

THE FELLOWSHIP

The Academy Fellowship comprises 408 of Australia's leading research scientists, elected for their personal contributions to science. Fellows occupy senior positions in universities, the CSIRO and industry.

The Fellowship, 30 April 2007:

Ada, GL
Adams, JM
Allen, DG
Anderson, JR
Anderson, JM
Anderson, BDO
Andrews, TJ
Angus, JA
Angyal, SJ
Antonia, RA
Appleby, CA
Archer, M
Armstrong, BK
Baddeley, AJ
Banwell, MG
Barber, MN
Bartlett, PF
Bartnik, RA
Basten, A
Batterham, RJ
Baxter, RJ
Baxter, RC
Beckwith, ALJ
Bedding, RA
Bennett, MR
Bennett, MA
Bergersen, FJ
Berkovic, SF
Bilger, RW
Birch, LC
Bishop, PO
Blanden, RV
Blevin, WR
Boardman, NK
Boger, DV
Bond, AM
Boyden, SV
Boyle, BJ
Brennan, MH
Brent, RP
Brown, G
Brown, RD
Bruce, MI
Buchdahl, HA
Budd, WF
Burdon, JJ
Burger, HG

Burgess, AW
Burgman, MA
Burke, DJ
Burnstock, G
Campbell, KSW
Campbell, JH
Canty, AJ
Cavill, GWK
Celermajer, DS
Chalmers, JP
Chappell, JMA
Chappell, BW
Christiansen, WN
Clarebrough, LM
Clark, GM
Clark, RG
Clarke, AE
Cockburn, A
Cole, KD
Cole, ARH
Colless, MM
Colman, PM
Coltheart, M
Compston, W
Cook, DI
Cooper, DA
Cory, S
Costa, M
Costin, AB
Cowan, IR
Cowling, MG
Cowman, AF
Cox, GB
Craig, DP
Crompton, RW
Crossley, MJ
Crozier, RH
Curtis, DR
Dance, IG
Dancer, EN
Dawes, IW
Day, MFC
Day, RH
de Kretser, DM
Delbourgo, R
Dennis, ES
Denton, DA

Dewar, RL
Doddrell, DM
Doherty, PC
Dopita, MA
Dracoulis, GD
Drummond, PD
Dunn, AR
Easton, CJ
Eastwood, MG
Egan, JB
Ekers, RD
Elliott, WH
Ellis, JG
Ellis, GRA
Esler, MD
Evans, LT
Evans, RJ
Evans, DJ
Ewens, WJ
Faraone, L
Farquhar, GD
Fenner, FJ
Field, LD
Figgis, BN
Finnigan, JJ
Flambaum, VV
Fletcher, NH
Forrester, PJ
Fraser, RDB
Frater, RH
Frazer, IH
Frederiksen, JS
Freeman, KC
Freeman, HC
Furness, JB
Gandevia, SC
Gani, JM
Gascoigne, SCB
Gibbs, AJ
Gibson, FWE
Gilbert, RG
Gleadow, AJW
Goodnow, CC
Goodwin, GC
Graham, RM
Graves, JAM
Green, MA

Green, DH
Grieser, F
Griffiths, RW
Grimshaw, RHJ
Groves, DI
Gu, M
Gunning, BES
Guttman, AJ
Haddad, PR
Hall, PG
Hall, RM
Hamann, SD
Hannaford, P
Hardham, AR
Harrison, TM
Hartley, RI
Harvey, RP
Hatch, MD
Head, AK
Healy, TW
Heyde, CC
Higgins, TJ
Hill, DJ
Hilton, DJ
Hinde, DJ
Hirst, GDS
Hobbs, RJ
Hobbs, BE
Hoffmann, AA
Holliday, R
Holloway, BW
Holman, ME
Holmes, AB
Holt, PG
Hopwood, JJ
Horridge, GA
Hughes, TP
Hume, ID
Hunter, RJ
Hurst, CA
Hush, NS
Hutchinson, JE
Hyde, BG
Hyde, ST
Hynes, MJ
Imberger, J
Israelachvili, JN

