CSIRO Atmospheric Research.

Assessment of the effects of network density on interpolation of precipitation across Canada by Prof. M HUTCH-INSON with Dr Dan McKenney, Canadian Forest Service, Environment Canada.

Development of grid-based implementation of the GROWEST plant growth index model with a graphical user interface to enable statistical assessments by Prof. M HUTCHINSON with Timothy Brinkley and Dr Greg Laughlin, Bureau of Rural Sciences, Department of Primary Industry.

Management of diffuse pollutants in the Ben Chifley Catchment by Prof. A J JAKEMAN with Dr Yoshi Kobayashi (NSW Environmental Protection Authority).

Basin wide mapping of sediment and nutrient exports in dryland regions by Prof. A J JAKEMAN and BF Croke with Dr Chris Moran (CSIRO Land and Water).

Tools to achieve landscape redesign giving environmental/ economic targets by Prof. A J JAKEMAN with Drs Kerry Taylor and Gavin Walker (CSIRO Mathematical and Information Sciences).

Integrated water resource assessment and management project — Phase II by Prof. A J JAKEMAN with Dr Santhad Rojanasoonthon, Royal Project Foundation, Thailand. Integrated water quality model by Prof. A J JAKEMAN and L Newham with Dr R Vertsessy (CSIRO Land and Water).

Integrated catchment management system by Prof. A J JA-KEMAN and BF Croke with Ms Susan Cuddy (CSIRO Land and Water).

Sediment budget dynamics in the Georges Basin by Prof. R.J.WASSON with Prof. A.K. Singhiri and Dr M.M. Sarin (PRL, India), Assoc.Prof. R Sinha (IIT Kanpur, India).

## The Faculties

## **Faculty of Arts**

Study of the Insula del Menandro in Pompeii by Dr P. ALLISON with Cambridge University and University of Manchester for the British Pompeii Research Committee; included students from the University of Sydney in fieldwork for the Kinchega Archaeological Project.

Sexuality and methodology by Dr S. ANGELIDES with Dr N.Vitellone and Dr L. Adkins, University of Manchester.

Modernisation and health in the Pacific by Dr R. AT-TENBOROUGH, invited speaker at symposium International Union of Anthropological and Ethnological Sciences Inter-Congress, Tokyo; attended Meeting of Buttressing Coalition, Papua New Guinea Institute of Medical Research (Cairns).

Archaeology of the Northern Philippines by Prof. P BELLWOOD with the National Museum of the Philippines and the Archaeological Studies Program in the University of the Philippines.

Academic program for the 17th Congress of the Indo-Pacific Prehistory Association, Academia Sinica, Taipei organised by Prof. P BELLWOOD with institutions within Taiwan-Department of Anthropology, National Taiwan University, National Museum of Prehistory, Taitung, Program for Asian and Pacific Research, Academia Sinica, and the National Museum of Natural Science, Taichung.

State of French language and culture, "L'Observatoire du Français en Asie-Pacifique" by Dr Peter BROWN, member Asia-Pacific (Australia, New Zealand, New Caledonia, French Polynesia, Vietnam) Research Team.

Long-time history of the Murrayland tradition by Dr D. BULBECK with Prof. Maciej Henneberg (Wood Jones Professor, University of Adelaide) and Assoc. Prof. Donald Pate (Flinders University), including consultations with the Ngarrindjeri Heritage Committee, Eric Cook (Berri Campus, Murray Institute TAFE SA) and Dale Hancock (University of South Australia).

mtDNA research in Southeast Asia by Dr D. BULBECK, invited collaboration with Dr Martin Richards (Department of Chemical and Biological Sciences, University of Huddersfield, UK) as specialist in Southeast Asia. mtDNA of the Orang Asli of Peninsular Malaysia by Dr D. BULBECK with Dr Richards and Prof. Stephen Oppenheimer (of Green College, Oxford University), Returning them home: osteological sorting of disarticulated human bones to their original skeletons.

Joint Chief Investigators in submitting the ARC Linkage-Project application by Dr D. BULBECK with Assoc. Prof. Chris Briggs (Department of Anatomy and Cell Biology, University of Melbourne), and Colin GROVES, ANU.

Land of Iron: The Historical Archaeology of Luwu and the Cenrana Valley, results of the Origin of Complex Society in South Sulawesi Project (OXIS) by Dr D. BUL-BECK with Prof. Geoffrey Hope and Dr Doreen BOWDERY (ANU) and Dr Ian Caldwell (University of Hull) and Cynthia Lampert (Bradford University) on the second, revised edition of David Bulbeck and Ian Caldwell's 2000 publication of the same name.

Geomorphological change during late prehistory and historical times in South Sulawesi, Indonesia by Dr D. BUL-BECK with Dr Malcolm Lillie (University of Hull) and Dr Ian Caldwell (University of Hull/Leeds).

Critical edition of Catherine Martin's An Australian Girl by Dr R. CAMPBELL with the Australian Scholarly Editing Centre, ADFA, and Assoc. Prof. Margaret Allen at the University of Adelaide.

Excavation of the Pulemelei mound, Samoa by Dr G. CLARK with Drs Paul Wallin and Helene Wallin-Martinsson, Kon-Tiki Museum (Oslo).

Palaun Ceramics by Dr G. CLARK with Scott Fitzpatrick University of Oregon.

Historical experts and indigenous litigants by Prof. A. CURTHOYS with Prof. L. Behrendt, UTS; Prof. T. Wright, University of Newcastle and Dr A. Genovese UTS.

A companion to women's history by Prof. A. CURTHOYS with Dr M. Songberg, Macquarie University and Prof. Barbara Caine, Monash University.

Genetic studies of ancient crops from central Turkey by Dr A. FAIRBAIRN (visiting fellow) with Dr Mehmet Somel, Middle East Technical University, Ankara Turkey.

Stable isotope signatures in plant remains and animal bones from Çatalhöyük by Dr A. FAIRBAIRN with Jessica Pearson, Oxford University.

Dating Celtis stiones from Çatalhöyük by Dr A. FAIR-BAIRN with Dr Tom Higham, Oxford University.

Macrobotanical research by Dr A. FAIRBAIRN with the Çatalhöyük Research project Cambridge University, UK.

Macrobotanical research by Dr A. FAIRBAIRN with Daniele Martinoli, University of Basel, Switzerland and Dr Ann Butler, Institute of Archaeology, UK (Mellaart Archive, Çatalhöyük).

Excavations of Kaman Kalehöyük by Dr A. FAIRBAIRN with Middle East Culture Center Japan.

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Macrobotanical research by by Dr A. FAIRBAIRN with Dr Eleni Asouti, Institute of Archaeology, UK.

Palaeobotanical research by Dr A. FAIRBAIRN at Epipalaeolithic Pinarbasi, Konya, Turkey with Dr Doug Baird, Liverpool University, UK.

Conference in Lima, Identity and Transformation in the Inka Empire and in the Colonial Andes: Archaeological and Ethnohistorical Perspectives by Mr I. FAR-RINGTON with colleagues from PUCP, Peru (Dr Peter Kaulicke) and Harvard University (Prof. Gary Urton) at the Pontificia Universidad Católica del Perú;

Jaquijahuana project — large ARC Discovery grant application by Mr I. FARRINGTON with Dr David Cahill (UNSW).

Exhibition on 'Death', by Mr. I. FARRINGTON, adviser to Australian Museum.

Tambokancha Archaeological Project, Peru and other projects by Mr I. FARRINGTON with Dr Julinho Zapata, professor at UNSAAC.

Visiting professor Institut für Ethnologie, Dr D. GARD-NER at University of Heidelberg.

Political Economy and Culture of Indigenous Peoples: A Central Indian Case Study by Dr C. GREGORY, field-work in India, continuation of collaboration with the Paramparik Bastar Shilpi Parivar in Bastar District, CG, India, funded by a large ARC grant.

The Oral Epics of the Women of the Dandakaranya Plateau, Dr C. GREGORY invited to present a paper "at the 17th European Conference on South Asia in Heidelberg.

The structure of the clothing industry by Dr A. GREIG with Prof. J. Marceau and colleagues at the Australian Expert Group in Industrial Studies at University of Western Sydney.

Public lecture "The Tourmai fossil skull — the missing link? by Prof. C. GROVES with the National Museum of Australia.

Visiting fellow, Dr C. HELLIWELL in the Centre for Religion and Society at the University of Amsterdam.

Antipodean visions of transcultural studies by Dr R. HILLMAN with Prof. Martina Wagner-Egelhaaf, University of Munster and the Australian-German Joint Research Co-operation Scheme.

Ancient technological structure and cultural change in the greater Sydney region by Dr P HISCOCK with Dr Val Attenbrow, Senior Research Scientist, Australian Museum.

Method and theory in archaeology, two invited papers by Dr P HISCOCK to symposia of the Union of International Prehistoric and Protohistoric Societies in Liege, Belgium.

Causes of F111 aircraft accidents by Dr A. HOPKINS with Dr N. Naikar, Defence, Science and Technology Organisation.

The Challenge of Democracy in Moslem Countries by Dr M. LYON, participant, International Conference cosponsored by the Asia Foundation, Mershon Center (Ohio State University), and IRCOS (Yogyakarta).

Participant Dr M. LYON, "The place of Traditional Medicines in Fostering Public Health", Sanata Dharma University, Faculty of Pharmacy, Yogyakarta, Indonesia.

Prof. F. MERLAN, Professeur Invite, Centre de Recherche et de Documentation sur l'Oceanie, Aix-en-Provence; Professeur Invite, CRNS, (Centre National en Sciences Sociales, École des Hautes Études), Paris, France (papers given on work in New Guinea, Australia and more recent German project); joint convener, workshop Custom: The Fate of Non-Western and Indigenous Governance in the 21st century, with Dr James Weiner (under the auspices of the Australian Academy of the Social Sciences); assessed grant applications for Canadian, American, Australian, French and Dutch granting agencies.

Aussie English for Beginners by Dr Bruce MOORE with the National Museum of Australia.

Re-training programs for the civil service by Dr K. NOURZHANOV as adviser to Academy of Management, Government of Kyrgyzstan.

Politics of 'light handed' regulation: new environment policy instruments in Australia by Prof. E. PAPADAKIS with Dr A. Jordan, University of East Anglia and Dr R. Wurzel, University of Hull.

Donald Thomson's place in Australian Anthropology by Dr N. PETERSON, co- organiser Donald Thomson Centenary Symposium, Melbourne; attended Ninth International Conference on Hunting and Gathering Societies (CHAGS 9), Edinburgh; Paper "From Mode of production to moral Economy".

The Contribution of South Asia to the Peopling of Australasia by Dr P. RAGHAVAN, with a large number of tertiary institutions, scientific institutions and museums in Delhi State, Madya Pradesh, Uttar Pradesh, Punjab, Haryana, and Chandigarh in relation to ARC-funded Discovery Project.

Early Christian families in the context of imperial Roman society by Prof. B RAWSON with Prof. C. Osiek, University of Chicago and Prof. D. Balch, Brite Divinity School at the Texan Christian University.

Knowledge use by school principals Dr L. SAHA with Prof. B. Biddle, University of Missouri.

Prof. A. SAIKAL, InterAction Council of Former Heads of State, and adviser to the Council's Chair, The Rt Hon. Malcolm Fraser (Expert Adviser).

Peace and Democracy in the Middle East by Prof. A. SAIKAL as Co-Director of the United Nations University (Tokyo) project and co-editor of volume released in early 2003.

Carnegie Corporation Project on Self-Determination by Prof. A. SAIKAL with Liechtenstein Institute, Princeton University. The UN's Role in Democratisation: Capacity-building in Transition and Consolidation by Prof. A. SAIKAL with United Nations University (Tokyo).

OECD Development Cooperation Directorate Expert Meeting by Prof. A. SAIKAL on Afghanistan Reconstruction and Recovery: Seeing Round the Corner, Paris.

Regional Approaches to the Reconstruction of Afghanistan by Prof. A. SAIKAL with the Chr. Michelsens Institutt, Bergen, Norway, and the International Peace Research Institute, Oslo, Norway.

International Peace Academy (New York) project on "State Failure and the Crisis of Governance: Making States Work" by Prof. A. SAIKAL with Carr Center for Human Rights Policy, Harvard University, and United Nations University, Pocantico.

International Commission for Cooperation and Security in West Asia by Prof. A. SAIKAL with Toda Institute for Global Peace and Policy Research, Hawaii, the International Peace Research Institute, Oslo, the Norwegian Institute of International Affairs, and the Institute for Political and International Studies, Tehran.

UN Institute for Disarmament Research Panel on Biological Disarmament: The Agenda for the Next Century by Prof. A. SAIKAL.

Workplace culture change and enterprise bargaining in the meat processing industry by Dr M SIMMS, with Prof. A. Bodi, Deakin University, Dr G. Maggs, University of Newcastle and Mr L.J. Testi, Monash University; funded by the Meat Research Corporation.

Prof. M SPRIGGS, Overseas Visiting Fellow at St John's College, Cambridge; Visiting Prof. Ecole des Hautes Etudes en Sciences Sociales (EHESS); Australian Academy of the Humanities; Exchange Visitor to the Swedish Royal Academy of Antiquities, Letters and History, (sponsored by the Australian Academy of the Humanities and the Swedish Royal Academy of Letters, History and Antiquities as part of an academic exchange agreement between the two Academies); attended the European Association of Southeast Asian Archaeologists (EurASEAA) Conference at Sigtuna, Sweden; delivered joint paper with Dr Sue O'Connor, Vestiges of Early Pre Agricultural Economy in the Landscape of East Timor: Recent Research.

Fieldwork in Vanuatu for training of local archaeological fieldworkers, a collaborative project by Prof. M SPRIGGS with the Vanuatu Cultural Centre funded by a grant from the Pacific Biological Foundation.

PNG election 2002 by Dr W. STANDISH with Dr J. Chin, University of Papua New Guinea.

Political parties in PNG by Dr W. STANDISH with Dr O. Sepoe, University of Papua New Guinea.

The History of Islamic Civilisation by Dr M. TORABI with Dr Ali Akhan Velayati, Tehran University (book forthcoming).

Translation of Sufi Poetry Tour-e-Ma'refort by Dr M. TORABI with Prof. Riccardo Zipoli, Head, Department of Iranian Studies, University of Venice, Italy.

Constitutional politics by Prof. J. WARHURST with Assoc. Prof. M. Mackerras, ADFA, UNSW.

Federal election by Prof. J. WARHURST with Prof. M. Simms, University of Otago.

The significance of evidence based medicine by Dr K. WHITE with Prof. E. Willis, La Trobe University.

Old age in antiquity and modernity by Dr K. WHITE with Prof. Tim Parkin of University of Otago.

The unmet needs of cancer by Dr K. WHITE with patients in the ACT with Cancer Council, ACT.

## **Faculty of Asian Studies**

Collaborative ARC grant by Dr A. BROINOWSKI with the National Library of Australia

Dr A. BURTON tutored in Sanskrit and coordinated the ANU students participating in the Sanskrit courses offered by University of Sydney through videoconferencing; conducted Hindi videoconferencing courses at the University of Sydney.

APEC funded project managed by Prof. J. CORBETT with Asia-Pacific School of Economics and Management focused on Electronic Financial Transactions Systems.

Research program focusing on the Zhuang language and culture by Dr A. DILLER with Melbourne University, Prof David Holm.

Linguistic studies leading to collaborative publication/s by Dr A. DILLER with Prof Wilaiwan Khanittanhan, Thammasat University, Thailand.

Joint project - Study of Islam and democratisation in Indonesia by Prof. V. HOOKER, associate for Centre for the Study of Islam and Democracy, ParamadinaMulia University Jakarta.

Ethnographic research into the experiences of rural women working in Beijing, by Dr T. JACKA.

Exchange program between ANU and Peking University by Dr T. JACKA.

A more general study of current approaches to the society and culture of Song China by Dr C. JEFFCOTT, developing collaboration with Dr Lewis Mayo, University of Melbourne.

Monthly analysis of developments in each country of the ASEAN region by Dr D. JOHNSON with private business group, ASEAN Focus.

Vietnamese business culture, continued ARC funded project by Prof A. MILNER with the St James Ethics Centre, Sydney and the Vietnamese Ministry of Culture.

Regional research by Prof A. MILNER as Raffles Visiting Professor in History at National University of Singapore with the Department of History, National University of The Australian National University Annual Report 2002

Singapore and the National Technological University of Singapore.

Monthly analysis of developments in each country of the ASEAN region by Prof A. MILNER with private business group, ASEAN Focus.

Research on East Asian-Latin American commercial relations by Prof A. MILNER, consultancy work for the Singapore firm Sri Kumar Siddique.

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

Major research project Histoire de la tradition en Indonesie et en Malaysie, Dr I. PROUDFOOT assisted French team from the Ecole Francaise de L'Extreme-Orient.

QUYNH-DU, T-T. teacher, first-year Vietnamese, University of Sydney as part of a joint agreement between the ANU and the University of Sydney.

Volume of essays on scholarly dissemination in selected Southeast Asian countries by Dr C. REYNOLDS with a Filipino colleague.

Dr C. REYNOLDS, supervisor, pro bono of Ms Sopha Chanamool, Thai PhD candidate at Chulalongkorn University.

Words in Motion for Social Science Research Council (NYC), Dr C. REYNOLDS organised, convened and hosted workshop.

Work continued on the Sumanas\_ntaka, a twelfth century Old Javanese poem of more than 1,100 stanzas by Dr S. SUPOMO and Prof. Peter Worsley, Sydney University.

Collaborative research project by Dr K. WELLS with Dr Evan (UNSW) funded by Korea Research Foundation.

Dr Y-W WONG, faculty representative on Selection Committee for the 2001–2002 Scholarship for Mandarin Training in Taiwan.

## **Faculty of Economics and Commerce**

Leadership in Asia by G. FISHER with D. Ahlstron (City University of Hong Kong).

Corporate reporting on the Internet in Australia by S. LO-DHIA with A. Allam and A. Lymer (U of Birmingham).

'9/11' in the service of corporate rhetoric: Southwest Airlines' 2001 letter to shareholders by R. CRAIG with J. Armenic (U of Toronto).

An agenda for the reform of accounting education in the post-Enron era: Moving accounting "out of the shadows" by R. CRAIG with J. Armenic (U of Toronto).

Enron discourse: the rhetoric of a resilient capitalism by R. CRAIG with J. Armenic (U of Toronto).

The deployment of accounting-related rhetoric in the prelude to a privatisation by R. CRAIG with J. Armenic (U of Toronto).

The entailments of metaphors in structuring thought about accounting by R. CRAIG with J. Armenic (U of Toronto).

The rhetoric of a juggernaut: AOLTimeWarner's internet policy statement by R. CRAIG with J. Armenic (U of Toronoto).

The roles and social construction of accounting in industrial relations by R. CRAIG with J. Armenic (U of Toronto).

Communication in diverse groups by G. FISHER with O. Ayoko (UQ) and C. Hartell (Monash).

Supply chain management by S. GREGOR with M. Bekking and A. Wassenaar (Twente University).

Passion the missing P of marketing by G BELL with R. Hill (Swinburne).

Passion drivers in marketing by G. BELL with J. Rex (Swinburne).

The effect of job burnout on job satisfaction and turnover intentions by G. MONROE with V. Chong (UWA).

Factors affecting environmental disclosures of companies in the Western Australia timber industry by G. MON-ROE with T. Christopher (ECU).

Whistle-blowing in public accounting firms by G. MON-ROE with J. Chung and L. Thorne (York University).

The effect of explanation and counter-explanation on ethical decision-making by G. MONROE with J. Chung (York University).

Affect and auditor decision-making by G. MONROE with J. Cohen (Boston College) and J. Chung (York University).

The effect of disclosing non-financial performance indicators on business valuations by G. MONROE with P. Coram (UWA) and D. Woodliff.

Falsely Accused? The expert evidence of accountants by R. CRAIG and P. Reddy (Melb).

Measuring the convergence of national accounting standards with international financial reporting standards using association coefficients: the case of Portugal by R. CRAIG with M. Fontes and L. Rodrigues (Universidade do Minho, Braga).

The Portuguese School of Commerce, 1759–1844 by R. CRAIG, D. Gomes and L. Rodrigues (Universidade do Minho, Braga).

Clowns of No Account?: reflections on the involvement of four Irishmen in the commercial life of the New South Wales Colony, 1788–1818 by R. CRAIG with C. Ohogartaigh (Dublin City University) and M. Ohogartaigh (St. Patrick's College).

Kempsey Aboriginal community website development evaluation by P. RADOLLwith J. Desantolo, J. Lester and P. NEAL (Newcastle).