Jacobsen, JV
Jagadish, C
James, DE
Jameson, GJ
Jeffrey, SW
Johnstone, BM
Jones, The Hon. BO
Kay, BH
Kemp, BE
Kemp, DJ
Kennett, BLN
Kerr, JFR
Kerr, A
Kivshar, Y
Klein, AG
Korner, PI
Kotagiri, R
Kuchel, PW
Ladiges, PY
Lamb, TD
Lambeck, K
Lance, JW
Larkins, FP
Law, PG
Lay, PA
Le Couteur, KJ
Lehrer, GI
Letham, DS
Levick, WR
Lindoy, LF
Linnane, AW
Lovering, JF
Lumbers, ER
Lyons, LE
McCloskey, DI
McComb, AJ
McCormick, PG
McCracken, KG
McCulloch, MT
McDougall, TJ
McDougall, I
McElhinny, MW
McEwan, AD
McFadden, PL
McFadden, GI
MacFarlane, DR
McIntosh, RA
McIntosh, AGR
McKay, BD
MacKay, IR
McKellar, BHJ
McKenzie, JA
McLachlan, EM
McLeod, JG
Mai, Y
Main, AR
Manchester, RN
Mander, LN
Marcelja, S

Marshall, BJ
Martin, RL
Martin, TJ
Masters, CL
Mathieson, AM
Mayo, O
Melrose, DB
Mendelsohn, FAO
Metcalf, D
Meyer, RE
Milburn, GJ
Miller, JFAP
Millis, NF
Mills, BY
Mitchell, GF
Moodie, AF
Moore, JB
Moran, W
Morrison, JD
Morton, DC
Mould, JR
Munns, RE
Myers, RH
Napper, DH
Neeman, A
Newton, JO
Nichol, LW
Nicola, NA
Ninham, BW
Norrish, K
Nossal, Sir GJV
Nugent, KA
O'Reilly, SY
Orlowska, ME
Osborne, MR
Osmond, CB
Paddon-Row, M
Paltridge, GW
Passioura, J
Pate, JS
Paterson, MS
Peacock, WJ
Pearman, GI
Pegg, DT
Pettigrew, JD
Phan-Thien, N
Pickett-Heaps, JD
Pittard, AJ
Porter, R
Possingham, HP
Poulos, HG
Powell, R
Praeger, CE
Quirk, JP
Radom, L
Ralph, JT
Ralston, J
Randolph, MF
Redman, SJ

Reeves, PR
Reid, AF
Renfree, MB
Rickards, RW
Rintoul, SR
Ritchie, IM
Rizzardo, E
Robinson, DW
Robson, R
Rogers, C
Rogers, GE
Rogers, LJ
Rubinstein, JH
Runnegar, BN
Sambrook, JF
Sara, VR
Sargeson, AM
Seneta, E
Sharman, GB
Shine, R
Shine, J
Short, RV
Shortman, KD
Shparlinski, I
Simmons, MY
Simon, L
Simpson, ER
Simpson, SJ
Slatyer, RO
Sloan, IH
Sloan, SW
Smith, SE
Smith, FA
Smyth, DR
Snyder, AW
Solomon, DH
Speed, TP
Sprenst, JFA
Sprenst, J
Sridhar, T
Srinivasan, MV
Stalker, RJ
Stanley, FJ
Stanton, RL
Stephenson, DG
Sternhell, S
Stokes, RH
Stone, J
Strasser, A
Street, RH
Street, R
Sullivan, CE
Summons, RE
Sutherland, GR
Sutherland, RL
Swan, JM
Tanner, RI
Taylor, SR
Thomas, AW

Thompson, CJ
Thompson, AM
Trudinger, NS
Truswell, EM
Tuck, EO
Tucker, RS
Turner, JS
Tyerman, SD
Tyndale-Biscoe, CH
Underwood, AJ
Vaux, DL
Veevers, JJ
Vincent, RA
von Caemmerer, S
von Itzstein, M
Wake, RG
Walker, NA
Wall, GE
Wallace, GG
Wallace, HR
Walter, MR
Warren, JR
Watts, RO
Weigold, E
Weiss, DE
Welsh, AH
Wentrup, C
White, JW
White, GK
Whitten, WK
Whitten, MJ
Wild, SB
Wild, JP
Williams, R
Williams, JF
Williams, JS
Williamson, R
Williamson, RE
Wintour-Coghlan, EM
Wiskich, JT
Womersley, HBS
Woodall, R
Zillman, JW