Shopping online for the disabled by and G. BELL with B. Evans (Swinburne).

Bridging the digital divide: the problems of online shopping for select disabled groups by G. BELL with B. Evans (Swinburne).

Leadership in Asia Pacific and Africa by G. FISHER with R. Litrell (Auckland University of Technology).

Theory of inter-organisational systems by S. GREGOR with R. Johnston (Melb).

E-commerce in agricultural business by S. GREGOR with J. Rolfe (CQU).

Electronic auctions in the beef industry by S. GREGOR with C. Driedonks (Twente University), E. Van Heck (Erasmus) and A. Wassenaar (Twente University).

Floor trading versus computer trading — does in matter? by S. GREGOR and T. O'NEILL with D. Foster and R. Woods (UNSW).

Factors affecting auditor independence and the purchase of non-audit services from the incumbent auditor by G. MONROE with C. Hayes (ECU) and T. Mock (University of Southern California).

Current environmental accounting problematic: a shift from anthropocentrism to ecocentrism by S. LODHIA with R. Nandan (JCU).

Adoption of information technologies in Fiji: Issues in the study of cultural influences on information technology acceptance by S. LODHIA with T. Lynch (CQU) and N. Szorenyi (CQU — Fiji).

The effect of supervision style on work-related stress and job performance by G. MONROE and R. WINTER with G. Soutar (UWA).

#### **School of Economics**

Ambiguity and risk by S. GRANT with J. Eichberger (Heidelberg University) and A. Chateauneuf, (University of Paris I).

Bargaining theory with non-expected utility by S. GRANT with A. Kajii (Tsukuba University) and A. Burgos (Universidad Carlos III).

Reveal or not to reveal: an investigation into the role of secret reserve prices in auctions by S. GRANT and M. RYAN with A. Kajii, (Tsukuba University) and F. MEN-EZES.

Games and equilibria without probabilistically sophisticated beliefs by S. GRANT with A. Kajii (Tsukuba University), and B. Polak, (Yale University).

Quantifying beliefs with State-dependent preferences and without reduction by S. GRANT with E. Karni (Johns Hopkins University).

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

Floor trading versus computer trading — does it matter? by S. GREGOR and T. O'NEILL with D. Foster and R. Woods (UNSW). The volume volatility relationship by T. SMITH with K. Walsh (UNSW).

Nonlinearities in stock and bond markets by T. SMITH with K. Walsh (UNSW).

Asset pricing model choice by T. SMITH, with K. Walsh and R. Kohm (UNSW).

Regime shifts and bond returns by T. SMITH with K. Boudoukh, M. Richardson and R. Whitelaw (New York University).

## The Faculty of Engineering and Information Technology

A flexible memory management research infrastructure for C# by Dr S. BLACKBURN with Dr B. Zorn (Microsoft Research, USA).

A flexible memory management research infrastructure for Java by Dr S. BLACKBURN with Dr P. Cheng, (IBM T.J. Watson Research Centre, New York, USA) and Dr K. McKinley, (University of Texas, USA).

Addressing the memory management bottleneck for modern object oriented languages by Dr S. BLACKBURN with Dr A. Hocking (Purdue University, USA), Dr K. McKinley (University of Texas, USA) and Dr E. Moss (University of Massachusetts).

Stamping technology for automotive manufacturing processes (STAMP) by Prof. M. J. CARDEW-HALL with Prof. P. Hodgson and Dr M. Dingle (Deakin University) and the Ford Motor Company.

Parallel techniques for high-performance record linkage by Dr P. CHRISTEN with Dr M. HEGLAND and Dr S. ROBERTS (Mathematical Science Institute, ANU) and Dr T. Churches (NSW Department of Health).

Stamp forming of lightweight fibre-metal laminate systems by Dr P. COMPSTON, Dr S. KALYANASUNDA-RAM and Prof. M. J. CARDEW-HALL with Prof. W. J. Cantwell (University of Liverpool) and the Ford Motor Company.

Advanced characterisation of silicon materials and devices by Prof. A. CUEVAS with Dr R. Sinton (Sinton Consulting, Boulder, Colorado, USA).

Application of plasma silicon nitride to multicrystalline silicon solar cells by Prof. A. CUEVAS with Dr J. Schmidt (Institute for Solar Energy Research Emmerthal-Hameln, ISFH, Germany).

Investigations of n-type multicrystalline silicon by Prof. A. CUEVAS with Dr F. Ferrazza (Eurosolare Spa, Italy) and Mr S. Rieppe (Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany).

Lifetime studies of metallic impurities and precipitates in multicrystalline silicon solar cells by Prof. A. CUEVAS, and Dr D. MACDONALD with Dr S. Glunz, (Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany). The Australian National University Annual Report 2002

Hardware verification using Lax logic by Dr J. DAWSON and Dr R. GORÉ with Dr M. Fairtlough (University of Sheffield, UK).

Interactive sound sculpturing in a virtual environment by Dr H. GARDNER with Dr S. Barass (CSIRO Centre for Mathematics and Information Science).

A sequent calculus for reasoning about Java programs by Dr R. GORÉ with Dr B. Beckert, Mr B. Katz and Prof. P. Schmitt (University of Karlsruhe, Germany) and Ms K. Trentelman (RSISE).

Bi-modal logics for reasoning about hybrid systems by Dr R. GORÉ with Mr V. COULTHARD (RSISE, ANU), Dr J. Davoren (University of Melbourne) and Dr S. Demri (CNRS, France).

Proof theory of Bi-Lax logic by Dr R. GORÉ with Dr G. Barthe (INRIA-Sophia-Antipolis, France) and Dr M. Fairtlough (University of Sheffield, UK).

Input to state stability: analysis and controller synthesis by Prof. M. JAMES and Dr S. HUANG with Dr P. Dower (La Trobe University) and Dr D. Nesic (University of Melbourne).

Nonlinear robust control by Prof. M. JAMES with Prof. J.W. Helton and Prof. W. McEneaney (University of California, San Diego, USA).

Nonsmooth robust control by Prof. M JAMES with Prof. I. Petersen (University of New South Wales at the Australian Defence Force Academy).

Context/IE Pelican by Dr C. JOHNSON with Dr B. Kummerfeld (University of Sydney), Dr R. Hexl (Griffith University) and Dr A. Quigley (University of Sydney).

Data warehousing by Dr W. LIANG with Assoc. Prof. J. Yu (Chinese Hong Kong University) and Prof. M. Orlowska (University of Queensland).

Multicast for WDM optical networks by Dr W. LIANG with Prof. X. Shen (University of Missouri, USA).

QoS routing by Dr W. LIANG with Prof. H. Shen (Japan Advanced Institute of Technology).

Solar thermal gas turbine by Dr K. LOVEGROVE with Dr R. Buck (DLR, Stuttgart, Germany).

Development of electro-spun nano fibres for composite biomedical uses by Dr A. LOWE with Prof. S. Ramakrishna (National University of Singapore).

Intelligent electronic mail sorter by Dr E. McCREATH with Assoc. Prof. J. Kay (University of Sydney).

Smart Personal Assistant by Dr E. McCREATH with CRC Smart Internet Technology.

Effects of iron on multicrystalline silicon by Dr D. MAC-DONALD with Dr B. Geerlings, (Netherlands Energy Research Foundation).

Lifetime spectroscopy of nickel in silicon by Dr D. MAC-DONALD with Dr A. Istratov, (University of California at Berkeley, USA). Neutron activation analysis of multicrystalline silicon by Dr D. MACDONALD and Prof. A. CUEVAS with Dr A. Kinomura, (National Institute of Advanced Industrial Science and Technology, Osaka, Japan).

Computational and theoretical graph theory by Prof. B. McKAY with Dr K. Piwakaowski (University of Gadnsk, Poland), Prof. S. Radziszowaski (Rochester Institute of Technology, USA) and Prof. G. Exoo, (Indiana State University, USA).

Computational methods for enumeration of combinatorial objects by Prof. B. McKAY with Dr G Brinkmann (University of Bielefeld, Germany), Dr C. Greenhill (University of Melbourne), Prof. R. Thomas (Georgia Institute of Technology, USA), Prof. W. Myrvold, University of Victoria, Canada), Dr M. Paredes, University of Santander, Colombia) and Dr G. Royle (University of Western Australia).

Efficient implementation of combinatorial algorithms by Prof. B. McKAY with Dr P. Lieby (University of Sydney).

Layout problems for graphs by Prof. B. McKAY with Prof. P. Eades and Dr S. Hong (University of Sydney).

Theoretical enumeration problems by Prof. B. McKAY with Prof. R. Canfield (University of Georgia, USA), Dr X. Wang (DSTO), Dr I. Wanless (Oxford University, UK), Dr N. Wormald (University of Melbourne) and Dr C. Greenhill (University of Melbourne).

Nonlinear control of under-actuated dynamic systems by Dr R. MAHONY with Dr T. Hamel (Université d'Evry, France) and Dr F. Chaumette (INRIA, Université de Rennes, France).

Visual-servo technology for UAVs by Dr R. MAHONY with CSIRO Queensland Centre for Advanced Technology (QCAT).

Multilayer technical textiles for high performance rigid composite products by Dr Z. STACHURSKI with Dr I. Crouch (CRC-Advanced Composite Structures, Melbourne), Dr S John (RMIT, Melbourne) and Specialty Group Pty. Ltd.

Exploration of possible uses of angular position mictotrackers by Mr P. VULYSTEKER with Dr Y. Caritu (CEA/LETI/DSIS, Grenoble, France).

### **Faculty of Law**

Participation in a workshop to discuss research directions for family law by Dr J BEHRENS with Family Law Research Unit, Griffith University.

International challenges to the Australian legal system: trade and human rights by Prof. H CHARLESWORTH with Prof. George Williams, (UNSW).

Discussion paper Royal Commission into the building and construction industry, the law relating to industrial action in the building and construction industry by Ms S McCRYSTAL with members of Faculty of Law, Monash University. Collaborated in research with ACIPA members at Griffith University by Dr M RIMMER with Dr K Bowrey and Prof. Jill McKeough (UNSW).

A joint program with Nan Kai University, Tianjin, China and Flinders University, SA by Mr W MORGAN lecturing in the off-shore Master of Arts (International Relations of Economy and Trade) program.

## **Faculty of Science**

#### 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 HS Warren (Cancer Research Unit, Royal Canberra Hospital, Canberra ACT).

Exchange of the CD4 D2 disulfide is important for interaction of CD4 with MHC class II and HIV entry by Dr J ALTIN with Prof. PJ Hogg (Centre for Vascular Research, Faculty of Medicine, University of New South Wales).

Molecular biology of nematodes by Dr Carolyn BEHM with Dr WN Grant (Molecular Parasitology, AgResearch, Upper Hutt, New Zealand) and Dr S Trowell (CSIRO Division of Entomology).

New insecticide targets by Dr C BEHM with Dr S Whyard (CSIRO Entomology).

In vivo testing of anti-cryptosporidial compounds in mice by Dr C BEHM with Prof. R PASHLEY and Sydney Water.

Regulation of the pH of the malaria parasite's digestive vacuole by Prof. K KIRK with Dr PG Bray and Prof. SA-Ward (School of Tropical Medicine, University of Liverpool, UK).

Targeting the 'New Permeation Pathways' induced by the malaria parasite in its host blood cell membrane by Prof. K KIRK with Dr H Staines and Prof. JC Ellory (University Laboratory of Physiology, University of Oxford, UK), and Assoc. Prof. ML Go (Department of Pharmacy, National University of Singapore).

Choline transport in the intracellular malaria parasite" by Prof. K KIRK with Dr CB Mamoun (Connecticut Medical Centre, University of Connecticut, USA).

Characterisation of a supernodulation mutant of the legume Medicago truncatula by Dr U MATHESIUS with Dr J Frugol (Clemson University, USA) Prof. D Cook (UCLA Davis, USA) and Prof. B Rolfe (RSBS, ANU).

Plant detection of quorum sensing compounds by Dr U MATHESIUS with Prof. W Dietz Bauer and Dr M Teplitsk (Ohio State University, USA) and Prof. B ROLFE (RSBS, ANU).

Magnesium as a neuroprotectant in stroke by Dr R MAR-TIN with Dr B Melloni (Centre for Neuromuscular & Neurological Disorders, Dept of Pharmacology, University of WA, Australian Neuromuscular Research Institute, Sir Charles Gairdner Hospital, WA).

Shigella O-antigen modification project by Dr N VERMA with Dr A Weintraub (Karolinska Institute, Sweden).

Shigella project by Dr N VERMA with Prof. C. Sasakawa (University of Tokyo).

Structure, function and regulation of ammonium transporters by Dr S HOWITT with Dr M Udvardi (Max Planck Institute of Molecular Plant Physiology, Germany).

Is MIF and NO production a feature of severe malaria? by Prof. I CLARK with Dr T Taylor and Dr M Molyneux (Queen Elizabeth Central Hospital, Blantyre, Malawi).

Heart muscle injury in malaria" by Prof. I CLARK with Dr R Bellomo (Austin Hospital, Melbourne).

Bioactive substances from Nostoc cyanobacteria by Dr G SMITH with Prof. M Tredici (Dipartimaneto di Biotecnologie Agrarie Universita" degli Studi di Firenze P. le delle Cascine, Firenze, Italy).

The electrophysiological characterisation of brain glutamine transporters by Dr S BRÖER with Prof. Lang (University of Tubingen, Germany).

#### School of Botany and Zoology

Start of a project by Dr Paul COOPER with Dr Kevin Powell, Victoria Research Institute-Rutherglen on the digestive physiology of the grape vine aphid, Phylloxera vitis, supported by the Grape and Wine Research and Development Corporation and will provide a PhD scholarship for 3.5 years.

Collaboration between Dr COOPER and Richard Reina (Drexel University) and an Honours student, Hannah Gisz, in a study of developmental physiology of hatchling leather sea turtles in Costa Rica.

The Mammals of Africa project by David HAPPOLD with colleagues in the following: American Museum of Natural History (USA); Smithsonian Institution, Washington DC (USA); The Natural History Museum, London (UK); Staatliches Museum fur Naturkunde (Germany); Museum National d'Histoire Naturelle (France); University of Cape Town, Cape Town (South Africa); Rhodes University (South Africa); University of Natal (South Africa); Durban Natural History Museum (South Africa); University of Pretoria (South Africa); Senckenberg Museum (Germany); University of London (UK); Museum Alexander Koenig (Germany); University of Antwerp (Belgium); Royal Botanic Gardens, Kew (UK).

Research on diagnostics is carried out by Mark GIBBS with PANBIO Limited, a Brisbane-based company that specialises in identifying infectious disease agents.

Potyvirus evolution by Mark GIBBS with researchers at Saga University, Japan and Queensland University of Technology.

Development of the national plant disease database by Mark GIBBS with researchers at the Institute for Horticultural Development Knoxfield, Victoria and Agriculture Fisheries and Forestry Australia.

#### **Department of Chemistry**

On new synthetic methods using transition metals by Dr B. FLYNN with Dr A. Meyer (CSIRO Division of Molecular Science).

New synthetic methods using transition metals by Dr B. FLYNN with Dr A. de Meyere (Institute für Organische Chemie der Georg-August-Universität Göttingen Germany).

Developing novel anti-cancer agents by Dr B. FLYNN with Dr E. Hamel (National Cancer Institutes, USA).

The singlet and triplet valence excited states of pyrimidine by Dr G. FISCHER with Dr P. Wormell (University of Western Sydney) and Dr J. Reimers (University of Sydney).

Spectroscopy of long chain carbon compounds by Dr G. FISCHER with Dr J. Maier (University of Basel).

Electronic spectroscopy of dicyanoacetylene and related molecules by Dr G. FISCHER with Dr D. Ramsay (NRC, Canada) and Prof. I. G. ROSS (ANU).

Organometallics for photonics applications by Drs M. HUMPHREY and M. CIFUENTES with Prof. R. Llusar (University Jaume I, Spain), Prof. A. Persoons (Catholic University of Leuven, Belgium) and Prof. A. Hunter (Youngstown State University, Ohio, USA).

Primary phosphines in the elucidation of insect toxicology of phosphine by Dr G. SALEM with Dr J. Desmarchelier (CSIRO).

Studies of the oxygen evolving centre of Photosystem II during the second turnover of the enzyme by Dr K. AHR-LING with Dr S. Styring (Biochemistry, Lund University, Sweden).

Comparative biophysical studies on Photosystem II of higher plants and Cyanobacteria by Dr R. PACE with Dr S. Styring (University of Lund, Lund, Sweden).

Complexes of secondary amides by Dr P. ANGUS with Prof. W. G. Jackson (Department of Chemistry, ADFA).

Combinatorial synthesis of chiral piperazines by Dr C. CHAI with Prof. A. Berkessel, 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 and 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, Dwarsdrift, 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).

Role of the hydrophobic region AGAAAAGA in the formation of PrP[106-126] channels in planar lipid bilayers by Dr J. KOURIE with Dr R. Cappai (Melbourne).

Quinacrine and chlorpromazine act by two different mechanisms on ion channels by Dr J. KOURIE with Dr M. Salmona and Dr G. Forloni (Italy).

Polyamidoamine Dendrimer (starburst), Coproporphyrin I, polypropylenimine dotriacontaamine dendrimer and modulation of PrP-formed channels by Dr J. KOURIE with Dr M. Salmona and Dr G. Forloni (Italy).

Transition metals and amyloid beta protein- and prionformed channels by Dr J. KOURIE with Dr K. Barnham and Dr C. Curtain (Melbourne).

NMR studies on natriuretic peptides models of the mechanisms of ion channel formation by Dr J. KOURIE with Dr P. Pallaghy (Melbourne).

Modulation of recombinant prion protein- and fragmentformed channels by Dr J. KOURIE with Dr D. R. Brown (UK).

Computational studies involving the modelling of oxo-, carboxylato- and peroxo-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/lowspin equilibria on metal-metal bonding in binuclear d5d5 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).

Density functional study of small molecule activation in transition metal complexes by Dr R. STRANGER with Dr B. F. Yates (University of Tasmania).

New antibiotics by Dr R. BARROW with Dr T. Mukkur and Dr M. Kotiw (University of Southern Queensland), Dr S. Tomasi (University of Rennes, France) and Dr S. Bloor (Industrial Research Ltd., Lower Hutt, New Zealand).

#### **Department of Geology**

Studies of volcanic rocks recovered by Prof. RJ ARCU-LUS and the National Marine Facility (RV Franklin) from backarcs and arcs of the western Pacific with CSIRO Exploration & Mining.

Age determinations for rocks of the Solomon Islands with Prof. RJ ARCULUS and Prof. RA Duncan, Oregon State University, USA.

Studies of volcanic rock geochemistry from Hokkaido and Honshu (Japan) and Kamchatka (Russia) with Prof. RJ ARCULUS, and Assoc. Prof. DA Gust, Queensland University of Technology, and Dr AB Kersting, Lawrence Livermore, USA.

Age determinations of volcanic rocks from the New Georgia Group (Solomon Islands) with Prof. RJ ARCULUS, and Dr M Cosca, Université du Lausanne, Switzerland.

Studies of ultra-high pressure rocks from NW China with Prof. RJ ARCULUS and Prof. L. Zhang (Beijing University).

Vertebrate fossils from Gogo, the genus Onychodus by Prof. KSW CAMPBELL and Dr RE BARWICK with Dr Per Ahlberg of the British Museum of Natural History and Dr J Long, Western Australian Museum.

The significance of the teeth of the dipnoan Speonesydrion by Prof. KSW CAMPBELL and Dr RE BARWICK with Dr Jan den Blaauwen, Swammerdam Institute, University of Amsterdam.

Cooperative research on the digestive strategy of the Chinese golden monkey with Dr JM Caton, Prof. Richard Wrangham and his honours student from the Anthropology Dept., Harvard University.

Studies of inorganically grown biomorphic composite materials by Dr AG CHRISTY and Prof. ST HYDE with Ms Anna CARNERUP (Applied Maths Dept, RSPhysSE, ANU), Dr NJ Welham (Murdoch University, W. Australia), Prof. J-M Garcia-Ruiz (University of Granada, Spain).

Stability and phase relations of Be-bearing sapphirine and effect of Be on high-grade metamorphic phase equilibria by Dr AG CHRISTY with Prof. ES Grew (University of Maine, USA), Prof. W Schreyer and Dr A Hölscher (University of Bochum, Germany), Dr Y Tabira (RSC, ANU and Mitsui Mining and Smelting Co, Japan). Composition, structure and properties of magnetic carbon nanofoams by Dr AG CHRISTY, Dr AV RODE, Prof. EG GAMALY and Prof. ST HYDE with Prof. RG ELLI-MAN (RSPhysSE, ANU), Dr J Giapintzakis and Dr J Androulakis (University of Crete, Greece), Prof. D Tomanek and Dr S Berber (Michigan State University, USA), Dr N Park (Seoul National University, Korea).

Supervision of University of Newcastle PhD student, Mr K Ruming by Prof. S.F. COX.

Evolution of fluid flow patterns in the Mont Blanc and Aar Massifs in the European Alps Collaboration by Prof. COX with Drs Boullier (Universite Joseph Fourier, Grenoble), N Mancktelow (ETH, Zurich) and G Pennachioni (Univerity of Padova); the collaboration forms part of an ARC Large Grant project, held in the Geology Department, The Faculties.

Structural controls on development of lode gold mineralisation by Prof. COX with geoscientists at Gold Fields Australia Ltd St Ives Gold Mining Company at Kambalda, WA.

Collaborative research by Prof. COX with a consortium of Australian minerals exploration companies via AMIRA International and the ARC Linkage grant scheme.

Late Palaeozoic correlation chart (part of DFG-Program 1054 "Evolution of the Earth's system during the Late Palaeozoic in the light of sedimentary geochemistry") by Dr PJ JONES with Dr M Menning, GeoForschungsZentrum, Potsdam, Germany.

Revision of some Permian and Triassic conchostracan genera from Australia by Dr PJ 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 PJ JONES with Dr M. Coen, Université de Louvain-la-Neuve, Belgium.

Examination of Permian conodonts from the Perth Basin, Western Australia by Dr R.S. NICOLL with Dr A. J. Mory, Geological Survey of Western Australia.

Ordovician and Silurian conodonts from the Carnarvon Basin, Western Australia by Dr R.S. NICOLL with Dr A. J. Mory, Geological Survey of Western Australia.

Biostratigaphy, geochronology and palaeomagnetism of the Upper Permian, Lower Triassic and Permian-Triassic boundary in South and East Asia by Dr R.S. NICOLL with Dr Ian Metcalfe, University of New England; Dr Roland Mundil & Prof. P.R. Renne, Berkley Geochronology Center, USA; Dr C.B. Foster, Geoscience Australia.

Wenlock (Late Silurian) Brachiopods from the Orange District of New South Wales by Dr D.L. STRUSZ with Dr A.J. Wright (Wollongong University).

#### **Department of Mathematics**

Subgroup covers of groups by Dr R.A BRYCE with L. Serena, (University of Florence, Italy) Products of groups by Dr P.J COSSEY with A Ballester-Bolinches, R Esteban, C Pedraza-Aguilera, M Alejandre (Valencia, Spain)

Permutable subgroups of p-groups by Dr P.J COSSEY with S Stonehewer (Warwick, UK)

Character degree and class size problems by Dr P.J COS-SEY with T Hawkes (Warwick, UK)

Recalcitrance in finite soluble groups by Dr P.J COSSEY with P Soules (Greece)

Non-LTE effects in magnetised accretion flows by Dr L. FERRARIO with R. Wehrse (Heidelberg University, Germany).

Modelling of X-ray heated accretion discs in close binary systems by Dr L. FERRARIO and Prof. D.T. WICKRA-MASINGHE with I. Hubeny (NASA, USA).

Cyclotron modelling of the low accretion rate polars SDSS1553+5516 and SDSS1324+0320 by Dr L. FER-RARIO and Prof. D.T. WICKRAMASINGHE with G. Schmidt and P. Smith (University of Arizona, USA).

Study of the populations of isolated magnetic white dwarfs and isolated neutron stars by Dr L. FERRARIO and Prof. D.T. WICKRAMASINGHE with G.I. Ogilvie (Cambridge University, UK).

A level set based adaptive finite element algorithm for image segmentation; Extension of the 2 phase segmentation to 4 phase segmentation; Quantitative comparision of different approaches to numerical solutions of the stefan problem by Dr J.M. FRIED, comparison with M. Benes (Czech Technical University, Prague).

Adaptivity for image segmentation by Dr J.M. FRIED with G. Dziuk (University of Freiburg, Germany).

Quantum ergodicity of boundary values of eigenfunctions on convex Euclidean domains with corners, under general boundary conditions by Dr A. HASSELL with Steve Zelditch, (Johns Hopkins, USA).

Constructing parametrix for the Schrodinger propagator on asymptotically conic manifolds and obtaining wavefront set estimates on solutions of the time-dependent Schrodinger equation on such manifolds by Dr A. HAS-SELL with Jared Wunsch, (Northwestern, USA).

Scattering theory for nondecaying potentials on asymptotically conic manifolds by Dr A. HASSELL with Andras Vasy and Richard Melrose, (both MIT, USA).

Forward algorithm for random fractals by Prof. J.E. HUTCHINSON with Orjan Stenflo (Stockholm University, Sweden), Michael Barnsley (Georgia Institute of Technology, USA).

A general framework for random fractals by Prof. J.E. HUTCHINSON with Orjan Stenflo (Stockholm University, Sweden), Michael Barnsley (Georgia Institute of Technology, USA). Actions of classical groups on complex manifolds by biholomorphic transformations by Dr A.V. ISAEV with N. Kruzhilin (Steklov Mathematical Institute, Moscow).

Description of all proper holomorphic mappings between Reinhardt domains in complex space by Dr A.V. ISAEV with N. Kruzhilin (Steklov Mathematical Institute, Moscow).

The structure of the lattice of closed ideals in the Banach algebra of operators on certain Banach spaces by Dr R.J. LOY with N J Laustsen (Copenhagen, Denmark).

Banach algebras on compact right topological groups by Dr R.J. LOY with A. T.-M. Lau (Alberta, Canada).

The ramifications of the hypothesis completely monotone fading memory in polymer dynamics by Dr R.J. LOY with R.S. Anderssen (CMIS, CSIRO).

Finite p-groups with normal normalisers (p > 3) by Dr E.A. ORMEROD with G. Parmeggiani (Padova, Italy).

Sparse grids by Dr S.G. ROBERTS with M Greibel (Bonn, Germany).

Storm surge by Dr S.G. ROBERTS with C Zoppou (GeoSciences Australia).

Geophysical Flows by Dr S.G. ROBERTS with S Matthai (Imperial College, UK) and S Geiger (ETH, Swit).

Observation program on NASA's Far Ultraviolet Spectroscopic Explorer by Dr S. VENNES with J Dupuis (Johns Hopkins, USA).

Optical spectroscopy of dwarf novae in quiescence by Dr S. VENNES with J Thorstensen (Dartmouth, USA).

Theoretical study of the orbital evolution of cataclysmic variables (CVs) including synchronised magnetic cataclysmic variables (MCVs of the AM Her type) by Prof. D.T. WICKRAMASINGHE with R Webbink (Illinois University, USA).

#### **Department of Physics**

Quantum imaging by Prof. H A BACHOR with Prof. C. Fabre (Universite Paris VI, France) as part of the QUCOV European Network.

Quantum cryptography and quantum noise reduction by Prof. H.A BACHOR and Dr P.K. LAM with Prof. G. Leuchs (Universitaet Erlangen, Germany) as part of the QUANTUM European Network.

Light detection and generation below the quantum noise limit by Prof. H.A. BACHOR and Dr P.K. LAM with Dr R.Schnabel and Prof. K.Danzmann (Universitaet Hannover, Germany).

Development of an Ion Implanter for Radioisotopes by Dr A.P. BYRNE with Dr H. Timmers and Assoc. Prof. D.H. Chaplin (University College, ADFA, UNSW).

Spectroscopy of neutron deficient lead and thallium nuclei by Dr A.P. BYRNE, Dr A.M. BAXTER with Prof. G.D. DRACOULIS, Dr G.J. LANE (RSPhysSE) and Dr A.O. Macchiavelli (LBL, Berkeley CA). Decay of superdeformed 192Pb by Dr A.P. BYRNE with Dr A. N. WILSON, Prof. G.D. DRACOULIS, Dr G.J. LANE (RSPhysSE) and Dr A.O. Macchiavelli (LBL, Berkeley CA)

Diffuse damage in semiconductors by Dr A.P. BYRNE with Dr M. C. RIDGWAY (RSPhysSE), Dr R. Vianden and F Ruske, (ISKP, Universitaet Bonn. Germany)

Superallowed Beta decays by Dr A.P. BYRNE with A. Prof. P.H. Barker (University of Auckland, NZ).

Neutron Rich translead nuclei using radioactive beams by Dr A.P. BYRNE with Prof. G.D. DRACOULIS, Dr G.J. LANE, (RSPhysSE) and Prof. P. M. Walker (University of Surrey, UK).

Red quasars from the two micron all sky survey by Dr P. FRANCIS with Drs. R. Cutri and B. Nelson (Caltech).

Galaxy clusters in the high redshift universe by Dr P. FRANCIS with Drs B.Woodgate and H. Teplitz (NASA Goddard Space-Flight Center), G. Williger (Johns Hopkins University) and P. Palunas (University of Texas, Austin).

Development of XMDS numerical package for high-performance integration by Dr J.J. HOPE with Dr P.D. Drummond and Mr G. Collecut (University of Queensland).

Continuous evaporation as a pumping method for an atom laser by Dr J.J. HOPE with Dr M.J. Davis (University of Queensland).

Single mode quantum statistical model of an atom laser by Dr J.J. HOPE with Mr A.S. Bradley (Victoria University, NZ).

Atomic detection using spatial modes of an optical resonator by Drs J.J. HOPE and J.D. CLOSE with Dr R.J. Ballagh (Otago University, NZ).

Scramjet flows by Dr AFH HOUWING with Dr R. Boyce and Dr N. Mudford, (School of Aerospace and Mechanical Engineering at the Australian Defence Force Academy, UNSW).

Generation of spatial squeezing and entanglement for optical imaging by Dr P.K. LAM with Prof. C. Fabre and A. Maitre, (Paris University, France).

Generation of optical Einstein-Podolsky-Rosen entanglement with optical fibres by Dr P.K. LAM with Prof. G. Leuchs, (Universität Erlangen-Nürnberg, Germany).

Gravitational wave detection by Prof. D.E. McCLEL-LAND and Dr S.M. SCOTT (Japanese projects TAMA and LCGT).

Theory of topological structures in spinor Bose-Einstein condensates by Dr.C SAVAGE with Dr J. Ruostekoski, (Dept. of Physical Sciences, University of Hertfordshire, UK).

Gravitational wave detection data analysis by Dr S.M. SCOTT with LIGO Laboratory, US and the LIGO Science Collaboration.

The development of visualisation software for general relativity by Dr S.M. SCOTT with Dr B.J.K. Evans (ANUSF).

Boundary constructions for space-time by Dr S.M. SCOTT with Dr P. Szekeres, (University of Adelaide) and Dr M.J.S.L Ashley (Pennsylvania State University).

Initial cosmological singularities by Dr S.M. SCOTT with Dr G.B. Ericksson, (University of Queensland).

SCOTT, S.M., member, Committee of the International Society on General Relativity and Gravitation; member, Editorial Board, Classical and Quantum Gravity, IOP Publishing.

#### **School of Psychology**

Symptom load in patients with terminal cancer by Prof. Don BYRNE with Prof. Robin-Stuart-Harris, University of Sydney/Canberra Clinical School

Social influence and attitude change processes at the ACT Deliberative Poll held on 29-30 November 2002 at Old Parliament House by Prof. Penny OAKES, Dr Kate REY-NOLDS and Dr Rachael EGGINS with Dr Pam Ryan, (Issues Deliberation Australia)

Group processes in extreme environments to be conducted during a Mars Society Canada Expedition One to the Mars Desert Research Station in Utah by Dr Kate REY-NOLDS and Dr Rachael EGGINS with Dr Steve Dawson (Mars Society Australia)

Visual attentional processes in both neurologically-normal individuals and in individuals who neglect one side of their world following a unilateral brain lesion by Dr Anne MAGUIRE with Prof. Michael Corballis and Assoc. Prof. Jenni Ogden, University of Auckland (New Zealand), Prof. Patricia Reuter-Lorenz, University of Michigan (USA) and Dr Timothy Bates, Macquarie Centre for Cognitive Science (Sydney).

Interaction of motion and spatial localisation processing by Dr Mark EDWARDS with Prof. David Badcock, Dept. of Psychology, UWA.

Interaction of cues in stereo-depth smoothing by Dr Mark EDWARDS with Prof. Clifton Schor, School of Optometry, UC Berkeley, USA.

Contrast tuning of the motion system Dr Mark ED-WARDS with Dr Colin Clifford, Dept. of Psychology, Uni of Sydney

Interaction of first- and second-order motion signals Dr Mark EDWARDS with Dr Shin'ya Nishida, NTT Basic Research Laboratories, Japan.

Randomised control trial for mental health first aid in Southern New South Wales by Dr Richard O'KEARNEY with Prof. Tony JORM, Ms Betty KITCHENER, Prof. Helen CHRISTENSEN (Centre for Mental Health Research at ANU) and Dr Ian White (Southern Area Health Service).

#### 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 mixedspecies 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 FORREST-ER 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 and the Australian Greenhouse Office.

Review of forest inventory and planning systems used in PNG, by Dr C BRACK and Mr A GERRAND for the Australian Council for International Agricultural Research.

Public Health Education and Research Program Innovations Grant, for a "National curriculum on Sustainability and Health for Public Health teaching programs" by Em. Prof. V BROWN jointly with Universities of New South Wales, Griffith, Latrobe and Western Sydney;

ARC/SPIRT research program To develop an interactive knowledge management framework for the local government sector, jointly with Baulkham Hills Shire Council by Em. Prof. V BROWN with 25 Local Government Authorities Australia wide.

Terms of whole-of-community engagement by Em. Prof. V BROWN with Murray-Darling Basin Commission and Bureau of Rural Sciences.

Implementing an Australian fire regime model in a northern Rocky Mountain Ecosystem by Dr G CARY with Dr Bob Keane, USDA forest service.

Australian forest history, coordinated by Dr J. DARGAV-EL with colleagues from all Australian states.

Dr M GILL collaborated with NSW National Parks and Wildlife Service; Northern Territory Bush Fire Council, University of Maryland, USA; W.A. Department of Conservation and Land Management.

Aeolian dust by Dr R GREENE with staff from the United States Department of Agriculture and University of Nebraska, Lincoln, and staff from the CRC for Landscape Environments and Mineral Exploration.

P release from strongly fixing krasnozem soils by Dr R GREENE with Dr P.Hocking from the CSIRO Division of Plant Industry

Cover crops for decreased P transport and increased efficiency of P application by Dr R.Greene and Dr P. Hocking with the SCA and Robertson Landcare Group.

Evaluating what motivates corporate environmental behaviour, and how corporations can be motivated to go beyond compliance by Prof. N GUNNINGHAM with Prof. R Kagan and Dr D Thornton, University of California, Berkeley.

Silviculture of plantation-grown Flooded Gum by T KLOOTWIJK, Dr RN JAMES and Dr G Smith, Northern Research Station of State Forests of NSW.

A description of the specifications used in Australia to describe log grades by Dr RN JAMES with the Joint Venture Agroforestry Program. Inheritance of wood properties in Slash x Caribbean Pine hybrids, by DP KAIN with Prof. PJ KANOWSKI, Dr P D EVANS, Dr MJ Dieters and Dr KJ Harding, Queensland Forestry Research Institute.

Propagation of Eucalyptus microcuttings by R MURTI and Prof. PJ KANOWSKI with Dr C Harwood, CSIRO Forestry and Forest Products.

Conservation genetics of the endangered shrub Grevillia isapicula, by S HOBEE with Prof. PJ KANOWSKI and Dr R Macgrath, School of Botany and Zoology and Dr A Young, CSIRO Centre for Plant Biodiversity Research.

Development of hybrid eucalypts for marginal lands in SE Australia and South Africa by Prof. PJ KANOWSKI and Mr DP KAIN, with CSIRO Forestry and Forest Products, CSIR South Africa, State Forests NSW, the University of Stellenbosch, and the Australian Council for International Agricultural Research.

Enhancing Australian forest sector market intelligence by Prof. PJ KANOWSKI and Dr UN BHATI with the University of Melbourne for the Forest and Wood Products Research & Development Corporation.

Reviewing Australia's experience of forest plantation privatisation by Ms J SCHIRMER and Prof. PJ KANOWSKI for the International Institute for Environment & Development.

Analysing the spatial distribution of taxonomic and genetic species diversity by Dr S LAFFAN with Drs Sophie Bickford and Rogier de Kok, Centre for Plant Biodiversity Research, CSIRO.

Using geographic visualisation to compare geostatistical and artificial neural network spatio-temporal interpolation methods by Dr S LAFFAN with Dr Claire Jarvis, University of Edinburgh, UK.

Ecosystem vulnerability to change by Dr B MACKEY with the CRC for Greenhouse Accounting.

Developing educational curriculum based on the Earth Charter by Dr B MACKEY in collaboration with a global network of colleagues in including Prof. Aberlardo Brenes from the United Nations University for Peace, Prof. Ed O'Sullivan from the University of Toronto and colleagues at the Paulo Freire Institute, Brazil.

Carbon offsets in forest plantations by Dr S MAHEN-DRARAJAH 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.

Reviewed the potential for a social forestry course in PNG by Dr D RACE for the Australian Centre for International Agricultural Research (ACIAR). Evaluated 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 ANU-TECH'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 and Dr C TIDEMANN with Environment Australia.

Cooperative research project on long-distance flying-fox movements by Dr C TIDEMANN with Dr J E Nelson of Monash University.

Flying-fox population demography by Dr C TIDE-MANN with Dr M J Vardon, Australian Bureau of Statistics and Dr G M O'Brien of University of New England.

Collaborative study on the impacts of removal of pest birds from nature reserves by Dr C R TIDEMANN and Mr M Moncur, with Dr D Shorthouse of Environment ACT.

Dr C R TIDEMANN with honours student Mr B BROWN, completed an investigation of factors affecting marsupial roadkill to inform mitigation with Mr T Mc-Coy of the NSW Roads and Traffic Authority and Mr W Allen of 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.

## **University Schools and Centres**

## Asia-Pacific School of Economics and Management

Wetland valuation and management by Jeff BENNETT with the University of Montpellier, France.

Reforestation by Jeff BENNETT with the Autonomous University of Barcelona, Spain.

Water management in China by Jeff BENNETT with Shenyang University, China.

Land and water degradation in China by Jeff BENNETT Forestry Economics and Development Research Centre, China.

Markets for ecosystem services by Jeff BENNETT with CSIRO, Canberra.

Water management in the Fitzroy River Basin by Jeff BENNETT with Central Queensland University.

Chinese grain marketing system reform by Chunlai CHEN with the Ministry of Agriculture, China.

Achieving food security in China by Chunlai CHEN with Beijing University, China.

East Asian trade strategy by Jane DRAKE-BROCKMAN, Peter DRYSDALE, Andrew ELEK and Christopher FINDLAY with the Ministry of Foreign Trade and Economic Cooperation, Beijing, Office of Prime Minister, Tokyo; University of Tokyo, Waseda University, Tokyo; Productivity Commission, Canberra; Cabinet Office, Tokyo; Department of Foreign Affairs and Trade, Canberra; Seranne Holdings, Bangkok; Office of National Assessments, Canberra; and Korea Institute for International Economic Policy.

Regional financial arrangements in East Asia by Peter DRYSDALE and Gordon DeBROUWER with the Ministry of Finance, Tokyo; University of Tokyo; University of Adelaide; Department of Treasury, Canberra; International Monetary Fund, Tokyo and Washington; Institute for International Economics, Cabinet Office, Tokyo; University of California, Santa Cruz; University of Southern California, Los Angeles; Meji Gakuin University, Tokyo; Reserve Bank of Australia, Sydney; Bank of Indonesia, Jakarta; Fudan University, Shanghai; Philippine Institute for Development Studies, Manila; National University of Singapore; Central Institute for Economic Management, Hanoi; Hitotsubashi, University, Tokyo; Monetary Authority, Singapore; Kobe University, Japan; Bank Negra, Kuala Lumpur; Keio University, Tokyo; Korea Institute for International Economic Policy, Seoul; South Bank University, London; People's Bank of China, Beijing; Institute of South East Asian Studies, Singapore; Ministry of Economics, Finance and Industry, Paris; China Center for Economic Research, Beijing; National Institute of Management, Phnom Penh, The Treasury, London; Ministry of Finance, Seoul; Asian Development Bank, Manila; Malaysian Institute for Economic Research, Kuala Lumpur; Waseda University, Tokyo; Kim & Chang, Seoul.