The Fellowship is listed at:

www.science.org.au/academy/fellows/fellow.htm

More information on each of the new Fellows is available at: www.science.org.au/academy/fellows/2007.htm

Corresponding Members

Andersson, B
Atiyah, Sir M
Bernard, J
Bjorkman, OE
Blackburn, E
Boyer, JS
Brooks, RA

Connell, JH
Cornforth, Sir JW
de Gennes, P-G
Feldmann, M
Gajdusek, DC
Harris, Sir H
Jones, VFR

Krebs, CJ
Lu, Y
May, Lord R
Öquist, FG
Oxburgh, Lord R
Powell, MJD
Raven, PH

Salpeter, EE
Sanger, F
Slater, EC
Tao, T
Zinkernagel, RM

New Fellows

We congratulate the following scientists who were elected to the Fellowship on 22 March 2007:

Professor David Albert Cooper

Director, National Centre in HIV, Epidemiology and Clinical Research, University of New South Wales

Professor Ian William Dawes

Professor of Genetics, School of Biotechnology and Biomolecular Sciences, University of New South Wales

Dr John Joseph Finnigan

Chief Research Scientist, CSIRO Centre for Complex Systems Science, Canberra

Professor Min Gu

Director, Centre for Micro-Photonics, Faculty of Engineering and Industrial Sciences, Swinburne University of Technology, Melbourne

Professor Richard Paul Harvey

Deputy Director, Victor Chang Cardiac Research Institute, Sydney

Professor David John Hill

ARC Federation Fellow and Professor, Department of Information Engineering, Research School of Information Science and Engineering, Australian National University, Canberra

Professor John Joseph Hopwood

Head, Lysosomal Diseases Research Unit, Women's and Children's Hospital, Adelaide

Professor Ian Douglas Hume

Emeritus Professor, School of Biological Sciences, University of Sydney

Professor David Ernest James

Director, Diabetes and Obesity Research Program, Garvan Institute of Medical Research, Sydney

Professor Peter Andrew Lay

Professor of Inorganic Chemistry, School of Chemistry, University of Sydney

Professor Douglas Robert MacFarlane

Professor, School of Chemistry, Monash University, Melbourne

Dr Rana Ellen Munns

Chief Research Scientist, CSIRO Plant Industry, Canberra

Professor Stephen James Simpson

ARC Federation Fellow, School of Biological Sciences, University of Sydney

Professor Scott William Sloan

ARC Federation Fellow and Professor of Civil Engineering, Department of Civil, Surveying and Environmental Engineering, University of Newcastle

Professor Gordon George Wallace

Director, Intelligent Polymer Research Institute, University of Wollongong

Professor Alan Hepburn Welsh

Professor, Centre for Mathematics and its Applications, Australian National University, Canberra

New Corresponding Members

Professor Elizabeth Blackburn

Morris Herzstein Professor of Biology and Physiology, Department of Biochemistry and Biophysics, University of California San Francisco, US

Professor Michael James David Powell

Professor, Centre for Mathematical Sciences, University of Cambridge, UK

Honours awarded to Fellows during the year 2006–07

Professor Sam Berkovic

Royal Society of Victoria 2006 Research Medal

Professor Henry Burger

NAMS–Procter & Gamble Pharmaceuticals 2006 Maurice M Gelfand Leadership Award

Professor Julie Campbell

Order of Australia: Officer in the General Division (AO)

Professor Ken Campbell

Geological Society of Australia WR Browne Medal 2006

Professor Bill Compston

Chinese Academy of Geological Science, Honorary Fellow

Chinese Government Friendship Award

Chinese Academy of Science, Foreign Member

Professor Ross Crozier

International Union for Study of Insects inaugural Hamilton Award 2006

Professor David de Kretser

Order of Australia: Companion in the General Division (AC)

Professor Derek Denton

Honorary Doctor of Laws, University of Melbourne

Professor Murray Esler

Order of Australia: Member of the Order (AM)

Professor Peter Doherty

Honorary Fellow of the Royal Society of London

Professor Graham Farquhar

Royal Society of Tasmania 2006 RM Johnstone Medal

Professor Ian Frazer

Australian Institute of Policy and Science, Merck Sharp and Dohme Florey Medal

Professor Hans Freeman

Australian Academy of Science 2007 David Craig Medal

Professor Simon Gandevia

Australian Physiological Society 2006 Exchange Lecturer

Professor Chris Goodnow

Australian Research Council Federation Fellowship

Professor David Green

Order of Australia: Member in the General Division (AM)

Professor Martin Green

Australian Research Council Federation Fellowship

Professor David Groves

Australian Academy of Science 2007 Haddon Forrester King Medal sponsored by Rio Tinto

Professor Min Gu

Elected to the Fellowship of the Australian Academy of Technological Sciences and Engineering



Professor Peter Hall, 2007 Matthew Flinders Medal and Lecture

Professor Paul Haddad

Australian Research Council Federation Fellowship

Professor Peter Hall

Australian Academy of Science 2007 Matthew Flinders Medal and Lecture

Australian Research Council Federation Fellowship

Professor Tom Healy

Inaugural *Nature* Lifetime Award 2006

Dr Bruce Hobbs

Elected to the Fellowship of the Australian Academy of Technological Sciences and Engineering

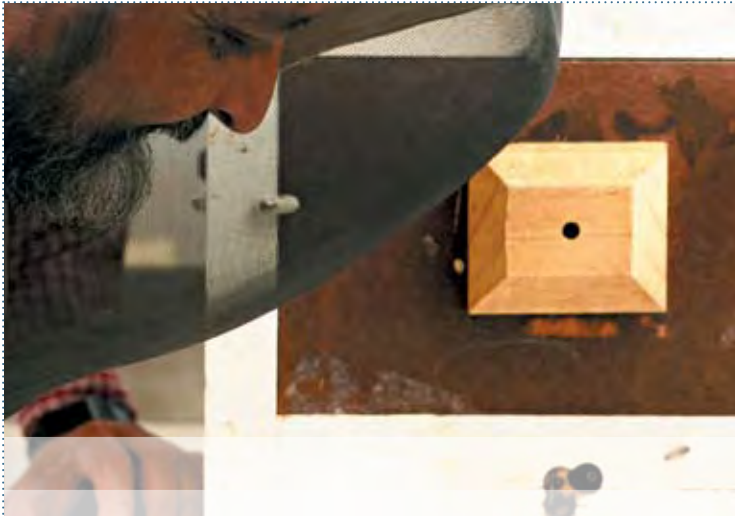
Professor Terry Hughes

Australian Research Council Federation Fellowship

Professor Chennupati Jagadish

Elected to the International Society of Optical Engineering Fellowship

Elected to the Electrochemical Society Fellowship



Main photo: Vikky Wilkes

Square peg in a round hole: lateral thinker Srinivasa Sreenivasulu Reddy at work with his bees

Professor Yuri Kivshar

Australian Academy of Science 2007 Lyle Medal

Professor Barry Marshall

Order of Australia: Companion of the Order (AC)

Professor Ian McDougall

Australian Academy of Science 2007 Jaeger Medal

Professor Geoff McFadden

Australian Research Council Federation Fellowship

Professor Keith Nugent

Australian Research Council Federation Fellowship

Professor Hugh Possingham

Australian Research Council Federation Fellowship

Professor John Ralston

South Australian Premier's Science Excellence Award

Professor Eugene Seneta

Australian Academy of Science 2007 Hannan Medal

Professor Rick Shine

Botanic Gardens Trust Eureka Prize for Biodiversity Research

Professor Evan Simpson

Komen Foundation 2006 Brinker Award

Professor Sally Smith

Australian Society for Soil Science, JA Taylor OBE Gold Medal in Soil Science Research and its Communication

Professor David Solomon

2006 Victoria Prize

Professor Mandyam Srinivasan

2006 Prime Minister's Prize for Science

Professor Raymond Stalker

Australian and New Zealand Association for the Advancement of Science Medal 2006

Professor Grant Sutherland

Honorary Member of the European Cytogeneticists Association

Professor Terence Tao

International Mathematical Union 2006 Fields Medal
John D and Catherine T MacArthur Foundation
MacArthur Fellowship

Professor Susanne von Caemmerer

Elected as a Member of Leopoldina, the German Academy of Sciences.