Australia–Japan 1.5 track dialogue by Gordon DE BROUWER and Peter DRYSDALE with the Australian Strategic Policy Institute, Canberra; Institute of International Affairs, Tokyo; Keio University, Tokyo; Hosei University, Tokyo; Doshihisa University, Kyoto; National Institute for Research Advancement, Tokyo; Japan Defense Agency, Tokyo; Ministry of Foreign Affairs, Tokyo; Department of Foreign Affairs and Trade, Canberra.

China's Interests in the WTO by Peter DRYSDALE and Ligang SONG with the Ministry of Foreign Trade and Economic Cooperation, Beijing.

Australia–Japan educational linkages by Peter DRYS-DALE and R. FARRELL with Keio University, Tokyo; the University of Queensland, Brisbane; University of Sydney; University of Technology Sydney; Queensland University of Technology, Brisbane; RMIT, Melbourne and the Academy of Science, Canberra. Knowledge in public administration by Michael HESS with the Department of Premier and Cabinet, Victoria.

Work in Thailand by Michael HESS with the Population Council, Bangkok.

Strategic development in Malaysia by Helen JAMES with the Universiti Kebangsaan, Malaysia and the University of Malaya.

Economics for community-based environment and development projects by Meg KEEN with the University of the South Pacific, Fiji and the South Pacific Regional Environment Program, Samoa.

Poverty reduction and environment by Meg KEEN with the World Wildlife Fund, South Pacific, Fiji and the Development Studies Network, Canberra.

Human settlements/sustainability by Meg KEEN with the Office of the Environment Commissioner, ACT.

Public service reforms in terms of e-government in Korea by Myungshik KIM with the Seoul National University, Seoul.

From rank to job-related public services system by Myungshik KIM with the Civil Service Commission of Korea, Seoul.

Economic considerations in community-based project planning and implementation, review of the international waters program's economic strategy by Padma LAL with the South Pacific Regional Environmental Programme, Samoa.

Economics of forest certification in the Solomon Islands; socioeconomics of coir based potting mix in the Solomon Islands by Padma LAL with CSIRO, Townsville.

Economics of community based projects by Padma LAL with the United Nations Sea Coast Program.

Adaptive management of mangrove crabs in Kosrae by Padma LAL with USDA — Department Institute of Pacific Islands Forestry, Hawaii.

The impact of the loss of preferential access in the Fiji sugar industry by Padma LAL with the Sugar Commission of Fiji, University of the South Pacific and the Lands Department of Fiji.

Role of the state in Vietnam's transition by Suiwah LE-UNG with the Ho Chi Minh National Political Academy, Hanoi.

Vietnam's trade, investment and financial links with the world economy by Suiwah LEUNG with the Central Institute of Economic Management, Hanoi.

Corporate governance in Vietnam by Suiwah LEUNG with the Department of Foreign Affairs and Trade, Canberra.

Power sharing by Ben REILLY with the University of California, San Diego.

Instant runoff voting by Ben REILLY with the Center for Voting and Democracy, United States.

Electoral reform by Ben REILLY with the National Democratic Institute, United States and the United Nations Development Programme, Fiji.

Advancing liberalisation in services and trade by Alexandra SIDORENKO with CSIS, Jakarta.

Reducing regional disparities in China by Ligang SONG with the Chinese Academy of Social Sciences, Beijing.

# Centre for Aboriginal Economic Policy Research

Indigenous community governance: understanding, building and sustaining effective governance in rural, remote and urban Indigenous Australian communities, ARC Linkage project proposal drafted by Dr W. SAND-ERS, Ms D. Smith and Reconciliation Australia.

Indigenous community organisations and miners: partnering sustainable regional development? ARC Linkage project by Prof. J.C. ALTMAN, Dr D. MARTIN, Dr S. HOLCOMBE, Ms K. TREBECK, Mr B. SCAMBARY with Rio Tinto and the Committee for Economic Development of Australia.

Managing endangered Banteng in a jointly-managed national park: contested values, Indigenous aspirations and resource use, ARC Linkage project proposal drafted by Dr P. WHITEHEAD, Prof. J.C. ALTMAN, Dr D. BOW-MAN and Dr B. BROOK from the Centre for Tropical Wildlife Management, NTU and the Territory Parks and Wildlife Service.

Pathways to improved educational attainment for Indigenous Australians: social and institutional factors underlying school participation, ARC Linkage project proposal drafted by Dr. B.H. HUNTER and Dr R.G. SCHWAB with the Australian Bureau of Statistics.

Timber harvest management for the Aboriginal arts industry: socioeconomic, cultural and ecological determinants of sustainability in a remote community context, ARC Linkage project by Prof. J.C. ALTMAN with the Key Centre for Tropical Wildlife Management, NTU (Tony Griffiths, Jennifer Koenig) and the Bawinanga Aboriginal Corporation and Maningrida Arts and Culture.

Factors underlying indigenous labour force status, 1981–2001, Australian Census Analytic Program Fellowship awarded to Dr B.H. HUNTER by ABS for 2002 and 2003.

Indigenous peoples and population mobility in Australasia and North America by Dr J. TAYLOR with Dr M. Bell, Centre for Population Research, University of Queensland.

Estimation of service populations in Indigenous communities by Dr J. TAYLOR with Dr M. Bell, Centre for Population Research, University of Queensland.

Indigenous literacy needs and regional analysis by Dr R.G. SCHWAB and Ms D. SUTHERLAND with the Jawoyn Association based in Katherine, Northern Territory, commissioned and facilitated by the Fred Hollows Foundation. Indigenous governance, capacity development and sustainability by Prof. J.C. ALTMAN, Dr D. MARTIN, Ms S. McDONNELL, Dr W. SANDERS, Ms D. SMITH and Dr J. TAYLOR with Reconciliation Australia, the National Institute of Governance, and University of Canberra.

Indigenous banking, Prof. J.C. ALTMAN, Ms S. Mc-DONNELL and Dr J. TAYLOR with Reconciliation Australia and Assoc. Prof. O. Stanley, James Cook University.

Atlas of Indigenous Australia by Mr W. ARTHUR and Ms F. MORPHY with Macquarie/MacMillan, University of Melbourne, AIATSIS, University of Queensland, and CRC for Aboriginal and Tropical Health.

Observing the census by Dr D. MARTIN, Ms F. MOR-PHY, Dr W. SANDERS, Dr J. TAYLOR with the Australian Bureau of Statistics.

Health expenditure, income and health status among Indigenous and other Australians by Dr B.H. HUNTER and Dr J. TAYLOR with Dr M. Gray, Australian Institute of Family Studies, sponsored by the Australian Institute of Health and Welfare and the Department of Health and Aging.

Competition and consumer issues for Indigenous Australians by Prof. J.C. ALTMAN, Dr D. MARTIN, Ms S. Mc-DONNELL, S. WARD and Dr B.H. HUNTER with the Australian Competition and Consumer Commission.

The validity of poverty measures for Indigenous Australians by Dr B.H. HUNTER with Mr N. Biddle, Mr S. Kennedy and Mr D. Smith, Australian Bureau of Statistics.

Discouraged Indigenous workers and employment by Dr B.H. HUNTER with Dr M. Gray, Australian Institute of Family Studies and Mr A. Heath, Reserve Bank of Australia.

Indigenous children and their families and households: the effectiveness of DFACS income support policy and related payments by Ms D. SMITH with Dr R. Henry, James Cook University of North Queensland, and Dr A.E. Daly, University of Canberra.

Desert Knowledge Cooperative Research Centre bid by Dr W. SANDERS, Ms D. SMITH and Dr J. TAYLOR with Dr M. Bell, Queensland Centre for Population Research, The University of Queensland, CSIRO and Centre for Appropriate Technology, Alice Springs.

Feral and exotic animal management strategy for Kakadu National Park by Prof. J.C. ALTMAN with Key Centre for Tropical Wildlife Management, NTU.

Audit work plan by Prof. J.C. ALTMAN, Mr W. ARTHUR, Dr B.H. HUNTER, Dr W. SANDERS, Dr R.G. SCHWAB, Ms D. SMITH, Ms D. SUTHER-LAND and Dr J. TAYLOR with the Australian National Audit Office.

## **Centre for Cross-Cultural Research**

Art on a String, exhibition curated by Dr Louise HAMBY with Object Gallery, Sydney (toured through 2002).

Births of a Nation, exhibition curated by Ann Mc-GRATH with the Powerhouse Museum (toured through 2002).

Blue Mud Bay project by Prof. Howard MORPHY (with Dr Nicholas Peterson and Dr Annie Clarke) with the Northern Land Council.

Burke and Wills: from Melbourne to myth, exhibition curated by Dr Tim BONYHADY with the National Library of Australia (toured through 2002).

Consortium for Research and Information Outreach established with the Humanities Research Centre in partnership with the National Museum of Australia. The Consortium aims 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.

Indigenous Science Curriculum Project by the Consortium for Research and Information Outreach, with the NSW Department of Education and Training, the Australian National Maritime Museum and the Yirrkala Community Education Centre, NT.

Inside Dreaming, a national touring exhibition curated by Dr Sylvia KLEINERT with Museum Victoria, Melbourne.

Seeing the Centre: the art of Albert Namatjira 1902– 1959, exhibition curated by Ms Alison FRENCH with the National Gallery of Australia and Gordon Darling Foundation.

South Seas Project by Dr Paul TURNBULL with the National Library of Australia.

## **Centre for Mental Health Research**

Associations with cognitive change by Prof. H. CHRIS-TENSEN, Prof. A. F. JORM and Dr K. ANSTEY with Prof. A. Mackinnon (Mental Health Research Institute of Victoria).

Australia-Japan partnership to investigate mental health literacy by Prof. A. F. JORM, Prof. H. CHRISTENSEN, Dr K. GRIFFITHS and K. BLEWITT with Dr H. Imada, Dr T. Takeshima and Dr Y. Kim (National Institute of Mental Health, Japan), Dr S. Misawa, Dr Y. Nakane and Dr Y. Izumi (Division of Neuropsychiatry in the Department of Translational Medicines, Japan).

BluePages by Dr K. GRIFFITHS and Prof. H. CHRIS-TENSEN with Dr D. Hawking (CSIRO Mathematical and Information Sciences).

Clozapine in community practice by Dr K. GRIFFITHS with Dr L. Drew (USyd) and Dr D. Hodgson (Canberra Hospital).

Cognitive and sensorimotor changes in ageing by Dr K. ANSTEY with Prof M. Luszcz (Flinders) and Dr S. Hofer (Pennsylvania State University).

Development of a new version of the strains in nursing care scale by Dr M. BIRD with Dr A-K Edberg and Prof. I. Hallberg (Lund University, Sweden).

Diagnostic tool for nursing home staff by Dr M. BIRD and C. KELLY with C. Heal (Healthy Ageing Research Unit, Hornsby Ku-ring-gai Hospital Research).

e-prevention by Prof. H. CHRISTENSEN and Dr K. GRIFFITHS with Prof. Ken Kirkby (University of Tasmania), A/Prof. J. Kenardy (University of Queensland), Prof. A. Mackinnon (Mental Health Research Institute Victoria), M. Frotheringham (Cancer Control Research Institute, Anti-Cancer Council of Victoria), J. Richard (University of Ballarat) and P. Conroy (110 Pty Ltd).

Evaluation of the ADARDS nursing home, Hobart by Dr M. BIRD, A. E. KORTEN and J. MALLER with Dr Pollitt (Monash).

Incontinence and cognitive impairment by Dr M. BIRD and C. KELLY with G. McNess (Alzheimer's Association, ACT).

Mental health first aid by B. KITCHENER and Prof. A.F. JORM with R. O'Kearney and K. Peterson (NSW Southern Area Health Service).

MoodGYM GP by Prof. H. CHRISTENSEN and Dr K. GRIFFITHS with Prof. I. Hickie (beyondblue) and Dr M. Moore (Sydney Division, Centre of General Practice).

MRI study of 60–64-year-old brains by Dr K. ANSTEY, Prof. A. F. JORM, J. MALLER, Dr C. MESLIN, P. JA-COMB and Dr J. BRINKMAN with G. De Plater and Dr R. Kumar (Canberra Hospital), Dr P. Sachdev and Dr W. Wen (Neuropsychiatric Institute, Prince of Wales Hospital), and Dr J. Price (National Capital Imaging).

Prevention of depression in older Australians by Prof. A. F. JORM, Prof. H. CHRISTENSEN and Dr M. BIRD with Prof. I. Hickie (beyondblue).

Vision, cognition and driving in older adults by Dr K. ANSTEY with Prof. S. Dain (UNSW), Prof. S. Andrews (USyd), J. Drobney (Westmead Hospital), Dr G. Smith (DSTO), A/Prof. S. Lord (POWMRI) and A/Prof. J. Wood (QUT).

### **Humanities Research Centre**

Art and human rights project by Dr Caroline TURNER and Ms Christine CLARK, Prof. Christine Chinkin (London School of Economics), Dr Jen Webb (University of Canberra) with the Drill Hall Gallery, Canberra School of Art Gallery, the National Museum of Australia, the National Gallery of Australia and Canberra Contemporary Artspace.

Dr John DOCKER provided assistance to Prof. Ian Donaldson (University of Cambridge) with the development of various activities and projects at the new Centre for Research in the Arts, Social Sciences and Humanities, University of Cambridge including the Organization of Knowledge project.

*The Enlightenment World*, a book of essays to be published in 2003 by Routledge, editors are Prof. Iain McCALMAN and Dr Christa KNELLWOLF assisted by Ms Georgina FITZPATRICK, co-editors Dr Martin Fitzpatrick (University of Wales), and Prof. Peter Jones (University of Edinburgh).

'Exoticism and the Culture of Exploration', special issue of the refereed journal *Eighteenth-Century Life* 26.3 (November 2002), edited by Dr Christa KNELLWOLF with Prof. Robert P. Maccubbin (College of William & Mary, USA).

*Friends of the people: uneasy radicals in the age of the chartists,* Merlin Press, London, 2002 by Dr Paul PICKER-ING with Prof. Owen ASHTON (Staffordshire University).

Gardens project by Prof. Iain McCALMAN and Dr Caroline TURNER with Prof. Ian Donaldson (University of Cambridge) and Prof. Roy Ritchie (Huntington Library, California).

"The Gordon Riots' for a new edition of Dickens, *Barnaby Rudge* to be published by Oxford University Press; editors are Prof. Iain McCALMAN and Jon MEE (Oxford University) assisted by Ms Georgina FITZPATRICK.

'Immigration' project by Dr Caroline TURNER and Dr Paul PICKERING with the National Museum of Australia and the National Gallery of Victoria.

'Indigenous peoples and the environment' project, specialising in comparative studies of rainforest peoples and habitats in Latin America and Australia by Prof. Iain McCALMAN with the Humanities Research Institute of the combined campuses of the University of California System, Irvine, California, and Dr Paul Turnbull (James Cook University). This involves a series of seminars and colloquiums, culminating in a joint set of fellowships to produce a scholarly publication.

'Liberty and Terror', French Revolution project led by Prof. Iain McCALMAN and Dr Caroline TURNER with the National Library of Australia.

'New media in contemporary Australian art' project by Dr Caroline TURNER with the Museum of the Moving Image, University of Melbourne, and the National Gallery of Victoria.

'The other within' project, Dr Caroline TURNER, chief investigator for this Australian Research Council Research Linkages project on other cultures in Asia-Pacific Museums, jointly with the National Museum of Australia, and Asialink, University of Melbourne.

'Urban Imaginaries' project led by Prof. Iain McCAL-MAN and Prof. Meaghan Morris (University of Lingnan, Hong Kong), which will see HRC and Lingnan staff develop a series of combined conferences and publications in 2004–5.

## **Mathematical Sciences Institute**

#### **Centre for Mathematics and its Applications**

Expansion of immersed curves by Dr B.H. ANDREWS with Prof.D.-H. Tsai and Prof. T.-C. Lin (NSTC, Taiwan).

Christoffel-Minkowski problems by Dr B.H. ANDREWS with Dr P.-F. Guan (McMasters) and Dr X.-N. Ma.

Erosion models and optimal mass transfer by Dr B.H. ANDREWS with Prof. M. Feldman (Wisconsin).

Combinatorics by Prof. M.T. BATCHELOR with Dr J. de Gier (Melbourne), Prof. B. Nienhuis and Prof. S. Mitra (Amsterdam).

Quantum spin ladders by Prof. M.T. BATCHELOR with Mr M. Maslen, Dr J. de Gier (Melbourne), Dr X.-W. Guan (Brazil) and Prof. K. Sakai (ISSP, Tokyo).

Random walks by Prof. M.T. BATCHELOR with Dr B. Henry (UNSW).

Stromatolites by Prof. M.T. BATCHELOR with Dr R. Burne (Geology, ANU) and Dr B. Henry (UNSW).

Geometric problems in quantum field theory by Prof. A.L. CAREY with Dr P. Bouwknegt, Dr S. Johnson, Dr V. Mathai, Dr M.K. Murray and Dr D. Stephenson (Adelaide).

Seiberg-Witten invariants on 3-manifolds by Prof. A.L. CAREY with Dr B. Wang (MPIM Bonn) and Prof. M. Marcolli (Chicago).

Invariants constructed using von Neumann algebras by Prof. A.L. CAREY with Prof. M. Braverman (Northeastern), Dr V. Mathai (Adelaide) and Prof. M. Farber (Tel Aviv).

Alain Connes formula for the Chern character of a Hochschild cycle in the cyclic cohomology of subalgebras of semi-finite von Neumann algebras by Prof. A.L. CAREY with Prof. J. Phillips (U of Victoria, British Columbia), Dr A. Rennie (Newcastle) and Dr F. Sukochev (Flinders).

Heavy-tail behaviour in GI/GI/1 queue by Dr D.J. DA-LEY with Prof. C. Kluppelberg (Technical University, Munich) and Prof. A. Baltrünas (Vilnius, Lithuania).

Theory of point processes by Dr D.J. DALEY with Prof. D. Vere-Jones (Victoria U of Wellington).

Complex operators on Lie groups by Dr N.M. DUNGEY with Dr A.F.M. ter Elst (Eindhoven U of Technology) and Prof. D.W. Robinson.

On patterns in sequences in random events by Prof. J.M. GANI with Prof. A. Irle (Kiel).

Deconvolution by Prof. P.G. HALL with Prof. R. Carroll (Texas A & M).

Semiparametric inference by Prof. P.G. HALL with Prof. R. Carroll (Texas A & M) and Prof. X. Lin (Michigan).

Errors in variables models by Prof. P.G. HALL with Prof. J. Horowitz (Northwestern).

Inference for ROC curves by Prof. P.G. HALL with Dr R. Hyndman (Monash).

High-dimensional, low sample size inference by Prof. P.G. HALL with Prof. S. Marron (North Carolina).

Modelling Internet traffic data by Prof. P.G. HALL with Prof. A. Nobel (North Carolina).

Wavelet methods in statistics by Prof. P.G. HALL with Dr S. Penev (UNSW).

Dimension reduction by Prof. P.G. HALL with Prof. Q. Yao (London School of Economics).

Long memory processes by Prof. C.C. HEYDE with Dr V.V. Anh (QUT), Prof. N. Leonenko (Cardiff) and Prof. V. de la Pena (Columbia).

Tail-heaviness by Prof. C.C. HEYDE with Prof. S. Kou (Columbia).

Risky asset modelling by Prof. C.C. HEYDE with Dr R. Gay (Monash).

Sparse grid algorithms by Dr T.M. HEGLAND with Dr S. Roberts and Dr O. Nielsen (ANU) and Prof. M. Griebel (Institut fur Angewandte Mathematik, Bonn).

Iterative algorithms for highdimensional fitting by Dr T M HEGLAND with Prof. M. Gutknecht (ETH, Switzerland) and Prof. G. Golub (Stanford).

Approximation by Dr T.M. HEGLAND with Dr V. Pestov (Victoria U of Wellington) and Prof. Z. Shen (Singapore).

Partial regularity of minimizers in the calculus of variations by Dr M.-C. HONG with Prof. M. Giaquinta (Pisa).

Module structure of free Lie rings and free Lie algebras by Dr L.G. KOVÁCS with Prof. R.M. Bryant and Dr R. Stöhr (UMIST, UK).

Units in integral group rings of finite groups by Dr L.G. KOVÁCS with Dr V. Bovdi (Debrecen, Hungary).

Tensor induction of group representations by Dr L.G. KOVÁCS with Mr E. Pacifici (Firenze, Italy).