Dr Robin Warren

Order of Australia: Companion of the Order (AC)

Deaths since 1 May 2006

We regret to record the following deaths:

Professor John Anderson, FRACI, 26 February 2007

Professor Anton Hales, 11 December 2006

Professor Max Kelly, 26 January 2007

Professor Ian Ross, AO, 14 November 2006

Professor Bob Symons, FRS, 4 October 2006

Professor Howard Warner, CBE, FTSE, 17 November 2006

Regional groups

The following reports for the period 1 May 2006 to 30 April 2007 have been received:

Australian Capital Territory

Chair: Professor John White



The Canberra Fellows Dining Club met five times in 2006. The meetings, organised by Dr John Passioura, were held in the Shine Dome with Fellows of the Academies of the Social Sciences, the Humanities and Technological Sciences and Engineering. Meetings with the combined academies were well-attended in 2006.

At the June meeting, Professor Ross Taylor gave a talk on 'Planets: a matter of chance or design?'; in July, Professor Richard Arculus spoke on 'The evolution of continents and oceans'; in October, Dr Denis Saunders spoke on 'Biodiversity: what is it and why should we care?' and in February 2007, Professor Henry Nix gave a talk on 'Ludwig Leichhardt: landscape ecologist and explorer'.

Many Canberra Fellows also attended the public lecture series '*The origin of species: the Australian connection*', launched during National Science Week with a lecture by Professor Jenny Graves and Dr Hugh Tyndale-Biscoe on 'Australian mammals: Curious sex and reproduction'.

A President's Soirée on stem cell research chaired and introduced by Professor John White attracted many Fellows on 11 September, at a time when Federal Parliament was considering key stem cell legislation. The lead speakers were Dr Elizabeth Finkel and Professor Peter Rathjen. Towards the end of the year, the Academy hosted the FEAST workshop

Research Without Borders and welcomed Professor Sir Christopher Llewellyn-Smith as one of a distinguished group of international speakers at that meeting.

New South Wales

Chair: Professor Elspeth McLachlan



NSW Fellows met on 22 March 2006 to discuss 'Science teaching in schools'. *Primary Connections*, the Academy's science and literacy initiative for Australian primary schools, was introduced by Unit Co-ordinator Claudette Bateup. Other speakers were recently retired Headmaster of Sydney Grammar Preparatory School Bryan Pennington and Gosford High School's Mark Butler, who won the 2004 Prime Minister's Award for Excellence in Science Teaching in Secondary Schools. Head of Science at Sydney Grammar Preparatory School Matthew McCloskey also contributed to the discussion.

The NSW Fellows have been active this year, sharing several gatherings with the NSW Fellows of the Academy of Technological Science and Engineering. The highlight of the annual dinner was an entertaining talk on 'Serendipity and intrigue in industrial inventions' by Professor Don Napper. The dinner was held at the Alio Restaurant, Surry Hills on 14 November 2006.

Queensland

Chair: Professor Peter Drummond



The past year has been a particularly busy one for Queensland Fellows. Professor Ian Frazer took on many responsibilities as Australian of the Year, Professor Julie Campbell co-chaired an InterAcademy Panel working group evaluating inquiry-based science education and Professor Terry Hughes was the February speaker in the Academy's public lecture series with his talk on 'The Great Barrier Reef: Designed to survive (built to last?)'.

Queensland continued to be an enthusiastic participant in training teachers in the Academy's science and literacy initiative, *Primary Connections*, with more than 300 teachers engaging in professional workshops held in Brisbane, Townsville and Cairns. Professor Ross Crozier liaised with Academy facilitators, who provided professional development in the Catholic Diocese of Townsville.

South Australia

Chair: Professor Robert Vincent



South Australian Fellows met three times during 2006. The first meeting was held on 24 April to celebrate the

election of Professor Barry Egan and to welcome him to the Fellowship.

Highlight of the year was the Think Tank for early-career researchers held on 30 October on the very relevant topic of 'Innovative technical solutions for water management in Australia'. It brought together over 40 young researchers from a range of disciplines to discuss novel solutions to the water crisis. Following the Think Tank, many participants, South Australian Fellows and their guests joined Academy President Professor Kurt Lambeck for an enjoyable dinner at the Universal Wine Bar. It provided an excellent opportunity to hear the President's opinion on a number of critical issues that face Australian science.

At the final meeting on 11 December, South Australian Fellows were joined by their colleagues from the Academy of Technological Sciences and Engineering to hear Professor Max Brennan talk about his role as Chief Scientist of South Australia. The meeting was a great success and plans were discussed for further joint meetings in 2007.

Tasmania

Chair: Dr Angus McEwan



Tasmanian Fellows met several members of the Academy's Council, including the President, during the National Academies Forum Symposium, 'A celebration of the history, culture, science and technology of Recherche Bay', on 26–28 February 2007. Tasmanian Fellow Dr Trevor McDougall was a member of the organising committee for the symposium, held at CSIRO Marine and Atmospheric Research in Hobart. Special guest speaker was Chairman of Trustees of the Tasmanian Museum and Art Gallery and former Governor of Tasmania Sir Guy Green.

Tasmanian Fellows and their colleagues from the Academy of Technological Sciences and Engineering (ATSE) enjoyed a dinner hosted by Dr June Olley at the Queen Mary Club in Hobart on 22 August. Guest speaker Dr Gustaaf Hallegraef discussed his research on toxic algal blooms in coastal waters and their implications for human health, fisheries, aquaculture and marine ecosystems.

Due to the small number of Tasmanian Fellows, joint functions with Fellows of ATSE and the Academies of Social Sciences and Humanities are planned for the coming year.

Victoria

Chair: Professor Tony Klein



A welcome function for the newly elected Victorian Fellows was held on 24 May in the presence of the Governor of Victoria, Professor David de Kretser and Mrs de Kretser as well as the President and Executive Secretary of the Academy. New Fellows Professor Mark Burgman, Professor Evan Simpson, Dr Andrew Holmes and Dr John Zillman gave brief presentations on their work.

Winner of the 2006 McFarlane Burnet Medal Professor Jenny Graves also gave a talk entitled 'The genomes of weird Australian animals'. The welcome was followed by a dinner for Fellows and guests at which then new Academy President Professor Kurt Lambeck welcomed the new Governor of Victoria.

The very successful annual Joint Academies Dinner, organised this year by Victorian Fellows, was held on 23 August at the Bio21 Institute and attended by Fellows of all four learned academies. Director of the Howard Florey Institute Professor Fred Mendelsohn gave an excellent after-dinner speech on 'The neuroscience revolution'.

The Academy's Lloyd Rees Lecture, commemorating the late ALG Rees, was given by Dr Jose Varghese on 29 September. Dr Varghese gave an insightful talk on 'Using synchrotron science as a probe for biological research'.

The annual Christmas dinner for Fellows and guests was held at the Observatory Café in the Royal Botanic Gardens on 23 November — a delightful and apposite venue, greatly enjoyed by all who attended.

Western Australia

Chair: Dr Bruce Hobbs



West Australian Fellows were joined by WA Fellows of the Academy of Technological Sciences and Engineering for Christmas dinner on 5 December 2006 at the Royal Freshwater Bay Yacht Club, Peppermint Grove.

The West Australian Fellows are looking forward to meeting the Academy's President on 16 May at a function to award Professor David Groves the Haddon Forrester King Medal sponsored by Rio Tinto plc. The meeting is set to coincide with the annual conference of the Cooperative Research Centres Association.