Integral representation of groups of prime order by Dr L.G. KOVÁCS with Prof. M.C.R. Butler (Liverpool, UK) and Dr J.M. Campbell (FEIT, ANU).

Matrix calculus, regression and ARCH models by Dr S. LIU with Prof. H. Neudecker (Amsterdam).

Symmetric Jack's polynomials by Dr V.V. MAN-GAZEEV with Prof. V.B. Kuznetsov (Leeds) and Prof. E.K. Sklyanin (York).

3d integrable models by Dr V.V. MANGAZEEV with Prof. S.M. Sergeev (MPI, Bonn).

Hardy spaces associated with a holomorphic semigroup by Prof. A.G.R. McINTOSH with Prof. P. Auscher (Paris-Sud, France) and Dr X. Duong (Macquarie). Hardy spaces of exact forms on Lipschitz domains by Prof. A.G.R. McINTOSH with Prof. P. Auscher (Paris-Sud, France), Dr Z. Lou (Shantou University, China), Prof. E. Russ (Marseille, France), Prof. P. Tchamitchian (Marseille, France).

Navier-Stokes equations on Lipschitz domainsby Prof. A.G.R. McINTOSH with Mr A. Axelsson (ANU) and Prof. S.Monniaux (Marseille, France).

Noncommutative K- and L-theory localisation by Prof. A. NEEMAN with Prof. A. Schofield (Bristol).

One-relator quotients of the modular group by Prof. M.F. NEWMAN with Prof. M.D.E. Conder (Auckland) and Prof. G. Havas (Qld) assisted by Ms S. Yu (vacation scholar).

Collection in polycyclic presentations by Prof. M.F. NEWMAN with Dr A.C. Niemeyer (Western Australia).

Soluble length of groups with prime-power order by Prof. M.F. NEWMAN with Dr S. Evans-Riley (Martin, USA).

Groups defined by powers by Prof. M.F. NEWMAN with Dr D.F. Holt (Warwick).

Minimal presentations by Prof. M.F. NEWMAN with Prof. G. Havas (Queensland) and Prof. E.A. O'Brien (Auckland).

The breadth and nilpotency class of groups with primepower order by Prof. M.F. NEWMAN with Prof. B. Eick (Braunschweig), Prof. E.A. O'Brien (Auckland) and Prof. J. Wiegold (Cardiff).

Electronic database for groups prime-power order by Prof. M.F. NEWMAN with Prof. E.A. O'Brien (Auckland).

Non-parametric regression models for high dimensional regression using Sparse Grids by Dr O.M. NIELSEN with Prof. M. Griebel (Institut fur Angewandte Mathematik, Bonn).

Curve fitting by Prof. M.R. OSBORNE with Dr T. Prvan (Canberra).

Estimation of differential equations by Prof. M.R. OS-BORNE with Prof. H.G. Bock (Heidelberg).

Jump curves with vertices by Mr C. RAU with Prof. P.G. Hall and Prof. P. Qiu (Minnesota).

Signal discrimination by Mr C. RAU with Dr D. Gray and Dr D. Gibbins (CSSIP, SPRI, Adelaide).

Analysis on Lie groups of polynomial growth by Prof. D.W. ROBINSON with Dr N. Dungey (ANU), Dr A.F.M. ter Elst (Eindhoven U of Technology) and Dr A. Sikora (New Mexico).

On second-order periodic elliptic operators in divergence form by Prof. D.W. ROBINSON with Dr A. Sikora (New Mexico) and Dr A.F.M. ter Elst (Technical University, Eindhoven).

Discrete schemes for elliptic and parabolic equations by Prof. N.S. TRUDINGER with Prof. H.-J. Kuo (National Chung-Hsing University, Taiwan). Degenerate Hessian equations by Prof. N.S. TRUDINGER and Dr X.-J. Wang with Prof. N.N. Ivochkina (St Petersburg Institute of Civil Engineering).

Interior curvature bounds for a class of curvature equations by Prof. J.I.E. URBAS with Dr W. Sheng (Zhejiang) and Dr X.-J. Wang (ANU).

Hardy spaces on Lie groups of polynomial growth by Dr Y. ZHU with Prof. D.W. Robinson and Dr A.F.M. ter Elst (Eindhoven U of Technology).

#### **Centre for Bioinformation Science (CBiS)**

Determining the genetic basis of Crohn's disease by Prof. S.R. WILSON with Dr J. Cavanaugh and Dr P. Pavli (Canberra Hospital).

Understanding the hereditary basis of haemochromatosis by Prof. S.R. WILSON with Dr M. Bassett and Dr J. Cavanaugh (Canberra Hospital).

#### **Department of Mathematics**

Subgroup covers of groups by Dr R.A. BRYCE with L. Serena, (University of Florence, Italy).

Products of groups by Dr P.J. COSSEY with A. Ballester-Bolinches, R. Esteban, C. Pedraza-Aguilera, M. Alejandre (Valencia, Spain).

Permutable subgroups of p-groups by Dr P.J. COSSEY with S. Stonehewer (Warwick, UK).

Character degree and class size problems by Dr P.J. COS-SEY with T. Hawkes (Warwick, UK).

Recalcitrance in finite soluble groups by Dr P.J. COSSEY with P. Soules (Greece).

Non-LTE effects in magnetised accretion flows by Dr L. FERRARIO with R. Wehrse (Heidelberg University, Germany).

Modelling of X-ray heated accretion discs in close binary systems by Dr L. FERRARIO and Prof. D.T. WICKRA-MASINGHE with I. Hubeny (NASA, USA).

Cyclotron modelling of the low accretion rate polars SDSS1553+5516 and SDSS1324+0320 by Dr L. FER-RARIO and Prof. D.T. WICKRAMASINGHE with G. Schmidt and P. Smith (University of Arizona, USA).

Study of the populations of isolated magnetic white dwarfs and isolated neutron stars by Dr L. FERRARIO and Prof. D.T. WICKRAMASINGHE with G.I. Ogilvie (Cambridge University, UK).

A level set based adaptive finite element algorithm for image segmentation; Extension of the 2 phase segmentation to 4 phase segmentation; Quantitative comparision of different approaches to numerical solutions of the stefan problem by Dr J.M. FRIED comparison with M. Benes (Czech Technical University, Prague).

Adaptivity for image segmentation by Dr J.M. FRIED with G. Dziuk (University of Freiburg, Germany).

Quantum ergodicity of boundary values of eigenfunctions on convex Euclidean domains with corners, under general boundary conditions by Dr A. HASSELL with Steve Zelditch, (Johns Hopkins, USA).

Constructing parametrix for the Schrodinger propagator on asymptotically conic manifolds and obtaining wavefront set estimates on solutions of the time-dependent Schrodinger equation on such manifolds by Dr A. HAS-SELL with Jared Wunsch, (Northwestern, USA).

Scattering theory for nondecaying potentials on asymptotically conic manifolds by Dr A. HASSELL with Andras Vasy and Richard Melrose, (both MIT, USA).

Forward algorithm for random fractals by Prof. J.E. HUTCHINSON with Orjan Stenflo (Stockholm University, Sweden), Michael Barnsley (Georgia Institute of Technology, USA).

A general framework for random fractals by Prof. J.E. HUTCHINSON with Orjan Stenflo (Stockholm University, Sweden), Michael Barnsley (Georgia Institute of Technology, USA).

Actions of classical groups on complex manifolds by biholomorphic transformations by Dr A.V. ISAEV with N. Kruzhilin (Steklov Mathematical Institute, Moscow).

Description of all proper holomorphic mappings between Reinhardt domains in complex space by Dr A.V. ISAEV with N. Kruzhilin (Steklov Mathematical Institute, Moscow).

The structure of the lattice of closed ideals in the Banach algebra of operators on certain Banach spaces by Dr R.J. LOY with N J Laustsen (Copenhagen, Denmark).

Banach algebras on compact right topological groups by Dr R.J. LOY with A.T.-M. Lau (Alberta, Canada).

The ramifications of the hypothesis completely monotone fading memory in polymer dynamics by Dr R.J. LOY with R.S. Anderssen (CMIS, CSIRO).

Finite p-groups with normal normalisers (p > 3) by Dr E.A. ORMEROD with G. Parmeggiani (Padova, Italy).

Sparse grids by Dr S.G. ROBERTS with M. Greibel (Bonn, Germany).

Storm surge by Dr S.G. ROBERTS with C. Zoppou (GeoSciences Australia).

Geophysical Flows by Dr S.G. ROBERTS with S. Matthai (Imperial College, UK) and S. Geiger (ETH, Swit.).

Observation program on NASA's Far Ultraviolet Spectroscopic Explorer by Dr S. VENNES with J. Dupuis (Johns Hopkins, USA).

Optical spectroscopy of dwarf novae in quiescence by Dr S. VENNES with J. Thorstensen (Dartmouth, USA).

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Economic analysis of various options for population level funded influenza and pneumococcal immunisation programs by Mr Ross ANDREWS and Dr Jim BUTLER with Kathryn Whitfield (DHS), Heath Kelly (VIDRL) & Peter McIntyre (NCIRS).

VECAP project — a case cohort study assessing the effectiveness of influenza and pneumococcal vaccination against hospital admissions for community-acquired pneumonia among persons aged 65 years or older by Mr Ross ANDREWS with Sue Skull (RCH), Donald Campbell (RMH), Graham Byrnes (Melb Uni), Heath Kelly (VIDRL), Peter McIntyre (NCIRS), Terry Nolan (Melb Uni)and Graham Brown (VIDS).

Integrative applied research in global health studies by Dr Gabriele BAMMER with Prof. Ilona Kickbusch (Distinguished New Century Scholar Leader, Yale University), Prof. Marcos Cueto (School of Public Health, Universidad Peruana Cavetano), Prof. Andrey Demin (Moscow Medical Academy), Prof. David Fidler (Indiana University School of Law), Dr Kenneth Fox (Boston Medical Centre), Dr Richard Freeman (University of Edinburgh), Prof. Allan Hill (Harvard School of Public Health), Prof. Craig Janes (University of Colorado), Prof. Uthaiwan Kanchanakamol (Institute of Community Empowerment, Chiang Mai, Thailand), Prof. Ann Marie Kimball (University of Washington), Prof. Peter Koehn (University of Montana). Prof. Subrata Lahiri (International Institute of Population Sciences, Mumbai), Prof. Chung Yul Lee (Yonsei University, Seoul), Dr Lori Leonard (Johns Hopkins University), Dr Pim Martens (Maastricht University), Prof. Richard Mollica (Harvard Medical School), Dr Seggane Musisi (Makerere University Medical School), Prof. Constance Nathanson (Columbia University), Prof. Peter Ndumbe (University of Yaounde), Prof. James Riley (Indiana University), Prof. Nelly Salgado de Snyder (National Institute of Public Health, Cuernavaca, Mexico), Associate Prof. Richard Scott (University of Calgary), Dr Lokendra Singh (Department of Health, Government of Nepal), Prof. Alfred Spira (Hopital de Bicetre, Le Kremlin Bicetre, France), Dr Kearsley Stewart (Northwestern University), Associate Prof. Pratiwi Sudarmono (University of Indonesia), Prof. Borisz Szegal (Dunaujvaros Polytechnic, Hungary), Dr Charles Viljoen (Potschefstroom University for Christian Higher Education, South Africa), Prof. Howard Waitzkin (University of New Mexico), Dr Wan Yanhai (Independent Public Health Researcher, China.).

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Responding to illicit drug problems in Australia — what is the best return on investment? by Dr Gabriele BAM-MER and Mr David McDONALD with Prof. Margaret Hamilton (Turning Point Alcohol and Drug Centre/University of Melbourne) Dr Robert Ali (Drug and Alcohol Services Council, Adelaide) Prof. Ross Homel and Dr Lorraine Mazerolle (Department of Criminology and Criminal Justice, Griffith University, Brisbane.)

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Estimating vaccine effects on transmission of infection from household data [a method for estimating new measures of vaccine efficacy from data on households observed during the course of an epidemic] by Prof. NG BECKER with T Britton (University of Uppsala) and PD O'Neill (University of Nottingham).

Estimating vaccine efficacy from small outbreaks [assessment of the performance of the classical estimate of vaccine efficacy when applied to outbreak data from a community where the infectious disease is controlled by mass vaccination] Prof. NG BECKER with T Britton (Uni of Uppsala).

A statistical method for analysing the association of deep vein thrombosis and long flights by Prof. Niels BECKER, Dr ZHENGFENG LI with C.S. Guest, C.W. Kelman, M. Kortt (Department of Health and Ageing) and C.D. Holman (The University of Western Australia).

Social factors in diabetes by Dr Dorothy BROOM with Dr Andrea Whittaker (Melbourne University).

The cost of managing hepatitis B infected patients in Australia by Dr Jim BUTLER, Rosemary KORDA and ann HOWARTH with Pianko S, Gow P, Nguyen S, Sievert W, Roberts S, Dudley F. (Departments of Gastroenterology at Alfred Hospital, Austin & Repatriation Medical Centre and Monash Medical Centre).

An analysis of needs of Aboriginal and Torres Strait Islander illegal drug users in the ACT and region for treatment and other services by Dr Phyll DANCE, Ms Jill GUTHRIE, Mr David McDONALD, Dr Rennie D'SOUZA, Dr Gabriele BAMMER, Ms Carmen CU-BILLO with Julie Tongs (CEO, Winnunga Nimmityjah Aboriginal Health Service, and her designated staff).

Cochrane systematic review: vaccines for preventing pneumococcal infection in adults by Dr Keith DEAR, Mr Ross ANDREWS with Prof. Chris del Mar and The Cochrane Acute Respiratory Infections Group (University of Queensland). Towards a strategy for randomised clinical trials in rare cancers by Dr Keith DEAR with Dr Tan Say Beng, (National University of Singapore), Prof. David Machin (University of Leicester, UK), Dr Paolo Bruzzi (National Cancer Research Inst, Genova, Italy).

The obesity challenge: on the ingredients for a fat society: and on the transition to and from a fat society by Dr Jane DIXON, Dr Bev SIBTHORPE, Dr Cathy BANWELL, Mr Richard ECKERSLEY, Prof. Tony McMICHAEL, Dr Geetha RANMUTHAGALA, Dr Robyn LUCAS, Prof. Tord KJELLSTROM, Ms Sarah HINDE with Paul Magnus, Tim Armstrong and Tracy Dixon (Australian Institute for Health and Welfare).

Australian Unity Wellbeing Index by Mr Richard ECK-ERSLEY with Robert Cummins (Deakin University).

OzFoodNet projects by Dr Gillian HALL, Ms Rebecca HUNDY, and Ms Nola TOMASKA with Martyn Kirk (ANZFA, Department of Health and Ageing), Rosie Ashbolt (Department of Health and Human Services, Tas), Joy Gregory and Karin Lalor (Department of Human Services, Vic), Leanne Unicomb, (NSW Health), Russell Stafford, (Queensland Health), Minda Sarna (Health Dept WA), Dr Jane Raupach (Department of Human Services, SA) and Geoff Millard, (Department of Health and Community Care, ACT).

Purchase of Indonesian census data by Prof. Terence W HULL with Dr Gour Dasvarma (Flinders University), Prof. Graeme Hugo (University of Adelaide), Dr Toening Adioetomo (University of Indonesia).

Economic costs of health impacts of vehicle air pollution in Australia by Prof. Tord KJELLSTROM, Dr Lorrae VAN KERKHOFF, Ms Rosalie WOODRUFF, Dr Leigh TREVILLIAN with Christine Williams and colleagues, (Bureau of Transport and Regional Economics, Department of Transport and Regional Services).

Health and air pollution project New Zealand by Prof. Tord KJELLSTROM, Prof. Tony McMICHAEL, Dr Jim BUTLER with Gavin Fisher (National Institute of Water and Atmospheric research Auckland), Alistair Woodward and Simon Hales (Wellington School of Medicine), Andy Sturman and Simon Kingham (Canterbury University Christchurch), Ian Town (Christchurch School of Medicine).

Spatial distribution of air pollution and mortality in Auckland by Prof. Tord KJELLSTROM with Amanda Scoggins (University of Auckland) and Gavin Fisher (National Institute of Water and Atmospheric research Auckland).

Prevention of deaths in custody in the UK by Mr David McDONALD with Dr Greta Vogt (Liberty, UK) and Ms Deborah Coles (INQUEST, UK).

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Public health impacts of climate change in Australia by Prof. Tony McMICHAEL, Ms Rosalie WOODRUFF, Prof. TORD KJELLSTROM with Neville Nicholls, Bureau of Meteorology.

Thermal stress and mortality in urban populations in developing countries (ISOTHURM Study) by Prof. Tony McMICHAEL with P Wilkinson, S Kovats, B Armstrong, S Pattenden, S Hajat (London School of Hygiene and Tropical Medicine).

Developing criteria for countries to notify outbreaks of communicable diseases to WHO: a project of WHO's new International Health Regulations by Dr Mahomed PATEL with the Swedish Institute for infectious Disease Control, Karolinska Institute, Stockholm, Sweden.

Efficacy of the BCG vaccine in the prevention of leprosy in India by Dr Mahomed PATEL with the National Institute of Epidemiology, Indian Council for Medical Research, Chennai, India.

Handbook for developing and managing applied epidemiology training programs by Dr Mahomed PATEL, with the International Health Division, Centers for Disease Control, Atlanta, USA.

The elimination of measles in the Western Pacific Region of WHO by Dr Mahomed PATEL with the Expanded Program on Immunisations, WHO-Western Pacific Regional Office, Manila.

The Epidemic intelligence program: initiating and translating research in to inform policy and practice by Dr Mahomed PATEL with Ministry of Health, National Institutes of Health, and University Postgraduate Programs in Public Health, Malaysia.

Child bedding and asthma — randomised controlled trial by Dr Anne-Louise PONSONBY with Nicholas GLAS-GOW (ANU Medical School), Paul GATENBY (Dean, ANU Medical School), Andrew Kemp (Department of Immunology, Royal Children's Hospital, Melbourne), Euan Tovey (University of Sydney) and Jennifer Peat (Department of Medicine, University of Sydney).

Infant and child bedding in Tasmanian infant cohort study by Dr Anne-Louise PONSONBY, Dr Leigh TREVILLIAN, & others with Terence Dwyer (Menzies Centre for Population Health, University of Tasmania), Andrew Kemp (Department of Immunology, Royal Children's Hospital, University of Melbourne), Jennifer Cochrane Menzies Centre for Population Health, University of Tasmania), David Couper (Department of Biostatistics, University of North Carolina at Chapel Hill), Allan Carmichael (Department of Paediatrics and Child Health, University of Tasmania).

Inquiry onto the health of school age children in the ACT by Dr Anne-Louise PONSONBY with the Standing Committee on Health — Kerrie Tucker & others, Legislative Assembly for the ACT.

International MS internet survey by Dr Anne-Louise PONSONBY with Rex D. Simmons (Canberra Hospital), Ingrid van der Mei (Menzies Centre for Population Health Research, University of Tasmania), Peter Sheridan (International Federation of MS affiliation).

Tasmanian MS case control study by Dr Anne-Louise PONSONBY with I van der Mei (Menzies Centre for Population Health Research, University of Tasmania, and the Cooperative Research Centre for Discovery of Genes for Common Human Diseases, Melbourne), T Dwyer (Menzies Centre for Population Health Research, University of Tasmania), L Blizzard (Menzies Centre for Population Health Research, University of Tasmania), R Simmons (Australian MS Longitudinal Study, Canberra Hospital), BV Taylor (Royal Hobart Hospital), H Butzkueven (Walter and Eliza Hall Institute of Medical Research), T Kilpatrick (Cooperative Research Centre for Discovery of Genes for Common Human Diseases, Melbourne, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia).

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Workshop to discuss operational definitions for monitoring asthma by Dr Anne-Louise PONSONBY with the Australian Centre for Asthma Monitoring, a collaborating unit of the Australian Institute of Health and Welfare.

Review of endocrine disruptors in the context of Australian drinking water by Dr Geetha RANMUTHUGALA with Em. Prof. Ian Falconer (CRC for Water Quality and Treatment).

Skin irritant effect of blue-green algae toxins, in healthy volunteers by Dr Geetha RANMUTHUGALA with Prof. Louis Pilotto (Department of General Practice, Flinders Medical School), Mr Mike Burch and Dr Peter Hobson (Australian Water Quality Centre).

The Health and Social Research Project: risks and benefits of arsenic mitigation programs in Bangladesh by Dr Geetha RANMUTHUGALA, Dr Wayne SMITH, Dr Keith DEAR, Dr Bruce CALDWELL, MD Abul Hasnat MILTON, Dr Kamalini LOKUGE, Prof. Jack CALD- WELL, Prof. Bob DOUGLAS with Dr Jack Ng and Prof. Michael Moore (National Research Centre for Environmental Toxicology (NRCET)), A/Prof. Malcolm Sim (Department of Epidemiology and Preventive Medicine, Monash University), MD Abul Hasnat Milton (NGO Forum for Drinking Water Supply and Sanitation, Dhaka.

Better health care by Dr Beverly SIBTHORPE with the Office of Aboriginal and Torres Strait Islander Health, Department of Health and Ageing.

Understanding the health effects of social policies (UHESP) by Dr Bev SIBTHORPE, Dr Jane DIXON, Ms Karen GARDNER with McIntyre, John Glover, Diana Hetzel (Population Health Information Development Unit), Fiona Stanley, Daniel McAullay, (Institute for Child Health Research, UWA) Hilary Graham (Lancaster University).

Intervention trial to assess the contribution of food chain to total arsenic exposure by Dr Wayne SMITH and Dr Geetha RANMUTHUGALA with MD Abul Hasnat Milton (NGO forum for Drinking Water Supply & Sanitation).

MS and seasonality of birth by Ms Judy STAPLES, Dr Lynette LIM, Dr Anne-Louise PONSONBY, Prof. Tony McMICHAEL with Prof. James McLeod (Department of Medicine, University of Sydney).

House dust mite and cat allergen inhalation dose study by Dr Leigh TREVILLIAN, Dr Anne-Louise PONSONBY, Dr Lynette LIM with Nicholas GLASGOW (ANU Medical School), Andrew Kemp (Department of Immunology at the Royal Children's Hospital, Melbourne).

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### Grants

Donor	Fund Purpose	Amount
AARNet Pty Ltd	Australian Partnership for Advanced Computing (APAC)	375,000
Aboriginal & Torres Strait Islander Commission	Reforms to Welfare at Mutitjulu Community	19,033
ACT Dept of Health & Community Care	Mental Health First Aid: Train the Educator Program	117,992
Adelaide University	Formal Correctness Proof of a Program Logic Calculus for the Deductive Verification of Java Programs	14,040
	Optimisation Algorithms for Grasping Problems in Robotics and for Computer Vision	17,100
	Improving Teacher Management and Student Outcomes in ADHD	16,300
Agip Australia Limited	Geothermal and Geochemistry	5,455
Aids Trust of Australia	Jonathan Mann Memorial Scholarship	30,000
Alzheimer's Association of Australia	Future Directions	15,152
AMIRA International Limited	Development and Application of Stress Transfer Modelling for Area Selection in Mesothermal Gold Systems	120,000
Asialink Centre	Asialink Residency	8,334
Asian Cultural Council	IPPA Newsletter — Asian Cultural Council Grant	8,775
Asian Office of Aerospace Research and Development	Hydrocarbon-fuelled Scramjet Research at Hypersonic Mach Numbers	87,905
Asia-Pacific Economic Cooperation Secretariat	Studies on the Costs and Benefits of Services Trade Liberalisation	61,85
Association of Universities for Research in Astronomy	Gemini South Adaptive Optics Imager Conceptual Design Study	275,73
	Funding support for administration and a program of activities for the State Society and Governance in Melanesia	790,584
AusIndustry	3D Universe Virtual Reality Theatre	90,00
Australia-India Council	Science Education Workshop and Seminar for Teachers	7,900
Australia-India Council Secretariat	2002 K R Narayanan Oration	8,100
	Exploration of Indian ancestral heritage links with Australia	12,000
Australian Academy of Science	Mechanisms of Immune Parameters which Lead to RSV Mediated Exacerbation of Allergic Airwary Disease — (Travel Grant)	5,600
Australian Agency for International Development	International Seminar Support Scheme	
	East Timor Agricultural Conference	25,000
	Indonesia Project — Young Economists Seminar	54,000
	Funding for Journal of Governance, Gender, Race and Religion in Melanesia	33,200
	Consultancy — Vietnam National Assembly and People's Councils: Building Legislative Capacity for the 21st Century — Participa- tion in Danang Workshop	30,000
	Education and Infrastructure	
	PNG Road Priority Study	62,000
	Development Bulletin-South Pacific Futures	32,000
	Information for Rural Development and Planning in Papua New Guinea	16,220
	Study of Indonesian Poverty	44,000
	Development Studies Network Microfinance Bulletin	32,300
	Centre for Democratic Institutions	2,335,190
	Consumer Protection & Competition Law Development Project	199,950
	International Roundtable on Increasing Access to HIV Treatments in Resource Poor Settings	30,000
	Support for the Indonesia Project	1,348,000
	Serial Publications and Outreach Activities for PNG and the Pacific Region	13,337
Australian Antarctic Division	Australian Antarctic Science Grant Crustal rebound in the Lambert Glacier area	17,698

	Conservation of Plant Biodiversity in Antarctica — A Genetic	18,600
	Approach The deep structure of East Antarctica from broadband seismic data.	14,490
Australian Business Foundation Limited	Innovations in Australia: Measurement, Performance, Systems, Dynamics and Change	225,000
Australian Centre for International Agricultural Research	Institutional Strengthening for Integrated Water Resource Manage- ment in Thailand	287,778
	Equitable Groundwater Management for the Development of Atolls and Small Islands (Phase 2)	394,318
	Agriculture — Some New Directions for a New Nation	25,000
	High Performance Eucalypts and Interspecific Hybrids for Marginal Lands in South and Eastern South Africa and South-Eastern Australia	21,880
	The Impact of changing agroforestry mosaics on catchment water yield and quality in Southeast Asia	91,102
Australian Competition and Consumer Commission	Support Research in the Econometrics Discipline	5,850
Australian CRC for Renewable Energy Ltd Australian Greenhouse Office	Solar Thermal Power Commercial Solar Concentrator Systems (for Electricity and Hot	5,000 1,000,000
	Water) IPCC Good Practice Guidance	24,000
		600,000
Australian Housing and Urban Research Institute	Solar Air Heating System With Integrated Heat Storage	80,820
Limited	Consultancy: Explanations of Changes in Housing Tenure in Australia	80,820
Australian Institute of Aboriginal & Torres Strait Islander Studies	French Archival Records for Marion Dufresne, 1772	7,126
	The Production of Indigenous Culture at CAAMA	28,005
	Archaeological investigations in Wanamara Country, northwest Queensland	30,000
	An-barra Archaeological Project	30,000
Australian Institute of Marine Science	Arafura-Timor Research Facility (ATRF)	272,727
Australian National Maritime Museum	Indigenous Science and Curriculum Development: An Investigation of the Comparability of Knowledge Systems	10,000
Australian Nuclear Science & Technology Organisation	Visit to GANIL, France from 3 April 2002 for Competition Between Octupole and Multi-particle Excitations in Po212 and At-213.	12,000
	Visit UK 25 Nov 02 for 6 days for A Comparative Study of the Scat- tering of Electrons and Neutrons at High Momentum Transfer, an Experiment at ISIS, UK	8,140
	Probing the Active Site of the Epsion Subunit of DNA Polymerase III	12,000
	A Study Of Changes In The Diffraction Patterns Of Human and Transgenic Mouse Hair With Disease	9,530
	<ol> <li>Langmuir Films of B-casein Deposited at the Air-Polysilicic Acid Interface. 2) Templated Films at the Air-Water Interface Using Sterically Hindered Silicate Precursors. 3) Protein Incorporation into Silicate Films</li> </ol>	9,878
	Langmuir Films of Poly (t-butylacrylate) Films at the Air/Water Interface. Structure of the Milk Membrane. Protein Incorporation into Silicate Films.	12,000
	Diffuse Neutron Scattering from Benzil, C14D10O2	11,600
	The Effect of Composition of Cr and Fe Oxidation States in Silicate Glasses and Melts	6,870
Australian Photonics Pty Ltd	Polymer Waveguides and Integrated Optics (Redfern Polymer Optics) Project	183,447
	Science Lectureships Initiative Program: Monitoring and Evaluation	99,000
Australian Research Council	Bibliometric Evaluation of the Impact of Research Funded by Both the Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC)	130,247
	Indigenous Researchers Development Scheme	
	A Historical Study of Indigenous Higher Education Centres in Australia	20,000
	Special Research Initiatives	
	Advanced Studies Institute: The Link Between Genomics and Phenomics	50,000
	Research Fellowships	
	Decolonising Nature: Wilderness and Nature in Settler and Indige- nous Thought, with Special Reference to Euro centrism and Reconciliation in Australia	130,000
	The Nature of Organic Matter in Rock Surface Accretions	224,404

The History of El Nino: Decoupling Natural and Human Induced Disturbance Events in the Fossil Record	44,035
The Origin and Evolution of Australian Butterflies: Phylogeny and Biogeography of Delias and Allied Genera	61,087
Discovery Projects	
Nature and Nation: Science, Environment and National Identity in Australia	103,746
Biodiversity Conservation, Vegetation Restoration and Landscape Design	231,000
Biogeography of Avian Mating Systems Polyandry, Reverse-Plumage Dimorphism, and Sexual Selection in Cape York and New Guinea Eclectus Parrots	155,000
Interstellar Physics at the Epoch of Galaxy Formation	400,000
Taking Measure of The Universe with Exploding Stars	230,000
The 6dF Galaxy Survey: Mass and Motions in the Nearby Universe	279,000
The Southern Sky Survey	1,061,300
Atomic Hydrogen Through Cosmic Time: Steps to the Square Kilo- metre Array	60,000
The First Stars and the Chemical Enrichment of the Universe	375,000
Interactive Demographic Transition Analysis and Theory	146,000
Honeybee Navigation: Low-Level and Cognitive Mechanisms	190,000
Proteome Analysis of Plant Response Pathways to Microbial Signals in the Model Legume, Medicago truncatula	229,000
The Shape of Plants: Discovering Factors That Control Morphology by Organising the Cytoskeleton.	421,000
Molecular and Cellular Characterisations of the Cortical Actin Cytoskeleton in the Plant Arabidopsis thaliana	465,000
CesA (Cellulose Synthase) Genes of Arabidopsis: All Doing the Same Job or Specialists Cooperating to Make the Most Abundant Biopolymer	180,000
Using the Fractionation of Hydrogen and Carbon Isotopes to Analyse the Mechanisms of the Primary Processes of Photosynthesis	360,000
Can Efficient Algal Variants of the Photosynthetic CO2 Fixing Enzyme, Rubisco, be folded and assembled in functional forms in Higher Plant Plasmids	495,000
Identification of Transcription Factor Genes Involved in the Regula- tion Aspects of Photosynthetic Capacity in Plants	285,000
Molecular Analysis of Photosynthetically-linked Active CO2 Uptake and CO2 Signal Transduction by Cyanobacteria (Blue Green Algae)	60,000
Molecular Characterisation of Marsupial Genome Organisation, Function and Evolution	540,000
Solving the Mysteries of Monotreme Chromosomes	390,000
Ion Channels Formed by Small Proteins from Viruses	450,000
A Genomic and Phenomic Investigation of a Mitochondrial Glutath- ione Transferase	240,000
Protein Degradation in Mammals	25,000
Towards a Complete Description of How Enzymes Work: Develop- ment of Simulation Methods and Protocols, Blind Test Predictions, and Experimental Validation	245,000
Structure of Exotic Neutron-Rich Nuclei Populated Using Novel Reaction Mechanisms.	566,605
Solvable Models on Regular and Random Lattices in Statistical Mechanics and Field Theory	318,000
Development of a Quantum Computer Based On Solid State Optical Impurity Sites	130,000
Storage of Non Classical Light in a Solid	265,000
Collision Studies with Laser-Cooled Metastable Helium Atoms — Recoil Atom Spectroscopy	265,000
A Microscope for Molecular Reactions	245,000
Electron Momentum Spectroscopy of Correlated Nanoscale Structures	295,000
How Does a Bose-Einstein Condensate Develop Phase?	1,056,605
Localised Instabilities in Magnetically Confined Plasmas Heated By Radio Waves	162,000
Surface Adsorption, Repulsion and Attraction: A New Experimental Approach to Surface Forces	573,782

Dynamic Force Microscopy of Small Molecular Assemblies	391,782
The Architecture of Networks: Characterisation and Visualisation of Complex Systems as Fluctuating Networks	687,275
Multi-Solition Complexes	245,000
Nanocavities in Si: Structural Evolution and Metal Gettering	183,000
Ion Implantation Processing in Silicon Carbide for Microelectronic Applications	619,411
Revealing the Mechanism of Heavy Ion Stopping at High Energies	202,118
Nanocavities and Nanoparticles in Silicon-Based Materials Tailored By Ion Implantation	350,000
Nonlinear Photonic Crystals	207,000
Nonlinear Atom Optics of Bose-Einstein Condensates in Optical Lattices	353,035
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Chanted Tales from Highland New Guinea: A Comparative Study of Oral Performance Traditions and Their Role in Contemporary Land Politics.	391,698
The History of an Urban Chinese Factory Community in Transition	283,742
Understanding the Early Phases of Neolithic Dispersal in the Western Pacific	345,550
Development and Application of the Uranium Method for Dating Ancient Rock Engravings	249,500
The Overseas Chinese Water Frontier of Southeast Asia, 1700–1900	293,717
Raising and Solving New Questions in China's Late Imperial Demo- graphic History, and Their Economic and Environmental Implications	100,000
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Development of Methods and Strategies for the Measurement, Inter- pretation and Analysis of Diffuse X-Ray Scattering from Disordered Materials	245,000
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Learning to Drink: a Socio-Cultural History of the Introduction of Alcohol to Indigenous Australians and a Critique of Existing Explanations	208,474
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International Challenges to the Australian Legal System: Trade and Human Rights	365,520
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Advanced Physics and Characterisation of Silicon Materials and Devices	247,000
Lifetime Spectroscopy of Impurities in Silicon Solar Cells	253,035
Practical and Theoretical Aspects of Structure Enumeration	515,667
Design Efficient Routing Protocols for WDM Optical Networks	50,000
The LASE Process — A New Approach to Cost Effective Thin Solar Cells	180,000
Novel Geometric Invariants	105,000
Variational Problems of Monge-Ampere Type	424,000
Derived Categories and Their Applications, Especially in K-theory, topology and Algebraic Geometry	637,000
Genomic Evolution Equations and Global Effects of Curvature	400,000
Solvable Models and Pattern Formation: Quantum Spin Ladders, Combinatorics and Stromatolite Morphogenesis	175,000
Large Grants	
Environmental Significance of Molecular Carbon Compounds in Finely Layered Rockshelter Crusts in Northern Australia	35,000
Linkages Projects	
Bioscope IV: Advanced Scanned Probe Microscopy	170,000
Analysis of Possible Rules for Interstate Water Trading by the Austral- ian Capital Territory	67,635
Interactions between sulphur, nitrogen, and iron cycles in the sustain- able management and use of acid sulphate soils.	354,000
The Other Within: Visual Culture through Indigenous, tribal, minority, subaltern and multicultural displays in Asia-Pacific museums today	50,239
Control of meiosis and embryogenesis as a means to induce higher plants to reproduce asexually through seed	211,194
Temporary Overseas Migration to Australia	105,000
High Internal Phase Emulsions — Structure and Rheology Control	340,000
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Indigenous Community Organisations and Miners: Partnering Sus- tainable Regional Development?	318,000

	Anthropological Perspectives on Ethnographic Collecting by Austral-	67,635
	ian Colonial Administrators in Papua and New Guinea New Environmental Policy Instruments and Government-Industry	70,000
	Strategies in Queensland. The Determinants of Australia's Productivity Performance	67,635
	Regulatory Design for Water Quality Management in Urban Catchments	324,575
	Innovations in Australia: Measurement, Performance, Systems, Dynamics and Change	280,000
	Linkages International	
	Negotiation Support Systems for Groundwater Management in Small Islands	73,715
	Discovering the First Generation of Stars in the Galaxy — The Most Metal-Poor Stars	35,212
	Investigating Near-Threshold Atomic and Molecular Collision Proc- esses with Multiparameter Detection Techniques	77,649
	Expressive power & complexity of temporal logic for model-checking	11,000
	Propagation of Singularities for the Schrodinger Equation	11,400
	Federation Fellowships	
	The First Stage of Vision: Transduction and Adaptation in Retinal Photoreceptors	1,448,515
	Nonlinear Photonics and All-Optical Technologies	1,448,515
	Restorative Justice and Responsive Regulation	1,417,500
Australian Synchrotron Research Program	Visit Chem MatCARS — June 2002 — A Study of Changes in the Diffraction Patterns of Human and Transgenic Mouse Hair with Disease	5,595
Australian War Memorial	Feasibility Study for the Official History of Australian Peace Operations	50,000
Aventis CropScience GmbH.	Discovery of new genes for plant cellulose biosynthesis and improved fibre production	721,874
BASF AG	Characterisation of foam morphology and simulation of mechanical and thermal foam properties	75,000
Beng Choon Lim	K H Lim Honours Scholarship in Science — Malaysian or Overseas/ International Student	20,000
Beyondblue	A Proposal For A Web Based Intervention E: Mental Health: A Scop- ing Study	18,182
	Depression and Changing Families	40,000
	Mental Health for Rural Australians	50,000
	Research Assistant for the Establishment of Consumer Research Centre at CMHR	38,731
	The National Depression Initiative A Proposal For A Web Based Intervention E: Mental Health: A Scoping Study	18,182
	Depression and Changing Families	40,000
Biostatics Collaboration of Australia	Development and Delivery of Nationally Coordinated Postgraduate Courses in Biostatistics	30,000
Birds Australia	Cowra Birds in their Woodland Habitat	18,191
British Institute of Archaeology at Ankara	Archaeobotany of the Upper Levels of Çatalhöyük Through Study of the Mellaart Archive	8,605
Bureau of Rural Sciences	Experimental Development of Java Interface for the GROWEST Pro- gram and Demonstration of its Performance	10,000
Cambridge University	Cuckoo parasitism and host defences in Australia	5,000
Cancer Council of NSW	Development of a Methodology for Disease Burden Estimation from UV Radiation and Estimation of the Global Burden of Disease	13,156
Centre for Democratic Institutions	Responsible Parliamentary Government	35,000
Centre For Educational Development and Academic Methods	Expanding Access To Small Enrolment Asian Languages (EASEAL)	35,000
ACT Chief Minister's Department	BushLAN — Development of novel VHF wireless Internet technol- ogy for rural Australia	50,000
	Title Development of Absolute Thermal Imaging Systems for Indus- trial Process Control and Monitoring	40,000
	Humane Bird Trap	70,000
Christian Albrechts-Universitat zu Kiel, Volkswagen- Stiftung	Documentation of Teop Language	161,109
Clive and Vera Ramaciotti Foundations	Electrophysiological Characteristics of Metabolite Transporters	20,000
	Equipment for electrophysiology with a Fluorescent Ion Imaging Facility	20,000

Committee for Economic Development of Australia	Indigenous Community Organisations and Miners: Partnering Sus- tainable Regional Development	15,000
Commonwealth Department of Agriculture, Fisheries and Forestry Australia	Innovations in Australia: Measurement, Performance, Systems, Dynamics and Change	105,476
Commonwealth Department of Health & Aged Care	Development of a Computer Application for Japanese Language Teaching Using Automatic Speech Recognition Technologies	6,000
	Food-Borne Disease Surveillance Project — OzFoodNet	40,000
	Mental Health First Aid- Train the CALD Instructor	38,279
	National Centre for Epidemiology and Population Health to support education and research in public health at postgraduate level	5,501,664
	Development and Delivery and Coordination of a Degree of Master of Applied Epidemiology (MAEDC). Group 01 MAE conference	748,044
	Study of GP Divisions' Engagement in Indigenous Health	19,128
	Review of Access Economics methodology	10,000
Commonwealth Department of Industry, Tourism and Resources	Innovations in Australia: Measurement, Performance, Systems, Dynamics and Change	126,880
Conservation International	A Study of the Ecology and Behaviour of the Yellow-Cheeked Gib- bon in Southern Mondulkiri Province, Cambodia	7,400
Construction Forestry Mining Energy Union (ACT)	Rehabilitation and Halfway House Costing Options	32,030
Cotton Research and Development Corporation	Development of a Decision Support System for Water Allocation in the Gwydir and Namoi Valleys	374,905
	Development of a Decision Support System for Water Allocation in the Gwydir and Namoi Valleys	87,000
CRC for Greenhouse Accounting	Program B Convenor	48,850
	Project B Collaboration	43,000
CRC for Sustainable Production Forestry	Insect Resistance Traits of Eucalypts for the NSW Plantation Industry — Supplementary Funding to Support Rachel Lawrence's PHD	5,500
CRC Reef Research Centre	Symposium on the Exclusive Economic Zone in the Asia Pacific Region, and on Intellectual Property to Marine Genetic Resources in Exclusive Economic Zone	11,300
	Genetic Resource Ownership Issues in the Great Barrier Reef World Heritage Area (GBRWHA), its Ecotone and the Exclusive Eco- nomic Zone	42,800
Commonwealth Scientific Industrial Research Organ- isation (CSIRO)	Soil carbon dynamics: An investigation of C stability as a function of depth in a soil profile	5,424
	PhD Support for Ms Fleur Visser.	8,000
	Investigating gene silencing in plants	15,600
CSIRO/ARRC Laboratories	Consultancy: Triennial Analysis of CSIRO Divisional Publications	17,592
Defence Science and Technology Organisation	Hand Gesturing for Object Manipulation and Navigation	37,000
Department for International Development, UK (DFID)	Poverty Traps Nutrition Health Status and Anti-poverty Interventions in Rural India	143,917
Department of Conservation and Land Management	Ostracods in Groundwater of the Pilbara Region of Western Australia	110,000
Department of Defence	Professorship in Australian Defence History	480,000
	Defence Fellowship and Scholarships	337,144
Department of Education Science and Training	University Mobility In Asia and the Pacific (UMAP)	
	Student Exchange with Canadian Institutions	6,000
	Student Exchange with Taiwanese Institution	10,000
	Spanish Language Student Exchange	6,000
	Student Exchanges In Visual Arts And Crafts With Canadian Institutions	6,000
	Student Exchanges in Visual Arts and Crafts with a Japanese Institution	10,000
	Master of Applied Epidemiology (Indigenous Health)	50,000
	Year in Korea — 2004: Towards UCTS	10,000
	Consultancy: Longitudinal Surveys of Australian Youth Analysis Grants	11,880
	Consultancy: Review of the Breaking the Unemployment Cycle Initiative	7,000
	Provision of Services Under the Aboriginal Tutorial Assistance Scheme (ATAS)	69,160
	Major National Research Facility Program	
	The Arafura Timor Research Facility (ARTF)	3,250,000
Department of Environmental Protection, WA	Regulatory Design for Water Quality Management in Urban Catchments	33,500

Department of Foreign Affairs and Trade	AUSPECC/DFAT/APEC Business Advisory Council (ABAC) Consultancy	74,250
Department of Health & Aged Care	Mental Health Internet Meeting	19,003
I	Risk Assessment Regarding Human Health and Climate Change in Australasia	50,990
	Consultancy: Cross-Border Transfers of Involuntary Mental Health Patients	8,100
	National Collaborative Program on the Atmospheric Environment and Health	512,574
	Funding Arrangements for Pathology in Australia	14,495
	Rural Health Medical School Funding to Dec 2003	4,734,904
Department of Immigration and Multicultural and	Contract Services for Training and Technical Advice for the Business	20,000
Indigenous Affairs	Skills Centre Investigate the impact of immigration on income distribution in	22,727
	Australia	22,121
	Temporary Overseas Migration to Australia	122,970
Department Of Industry Tourism and Resources	FieldScreen Research Project: International Research and Commer- cial Alliances	22,520
	Stable Isotopes as a Key to Understanding the Earth's Biosphere — a Global Framework for Mineralisation	6,600
Department of Natural Resources and Environment	Genetic Variability Within and Between Populations of the Coran- gamite Water Skink	49,736
Department of the Environment and Heritage	Complete Genetic Profiling of Shy Albatross Populations	8,000
Department of the Premier and Cabinet	New Environmental Policy Instruments and Government-Industry Strategies in Queensland	85,600
Diabetes Australia Research Trust	Regulation of Gene Expression from a Costimulatory Locus with a Genetic Linkage to Diabetes	36,596
Ecowise Environmental Pty Ltd	Consultancy: Contaminant Budgeting	23,760
	Sensitivity of Catchment Hydrology to Vegetation Dynamics in Rela- tion to Fire.	10,000
Embassy of Italy	New Materials and Complexity	10,000
Employment, Workplace Relations and Small Business, Department of	APEC Labour Market Information Database and Website	35,207
	Socio-economic Issues Facing Traditional Indonesian Fishers who Access the MOU Box	18,556
Environment ACT, Department of Urban Services	Analysis of Possible Rules for Interstate Water Trading by the Austral- ian Capital Territory	34,500
	ANU Acton Heritage Walkway	5,000
	Taxonomic Revision and Phylogenetic Analysis of Aotus, Phyllota, Otion ined, Urodon, Eutaxia, Euchilopsis and Latrobea (Legumi- bosae, Mirbelieae)	10,000
	Phylogeny and Biogeography Studies of the Genus Pouteria (Sapota- ceae) in Malesia and Australasia Using Morphology and Molecular Data — Student: Mr Teguh Triono	82,500
Environment Australia	Leadbeater's Possum Recovery Plan — Implementation of Recovery Action No 6	37,300
Estate of Late Winifred Violet Scott	Conserving Native Animals in Fragmented Habitats	36,364
	Conservation biology of the threatened spotted tailed quoll in frag- mented forest landscapes in Tasmania	48,000
Fair Trade Labelling Organisation International	Consultancy: Social Accountability in Sustainable Agriculture Project	1,237,695
Forest & Wood Products Research & Development Corporation	Proposed FWPRDC Centre for Forest Sector Market Intelligence	100,000
	Effectiveness of Electric Pruning Shears for Pruning in Plantations of Radiata Pine. Honours student: Robert McWilliam.	12,100
Forestry Tasmania	Tasmanian Forestry: Audit of the five year wood resource review	10,045
FORTECH (Forestry Technical Services Pty Ltd)	India Australia Training and Capacity Building Project: Prevention and Control of Forest Fires	12,500
Fujitsu Laboratories of Europe Limited	ANU-Fujitsu Area 3 Fund	724,572
Geoscience Australia	Australian National Seismic Imaging Resource (ANSIR) Operations	553,695
	AUSCAN 2003 Cruise in the Murray Canyons Offshore Kangaroo Island	111,818
Grain Growers Association Limited	Development of Specific Microbial and Transgenic Technology to Control Fungal Pathogens: A Commercialisation Project Based on Patent No PB3834/99	1,146,293

Grains Research & Development Corporation	Development of Specific Microbial and Transgenic Technology to Control Fungal Pathogens: A Commercialisation Project Based on Patent No PP8394/99	1,146,293
Grape & Wine Research & Development Corporation	Assessment Of The Frequency And Impacts Of Severe Advective Frosts In The Canberra Viticulture Region	6,100
Griffin-nrm Pty Ltd	Glenrock Lagoon Cultural Landscape Conservation Management & Cultural Tourism Plan	5,500
Griffith University	Conceiving and Implementing National Integrity Systems	10,000
Groupe Limagrain Holding	Control of meiosis and embryogenesis as a means to induce higher plants to reproduce asexually through seed	165,000
Hermon Slade Foundation	The Long-term Population Dynamics and Conservation of a Poorly Known Australian Mammal	66,737
ICLARM — The World Fish Centre	ICLARM Workshops Consultancy	42,769
International Council on Human Rights Policy	Crime, Public Order and Human Rights	6,573
International Finance Corporation	Study of Privatisation of State-Owned Enterprises in China	302,600
Johnson and Johnson Research Pty Ltd	J & J Face Mutants	480,000
Kempsey Shire Council	Real-Time Control of Major Flood Gates: Lower Macleay	141,000
Kimberley Land Council	Wanjina-Wunggurr-Willinggin Native Title Claims	13,636
	Wanjina Wunggurr Wilinggin Land Claim	13,636
	Wanjina Wunggurr Wilinggin Native Claim Title	9,818
Land & Water Resources Research & Development Corporation	Visual Art as an Agent for Promotion of Vegetation Management	56,000
Land & Water Resources Research & Development Corporation	Environmental Science: From Independent Experts to Post-Modern Process Managers — STUDENT: Ms Lorrae van Kerkhoff	6,250
Land and Water Australia	Advisor to the Integration Investment Plan 2003–2006	20,000
	Indigenous Kinship with Country: Intercultural Values of Natural Resource Management — Scholarship Ms Diana James.	84,000
	Federalism and Natural Resource Management: Water in the Murray- Darling Basin — (Scholarship Mr Daniel Connell)	70,000
Lipotek Pty Ltd	Targeted Stealth Liposomes	537,556
Melbourne Enterprises International Ltd	MEI — ASEAN Regional Economic Policy Support Facility	282,000
Menzies School of Health Research	Policy Response to Indigenous Petrol Sniffing	35,000
Ministry of Finance, Japan	Study on Future Financial Arrangements to Support Financial Devel- opment in East Asia	250,000
Monash University	Development of a Module to Calculate Economic Indicators from Model Output	34,448
Murdoch University	Consultancy: Trees and Biodiversity: An Australian Guide to Increas- ing the Benefits of Farm Trees to Native Bush	61,600
National Centre for Education and Training on Addiction	Registered Nurses and Illicit Drug-Using Patients, An Investigation	10,002
National Health and Medical Research Council	Multi-state Population Models for Smoking — Burden of Disease	219,025
	Environment and Population Health: Research Development from Local to Global	2,474,900
	Intergenerational Transmission of Health Inequalities: Effects of Work Conditions On Parent Resources and Child Health	460,885
	Using Contextual Effects to Test Theories of Coding in Visual Cortex	190,000
	The Role of Liver Carboxylesterase in the Infection of Hepacytes by Plasmodium	72,077
	Characterisation of a Novel Human X-Linked Gene RBMX, a Can- didate for X-Linked Mental Retardation	355,000
	Characteristics of the Signalling Pathways Utilised by IL-13 Inde- pendently of IL-4Ralpha	224,317
	Specific Modification of Skeletal Muscle Ryanodine Receptor Activity	390,000
	Molecular Mechanisms in the Regulation of Allergy and Inflammation	4,875,000
	Structural and Functional Interactions Between the II-III Loop of the Skeletal DHPR and the Ryanodine Receptor	390,000
	Mechanisms By Which Chromatin Modulates Gene Expression	255,000
	Gene Transcription in Activated T Cells: A Model of Chromatin Remodelling	455,000
	Functional Genomic Studies of Human Glutathione Transferase Omega	254,000
	Fellowship	753,750
	Hybridisation System	11,050

Coordinated cleavages in the flavivirus structural polyprotein: role in virus assembly an host-pathogen interaction	270,000
Major Xenoantigens For Neovascularised Porcine Xenografts: The Role Of PERV and MHC In Rejection and Tolerance	480,000
Deficiency of Tyrosine Catabolism Genes and Accumulation of Asso- ciated Metabolites in Mouse Mammary Epithelium	136,628
Synaptic Integration and Plasticity in the Rat Piriform Cortex	240,000
Myoendothelial Gap Junctions: Their Composition & Role in Vascu- lar Responses Attributed to EDHF.	270,000
Synaptic Transmission in the Mammalian Central Nervous System	435,000
Excitatory Synaptic Circuitry and Plasticity in the Amygdala	450,000
The Contributions of Different Sources of Calcium to the Induction of Long Term Potentiation	255,000
Dynamic Aspects of Inhibitory Synaptic Transmission & Modulation By Neuroactive Drugs	350,000
Genetic and Biochemical Mechanisms Dysregulating CD4 T Cell Tolerance in Organ Specific Autoimmunity	435,000
Mechanisms for Controlling Antibody Production by Modulating B Cell Antigen Receptor Signalling.	430,000
Ongoing Uncoupled Research Fellowship	292,500
The Role of Interferon Gamma and Nitric Oxide as Down-Regulat- ing Molecules in Central Nervous System Inflammation	214,047
Patient Decision-Making in the Context of General Practise and Pri- mary Health Care	58,977
The pH of the Digestive Vacuole in the Malaria Parasite	210,000
Cooled Digital Colour Camera	8,000
Sonicator	8,321
Spectrophotometer	5,880
Luminometer	11,985
Transfer of Glutamine Between Astrocytes and Neuons	245,000
Identification and Characterisation of 'Nessy' a Novel Gene Impor- tant for T Cell Differentiation	240,000
Creating Spaces: Interdisciplinary Writings in the Social Sciences	13,000
Clinicopathological Correlates Of Fatal Cerebral Malaria (via Michi- gan State University)	50,555
The Other Within: Visual Culture through Indigenous, tribal, minority, subaltern and multicultural displays in Asia-Pacific museums today	10,000
Anthropological Perspectives on Ethnographic Collecting by Austral- ian Colonial Administrators in Papua and New Guinea	22,000
The Establishment and Operation of the OHS RegNet Centre	750,000
Rapid Urbanisation, Urbanism and Health in Asia	123,562
Durability of Treatment of Chronic Neck Pain	6,500
Indigenous Science and Curriculum Development: An Investigation of the Comparability of Knowledge Systems	10,000
Hydrogeological Actions for Central West Community Salinity Plan- ning — Hydrological and Hydrogeological Modelling of Salt Mobilisation and Transport, and a Historical Perspective of Land Use Change, in the Little River Catchment	27,500
Parallel Techniques for High-Performance Record Linkage	10,000
Consultancy: Totemism & the Social Context of Plants & Animals in NSW	40,000
Potential Impacts of Salinity on Frogs of Temperate South-Eastern Australia — An Ecological Synthesis	12,000
Quantifying Habitat Structure in Woodlands	10,000
Interactions between sulphur, nitrogen, and iron cycles in the sustain- able management and use of acid sulphate soils	30,000
High Internal Phase Emulsions — Structure and Rheology Control	1,150,228
Drought Assessment and Response for Small Island States in the Pacific	7,500
The Design of Combinatorial Oligonucleotide Probe Sets	151,569
Understanding the Human Context of Biotechnological Fox Control in Australian — (Scholarship)	20,000
Control of meiosis and embryogenesis as a means to induce higher plants to reproduce asexually through seed.	165,000

National Institute of Government and Law National Institutes of Health (USA)

National Museum of Australia

National Occupational Health and Safety Commission National University of Singapore NRMA — ACT Road Safety Trust NSW Department Of Education and Training

NSW Department of Land and Water Conservation

NSW Health department NSW National Parks and Wildlife Service

NSW Sugar Milling Co-operative Ltd

ORICA Australia Ltd. Pacific Biological Foundation

PANBIO Limited Pest Animal Control CRC

Pioneer Hi-bred International Inc

Pivot Ltd	Australian Foundation For Mental Health Research	14,000
Posiya Oy	Model Development of Post-Glacial Shoreline, Topography and Stress-Field Evolution in SW-Finland	62,384
Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization	Repair and Upgrade of Access Road for IMS Stations PS02 and IS07, Warramunga, Australia	109,967
	Enhancement of Infrasound Signal Data Processing and Operator Training	181,285
Primate Conservation Incorporated	A Study of the Ecology and Behaviour of the Yellow-Cheeked Gib- bon (Nomascus gabriellae) in Eastern Cambodia	5,237
Productivity Commission	The Determinants of Australia's Productivity Performance	15,000
Project Design & Management Ltd	Sustainable Development Policy and Planning Framework for PNG Dept of Mining	97,000
Questacon — The National Science and Technology Centre	Mike Gore Scholarship	10,000
Reconciliation Australia	Consultancies Income to be Used for Conference and Other Travel Expenses and Capital Equipment for CAEPR	73,200
Research Grants Committee	Development of mathematical models for analysing stromalite mor- phogenesis and understanding their significance in paleobiological and paleoenvironmental evolution	16,900
Rio Tinto Services Ltd	Indigenous Community Organisations and Miners: Partnering Sus- tainable Regional Development	82,500
Rural Industries Research and Development Corporation	Joint Venture Agroforestry Program-Biodiversity Contract	9,970
	A Study of Gluconobacter — Gluconic Acid Producing Bacteria, Symbionts of Bees: Development of Biological Control for Chalk Brood	24,000
Smart Internet Technology CRC	Knowledge Acquisition and Machine Learning Project — SPA2	766,105
	Pelican Defining The Context	55,623
Southern Area Health Service	Mental Health First Aid Training: A Randomised Controlled Trial	33,000
Specialty Coatings (Aust) Pty Ltd	Multilayer Technical Textiles for High Performance Rigid Composite Products	438,600
Statoil	Imaging & Analysis of Core Samples (Porous Rock) by CT Scan — WAG Injection	37,265
Sustainable Energy Development Authority	Combined Solar Systems Domestic Trial	117,500
Sydney Water Corporation	Effect of CryptoBlast on Cryptosporidium Parvum Animal Infectivity	37,500
Syngenta Seeds AG	Control of meiosis and embryogenesis as a means to induce higher plants to reproduce asexually through seed	165,000
Taipei Economic and Cultural Office	Civil Service Development Program	102,210
Texas Engineering Experiment Station	Spin-Based Lattice-Gas Quantum Optics in Solids Using Optical Addressing	333,275
The Andrew W Mellon Foundation	Comparative Study on Growth Dynamics of Asian Megacities	269,101
The Apex Foundation Trust for Autism	How Do Children with Asperger's Syndrome Manage Everyday Con- versation: An Examination of What Goes Wrong When AS Children Interact	5,000
The Department of Natural Resources and Environment	Consultancy: Monitoring Populations of Forest Vertebrates in the Central Highlands-Victoria-	45,000
The Government of The United States of America	Mutual Understanding — American Studies	5,473
The John D and Catherine MacArthur Foundation	National Ideologies, Transnational Identities and Buddhist Diplo- macy in Sino-Myanmar Relations	130,094
The Law Commission of Canada	Consultancy: Professional and Consultancy Services	14,739
The Myer Foundation	The Transition to Forest Sustainability in Victoria	30,000
	Original composition for oboe and piano	5,500
The Sanwa Bank Foundation	Annual Scholarship to Support Work by an Australian Graduate Student	5,393
The Sasakawa Peace Foundation	Distance Education in the South-West Pacific Cultural Heritage Training Program	121,133
The United Nations University	Project on Population Growth, Land Transformation and Environ- mental Change (PLEC)	15,795
The Wellcome Trust	Barriers to the use of Antenatal Care and Safe Delivery in Matlab, Bangladesh	56,150
The World Bank	Mapping Rural Poverty in Papua New Guinea	63,070
Torres Strait Regional Authority	Anthropological Inquiry in Relation to Native Title in Certain Torres Strait Seas	11,200
Tweed Shire Council	Interactions between sulfur, nitrogen, and iron cycles in the sustaina- ble management and use of acid sulfate soils	60,000

United Nations Office for Project Services	Fiii Lagislative peads assessment	30.659
United Nations Office for Project Services	Fiji Legislative needs assessment Salaman Jelanda Legislative Needs Assessment	23,177
	Solomon Islands Legislative Needs Assessment	21,064
United States Air Force	Papua New Guinea Legislative Needs Assessment Control of Insect Flight: Regulation of Flight Speed and Height above the Ground	114,075
	Ocellar Base Stabilisation	345,602
	Telemetered Control System	175.500
University of Adelaide	Centre for the Molecular Genetics of Development	540,000
Chiversity of Adelaide	Highly Oriented Nanostructures of Nonlinear Optical Materials for Applications in Polarised Light Emitting Diodes and Optical Devices	16,400
	100-W Laser System for Ultra-Fast Pulsed Laser Deposition	16,250
	Flow in Confined Spaces	10,400
	Signatures of Spatial Morphology in Ordered and Disordered Media	17,100
	Lifetime Studies of Metallic Impurities and Precipitates in Multicrys- talline Silicon Solar Cells	18,000
	Solar Thermal Gas Turbine	10,780
	Geometric Structure in Quantum Field Theory	24,000
University of Bochum	Documenting Waima'a, East Timor Language Endangerment and Maintenance in a Newly Emerging Nation	109,200
University of California	Malignant Progression in Papillomavirus Transgenic Mice (sub-con- tract of NIH-NCI Grant)	95,618
University of London	Tatou or Tatoo — Embodied Art and Cultural Exchange	71,670
University of New South Wales	Vascular Biology (NHMRC 2002 Program Grants)	2,500,000
University of Queensland	Upgrading of Hypersonics Facilities	40,500
University of Rochester	Metabolism and Toxicity of Halogenated Hydrocarbons	104,235
University of Utah	Tanner Lectures on Human Values	59,636
University of Western Australia	ACIGA-LIGO High Power Optical Test Facility	775,000
University of Pennsylvania	Consultancy: Home Office Crime Reduction Programme: Restora- tive Justice	1,700,000
Urban Services, ACT Dept of	Provision of Future Growth and Life Cycle Cost Modelling for Can- berra's Public Urban Tree Assets	30,000
URS Australia Pty Ltd	Australian Contribution to a National Agricultural Research System in PNG (ACNARS Project)	12,750
ViMed Biosciences Pty Ltd	VIMED Collaborative Research and Development Agreement	404,364
Volvo Technological Development Corporation	Vision for Smart Cars	64,000
Water and Rivers Commission	Regulatory Design for Water Quality Management in Urban Catchments	15,000
Water Corporation	Regulatory Design for Water Quality Management in Urban Catchments	52,000
Wenner-Gren Foundation for Anthropological Research, Inc	Indigenous Hydrological Knowledge and Dry-Season Agriculture in Upland Catchments of Northern Thailand	14,927
World Health Organisation	Development of Mathematical Representation of the Impact of Measles	54,900
	Reverse Genetics of Caenorhabditis Elegans to validate New Anti- filarial Drug Targets	87,750
World Resources Institute	Sub Global Assessment of Coastal Ecosystems in Tropical Australia	43,748
World Wildlife Fund	Development Bulletin on Environmental Sustainability and Poverty Reduction — Additional Funding	9,270
Sub-total	GRANTS \$5,000 and above	116,121,922

## Donations

Donor	Purpose	Amount
ACT Public Trustee	JCSMR General Donations	10,000
Allan, D C	Cambridge Commonwealth Fellowships (Australian Appeal)	10,000
Anonymous	Scholarship Donations	100,000
	Anonymous Drama Fund	42,000
	Noel Butlin Archives Centre Endowment Fund	10,000
	Dean of Law Special Fund	10,000
	Law Alumni Working Account	7,500
	Study of Optic Nerve and Retina	5,000
ANSIR	Operational Support for Major National Research Facility	2,766,913
ANU Union	Joseph and Lindsay Croft Scholarship	5,000
Atkinson, W J	CRES Director's Special Purpose Fund	10,000
Australian American Educational Foundation	Fulbright Scholarship Fund	20,000
Australian Institute of Administrative Law	Alumni Chair Annual Pledge	5,000
Australian Manufacturing Workers Union	Noel Butlin Archives Centre Endowment Fund	10,000
Australian Skeptics Science Foundation	Mount Stromlo Visitors Centre	10,000
Baume, P & J	The Baume Fund	5,000
Bridgestar Pty Ltd	Oxford Australia Fund	10,000
Canberra Tradesman's Union Club	Noel Butlin Archives Special Fund	10,000
Clough Limited	Fulbright Scholarship Fund	30,000
CSIRO	Cambridge Commonwealth Fellowships (Australian Appeal)	20,000
Davidson, Estate of the late Ruth	Jim Davidson Scholarship in South Pacific Studies	116,695
DePuy Australia Pty Ltd	ACT Orthopaedic & Musculoskeletal Research Foundation	25,000
Dick Smith Foods Pty Ltd	Ken Wanganeen Fund	10,000
Douglas, R and Duguid A, per Sotheby's Australia Pty Ltd	The Duguid Aboriginal Travel Scholarship	12,000
Dungey, M	General Research Activities	13,141
Estate of the late Elfriede Friedel Oster	Molecular Genetics Group JCSMR	200,000
Fenner, F	Fenner Hall Scholarships	125,200
	Frank & Bobbie Fenner Endowment Fund	21,220
Fildes, J E	Joyce Fildes Honours Scholarship	20,000
Finkel, A	Finkel Prize, JCSMR	50,000
Freilich, H	The Herbert & Valmae Freilich Foundation	50,000
Fukuoka Asian Culture Prizes	The Asian Studies Association of Australia Inc. Fund	43,503
HCA Menzies Donations	Robert Gordon Menzies Scholarship Fund	11,230
Holdsworth, R	School of Music Director's Support Fund	10,000
Hope, G	Natural History General Research Fund	12,500
Hopkins, A	Teaching and Research — Department of Social Sciences	6,000
J & W Australia Pty Ltd (J Chan)	JCSMR General Donations	144,800
Koch, H J & G E	Teaching and Research — School of Language Studies	10,500
Kornfeld, F	Kornfeld Scholarship Fund	22,500
Liu Chiang Szu-Yung	Scholarships in Chinese Studies	10,000
Mathys Australia Pty Ltd	ACT Orthopaedic & Musculoskeletal Research Foundation	65,000
Mitchell, J	John Mitchell Scholarship	25,120
National Australia Bank	NAB Donated Scholarships	10,000
Nicholson, J	Angus Nicholson Scholarship	5,000
Office of the Commonwealth Ombudsman	Jack Richardson Prize	7,000
Pickford, G	Drill Hall Gallery Foundation	20,300
Pola Nominees Pty Ltd	Fulbright Scholarship Fund	40,000
Santamaria, J G	University College Oxford Scholarship	17,000
Spinner, E	ANU Library	20,000
Strahan, J	School of Music Director's Support Fund	10,000
The Asia Pacific Centre for Theoretical Physics	Operational Costs of Summer School	9,588
The Australian Fullbright Association	W G Walker Memorial	10,000
The Korea Foundation	Chair in Korean Studies	399,980

The Pratt Family Foundation	Fulbright Scholarship Fund	40,000
The Westpac Foundation	CAEPR Indigenous Visiting Fellowship Scheme	125,000
Thomas, J M	Centre for Mental Health Research Donations	10,000
Thyne Reid Education Trust	Mount Stromlo Visitors Centre	50,000
Thyne Reid Education Trust	Mount Stromlo Visitors Centre	15,000
University of Queensland	Oxford Australia Fund	10,000
Various	ANU Artwork Collection	961,524
Vincent Fairfax Family Foundation	Oxford Australia Fund	120,000
Wenner-Gren Foundation	IPPA Newsletter	26,146
Westoby, M	The Jack Westoby Lecture & Fellowships	20,000
Wilson, J C	Sir Roland Wilson Foundation	50,000
Sub-total	DONATIONS \$5,000 and above	6,077,360
Sub-total	GRANTS and DONATIONS \$5,000 and above	122,199,282
Other	GRANTS and DONATIONS \$5,000 and under	317,875
TOTAL	<b>GRANTS and DONATIONS</b>	122,517,157

## **University Public Lectures 2002**

## The National Institutes Public Lectures

20 March *The Courts and Public Opinion* The Hon. Sir Anthony Mason AC KBE, NIGL (60)

29 May *Climate Change: Does Global Warming Warrant a Health Warning?* Prof. Tony McMichael (85)

5 June *Can this be the Promised Land? Work and Welfare for the Modern Woman* Prof. Bob Gregory (110)

19 June *Emerging Cancer Therapies* Prof. Christopher Parish (50)

26 June *Robots: Machines that See, Think and Do* Prof. Alexander Zelinsky (180)

20 August *The Light Path to the Future* Prof. John Love (50)

21 August *The Science of the Very Small* Prof. Jim Williams (60)

28 August *Do Auditors Actually Add Value to the Australian Economy?* Prof. Gary Monroe (35)

4 September *The Freedom Ride — Its Significance Today* Prof. Ann Curthoys (180)

11 September J.S. Bach and Rhetoric: The Goldberg Variations: What To Do When You Are Unjustly Accused Prof. Geofrey Lancaster (120)

12 September *Humanities Research: Past, Present and Future* Prof. Ian Donaldson and Prof. Iain McCalman (160)

18 September Heroin Trials, Supervised Injection, Zero Tolerance — How Should We Tackle Illegal Drugs? Dr Gabriele Bammer (90)

16 October *The Other Side of the Fence. Art and Environment* Mandy Martin (80)

21 October Lengthening the Long Arm of Law: Risk or Promise? Prof. Peter Grabosky (60)

23 October *Does Asia Still Matter to Australia's Defence?* Prof. Paul Dibb (180) 30 October Small Brains, Smart Minds: Insect Navigation and Robotic Applications Prof. MV Srinivasan (120)

6 November *Sustainable Energy Systems* Prof. Andrew Blakers (170)

13 November *The Australian Broadcasting Corporation* Emer. Prof. Ken Inglis (80)

20 November *The Ecological Power and Promise of Reconciliation* Dr Deborah Bird Rose (60)

27 November *Climate Change after Kyoto: a Blueprint for a Realistic Approach* Prof. Warwick J McKibbin (90)

11 December *Botany and Zoology* Dr Andrew Cockburn (80)

18 December *Taking to the Boats: the Prehistory of Indo-Pacific Colonization* Prof. Atholl Anderson (110)

## **Toyota-ANU Public Lectures**

4 February James Bennett Lecture: The Bias of Scientific Communication and the Dissemination of Scholarly Knowledge Prof. Jean-Claude Guedon (50)

28 February John Passmore Lecture: Classical Liberalism and the Perfectibility of Man James M. Buchanan, Nobel Prize in Economics 1996 (200)

4 March *Policies for sustainable agriculture and rural development* Jose Manuel Silva Rodriguez (80)

5 March *Two decades of open government* — *what have we learnt?* Prof John McMillan (140)

7 March Pamela Denoon Lecture: Homour, Feminism and the ways of the world Judy Horacek (380)

11 March *Good news for a change* David Suzuki (9000

21 March *The law of contract in the new millennium* Emer. Prof. Jim Davis (1200

21 March John Nash's contribution to economics Matthew Ryan (2000

22 March Sir Leslie Melville in the Development of Central Banking in Australia Ian MacFarlane (180)

26 March *The AIDS epidemic in Africa* Prof. Jack Caldwell (60)

28 March *The Figure of the Difficult Woman* Prof. Regina Morantz Sanchez, University of Michigan, Ann Arbor (800

28 March *New politics for new times: transformations of the Left in Europe since the Sixties* Dr Geoff Eley, University of Michigan (60)

4 April *The Carpet Wars* Christopher Kremmer (1500

4 April *Confessions of a promiscuous researcher* Dr Rae Frances, UNSW (1600)

9 April Gender equality and multiculturalism: Competing equality claims? Dr Ann Philips, LSEPS (50)

9 April

Working without informants: field studies of rock art in later prehistoric Europe Prof. Richard Bradley, Reading University, UK (1200)

6 May Judicial activism — justice or treason? Prof. Tom Campbell (1000)

20 May Fairness at work Prof. Philippa Weeks (120)

30 May Apocalyptic Visions and the Law: The Legacy of September 11 Prof. Andrew Byrnes (120)

19 June Basham Lecture: Pakistan and India: Political legacies from the Colonial Past Prof. Anthony Low (100)

26 June *Mind and Illusion* Prof. Frank Jackson (90) 11 July *Fly me to the moon!* Dr Harrison Schmitt (320)

19 July *Albert's Gift: the legacy of his art and life* Brenda Croft (60)

25 July Colonisation and Recolonisation in North America and Australasia 1788–1918 Prof. James Belich, University of Auckland (1400

8 August Faculty of Science: Dean's Lecture Series: Teleportation — Science Fiction or Fact? Dr Ping Koy Lam (500)

16 August *The Future of the Brain in Sickness and in Health* Panel discussion (1000)

19–23 August *Weather in a Week* Dr Edward Linacre (100)

19 August *Malta and Europe: A Mediterranean perspective* The Hon Dr Edward Fenech Adami (50)

20 August Good Faith in Contract and Pre-contractual dealings E. Allan Farnsworth, Columbia University (90)

28 August *Science: Before and After September 11* Dr Rita Colwell, US National Science Found (125)

29 August Sixth Annual Freilich Foundation Lecture on Tolerance and Bigotry: Beyond Mere Tolerance Archbishop Peter Carnley AO (280)

2 September *Obituary for a Passive Species* Peter Garrett (300)

2 September National Human Rights Institutions: An Issue Central to the Human Rights Agenda Mr Brian Burdekin AO (30)

4 September *The Challenge of the Moving Image in the 21st Century* Victoria Lynn, Australian Centre for the Moving Image (60)

5 September Making Monsters: Thinking about the Ethical Foundations of Business and Community Dr Simon Longstaff, St James Ethic Centre (70)

25 September *Growing Up in Bigotry* Paul Conelly, Mapule Ramashala (60) 8 October From Doha to Johannesburg: where do we go from here? Poul Nielson, European Commissioner for Development and Humanitarian Aid (170)

9 October Debilitating Debris: The Enduring Consequences of Modern Conflicts John Rodsted, ICBL (100)

23 October Border Crossings — The Experience of Anthropology Dr Jeremy Beckett, Uni Sydney (160)

24 October *Cosmopolitan Practice and a Question of Authenticity* Professor Joel S. Kahn, La Trobe University (175)

Figures in brackets indicate attendance numbers.

## Freedom of Information Act 1982 Statement

This statement has been prepared to comply with section 8 of the Freedom of Information Act 1982 and is correct at 31 December 2002.

## 1. Organisation and Functions of the University's decision-making Council and Boards are as follows:

### Council

In accordance with the Australian National University Act 1991(Cth), the Council is the governing authority of the University. The Act provides that the Council has the control and management of the University and is to act in all matters concerning the University in such manner as it thinks will best promote the interests of the University. The Council may enact delegated legislation, subject to the scrutiny of he Australian Parliament, known as Statutes, Rules and Orders.

The Council 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.

### Academic Structure of the University

The University's formal academic organisational structure consists of the Institute of Advanced Studies, The Faculties and University Schools and Centres.

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.

The Faculties offer undergraduate and graduate courses in arts, Asian studies, economics and commerce, engineering and information technology, law, science, art and music, and new medical courses are in preparation for commencement in 2004.

The Council has also established a number of organisational structures called University Centres which include members of staff from the Institute and The Faculties, or, in some other way draw their resources from the Institute and The Faculties. These Centres comprise the Asia Pacific School of Economics and Management, Mathematical Sciences Institute, Centre for Cross-Cultural Research, Humanities Research Centre, National Centre for Epidemiology and Population Health, National Graduate School of Management, Centre for Educational Development and Academic Methods, Centre for Mental Health Research and the Centre for Aboriginal Economic Policy Research.

The University Academic structure can be viewed at the end of this publication.

### Boards and Committees of the Council

Council is assisted in its functions by a number of Boards and Committees:

#### Academic Board

The Academic Board reports to, or advises, the Council on all aspects of the academic policy of the University, including the strategic academic direction of the University and the development of teaching, learning, scholarship, research and research training in all parts of the University.

The Board comprises the Vice-Chancellor, as Chair, the Deputy Vice-Chancellor, the Head of each Research School, the Dean of each Faculty (including the Institute of the Arts Directors) the Director of each University Centre, 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 reports to Council through the Academic Board.

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 postgraduate graduate, and such other persons as the Council appoints.

#### **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 reports to Council through the Academic Board.

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.

#### **Finance Committee**

The Finance Committee considers all matters relating to the financial affairs of the University and makes recommendations on these matters to the Council or, where the Committee holds the requisite delegations from the Council, it determines these matters on behalf of the Council. All members of the Finance Committee are appointed by the Council and the Chair of the Finance Committee is a member of Council.

#### Audit Committee

The Audit Committee assists the University Council by assessing the quality of audits (both internal and external), advising on the efficiency and adequacy of University administrative, operating and accounting controls and appraises risk management planning and implementation within the University. Audit Committee comprises 5 members, of whom at least one must be a member of Council, and a Chairperson who is not a member of Council.

#### **Standing Committee**

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 Standing Committee comprises eleven members of Council and is chaired by the Pro-Chancellor.

#### **Other Committees**

Other committees of Council that meet as required are the Committee on Conditions and Appointment of the Vice-Chancellor and Deputy Vice-Chancellors, the Emergency Appointment (Vice-Chancellor) Committee and the Honorary Degrees Committee.

# 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 the responsibility of controlling and managing 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. Subject to the Act, the University has power to do all things that are necessary or convenient to be done for, or in connection with, the performance of its functions. The University has made statutes, rules and orders which can be viewed at <u>http://</u> www.anu.edu.au/cabs/.

The only delegated legislation that affects members of the public who are not members of the University community are Statutes made concerning the management of traffic and parking on campus, which can also be found at <u>http://www.anu.edu.au/cabs/</u>.

## 4. 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.

## 5. 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. Many documents are also readily available through the internet at the University website <u>http://www.anu.edu.au</u>.

# 6. 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 FOI Act.

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



4 April 2003

Professor I W Chubb AO Vice-Chancellor Australian National University Canberra ACT 0200

Dear Professor Chubb

#### AUSTRALIAN NATIONAL UNIVERSITY FINANCIAL STATEMENTS 2002

Returned herewith please find a copy of the University's signed financial statements for the year ended 31 December 2002 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 Australian National University for the year ended 31 December 2002. The financial statements include the consolidated financial statements of the consolidated entity comprising Australian National University and the entities it controlled at the year's end or from time to time during the year. The financial statements comprise:

- Statement by Directors;
- Statements of Financial Performance, Financial Position and Cash Flows;
- Schedules of Commitments and Contingencies; and
- Notes to and forming part of the Financial Statements.

The members of the Council 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 the 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 as to whether, in all material respects, the financial statements are presented fairly in accordance with Accounting Standards and other mandatory professional reporting requirements in Australia and statutory requirements so as to present a view which is consistent with my understanding of the University's and the consolidated entity's financial position, their financial performance and their cash flows.

The audit opinion expressed in this report has been formed on the above basis.

GPO Box 707 CANBERRA ACT 2601 Centenary House 19 National Circuit BARTON ACT Phone (02) 6203 7300 Fax (02) 6203 7777

#### Audit Opinion

In my opinion the financial statements:

- (i) have been prepared in accordance with Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*; and
- (ii) give a true and fair view, in accordance with applicable Accounting Standards and other mandatory professional reporting requirements in Australia and the Finance Minister's Orders, of the financial position of Australian National University and the consolidated entity as at 31 December 2002, and their financial performance and cash flows for the year then ended.

Australian National Audit Office

Allan M. Thompson Executive Director

Delegate of the Auditor-General

Canberra 4 April 2003



Council & Boards Secretariat Chancelry (10) Canberra ACT 0200 Australia Telephone: +61 2 6125 2113 Facsimile: +61 2 6125 8524 Email: head.cabs@anu.edu.au

## THE AUSTRALIAN NATIONAL UNIVERSITY

#### CONSOLIDATED FINANCIAL STATEMENTS FOR YEAR ENDED 31 DECEMBER 2002

#### 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 2001-2002) Orders made under the Commonwealth Authorities and Companies Act 1997 (FMO's) and the Guidelines for the Preparation of Annual Financial Reports for the 2002 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 2003

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ANU Financial Statements

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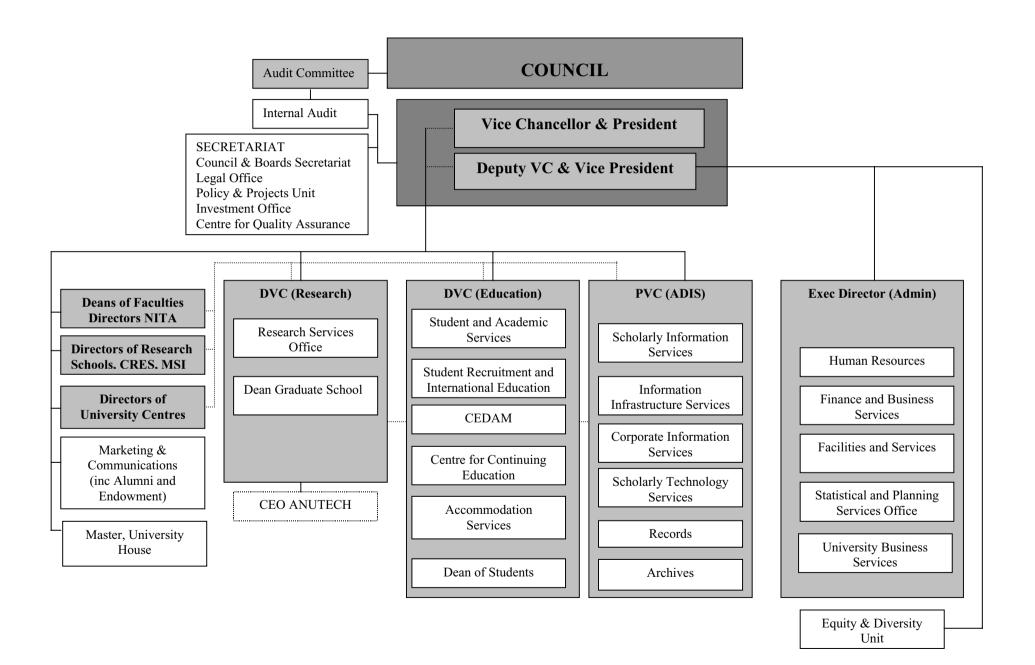
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