
Science Review Subcommittee Report for 2008/09

New Zealand Science Review is the official journal of NZAS and its most conspicuous public voice. Within the New Zealand research, science and technology sector, *Science Review* serves as an independent forum for the exchange of views on science and science policy.

NZAS is committed to the production of four issues of the journal per annum and has again accomplished this in 2008/09.

The work involved in doing this occupies a significant com-

ponent of Council deliberations but has been greatly smoothed and indeed reduced in recent years with a ‘forward plan of action’ managed by the Editor, the Council and the close support of the Editorial Subcommittee.

Accordingly, the NZAS membership has been able to enjoy a high-quality diet of interesting articles on diverse science topics, plus thought-provoking and stimulating commentary with particular emphasis on matters of science policy.

A satisfactory track record has now been established that

will appeal to prospective advertising sponsors. As indicated last year, in order to maintain *Science Review* as a viable financial concern, Council anticipates the need to raise extra revenue so as to cover production costs within the near future.

The Editorial Subcommittee was charged with the task of addressing this problem and is working towards this aim. The subcommittee remains unchanged since 2008 and currently comprises Hamish Campbell (convenor), John Clare, Dennis Gordon, Mike Berridge, and Allen Petrey (Editor).

The content of the 2009 issues of *Science Review* is summarised as follows:

First issue, Vol 65 (4)

This issue commenced with a summary report of the annual New Zealand Tb researchers meeting held at the Malaghan Institute of Medical Research in Wellington: Ronan O'Toole and Joanna Kirman (Victoria University and the Malaghan Institute) – 'TbNZ Meeting: A new barometer for tuberculosis research in New Zealand'.

Three articles follow:

Willie Smith (Auckland University): 'Dr E G Bollard – People, structure and Science in New Zealand horticulture'.

Mark Waterland (Massey University): 1999 NZ S&T Fellowship - 'Solvent effects in change-transfer processes'.

Janet Bradford-Grieve (NIWA): 'Absence of government leadership is damaging the health of systematics and taxonomy in the UK'.

The issue concludes with: an account of the NZAS Annual Awards which were presented by Hon Dr Wayne Mapp, the Minister of Research, Science and Technology, and Dr Paul Hutchinson, MP for Hunua; and the President's and Subcommittees' reports for 2007/08 and the NZAS Financial Report for year ended 31 July 2008

Second issue, Vol 66 (1)

This thematic issue celebrates the remarkable career, thus far, of Distinguished Professor of Theoretical Biology David Penny CNZM (Massey University) on the occasion of his 70th birthday.

It commences with an explanatory essay by David Penny himself: 'Why science?' and is followed by a letter from Pete Hodgson (Minister of Research, Science and Technology).

Eleven papers follow:

Michael Hendy (Massey University): 'Mathematics in evolution'.

Hamish Spencer (Otago University): 'Using phylogenies to reveal rare events'.

Mike Steel (Canterbury University): 'The Penny-Ante: mathematical biology or biological mathematics?'

Peter Lockhart (Massey University): 'From trees to processes'.

Lisa Matisoo-Smith (Auckland University): 'David Penny: man on the edge'.

Graham Wallis, Lise Wallis & Jon Waters (University of Otago): 'What, if anything, is *Galaxias vulgaris*? 20 years of research on galaxiid speciation'.

Anthony Poole (University of Canterbury): 'How the endosymbiont got its cell'.

Matthew Phillips (ANU, Canberra): 'Mammalian and avian survival across the Cretaceous-Tertiary boundary'.

Elizabeth Watson (Swedish Museum of Natural History, Stockholm): 'Crossing borders'.

Bernard Beckett (Massey University): 'Evolution of a school teacher's consciousness'.

The issue concluded with Reminiscences of David Penny from:

Tim Brown

Eric Terzaghi

David Woodhams

Kim Penny

Mike Berridge & Chris Sissons

...and two songs 'Shannon Crossroads' & 'David's Travels in the Land of Mathematics', by Peter Lockhart, Abby Harrison and Trish McLenachan ... and a Glossary.

Third issue, Vol 66 (2)

This thematic issue on 'innovative science' led with a provocative guest editorial by Mike Berridge (Malaghan Institute) entitled: '2009 science and innovation budget scorecard: stabilising but lacks vision'.

Two news items followed announcing: 'Professor Sir Peter Gluckman appointed Chief Science Advisor to Prime Minister', and 'New Dean of Science for the University of Auckland', Professor Grant Guilford.

There are articles by:

Jacqueline Rowarth (Massey University) & Stephen Goldson (AgResearch): 'Achieving innovative science'.

Jeffery Tallon (IRL): 'Legacies of the parallel worlds of Rutherford and Kamerlingh-Onnes, 1908'.

Three further contributions that showcase the New Zealand Science and Technology Postdoctoral Fellowship scheme include:

David Ackerley (Victoria University of Wellington): 'Molecular approaches for hexavalent chromium bioremediation: Stanford Medical Center'.

Jason Hindmarsh (Massey University): 'Investigation of drying and re-hydration of powdered dairy products with magnetic resonance imaging'.

Kelvin Lloyd (Wildland Consultants): 'The evolution of indigenous grasses and their response to environmental change'.

Lastly, Ken Aldous reports on the proceedings of the New Zealand Institute of Agricultural and Horticultural Science Forum 2009 held at Lincoln on 30 June entitled: 'New initiatives to improve the New Zealand science system'.

Fourth issue, Vol 66 (3)

This is a thematic 'Darwin commemorative' issue marking the 200th anniversary of the birth of Charles Darwin on 12 February 2009.

The guest editorial is by Dennis Gordon (NIWA) and the issue contains six articles as follows:

David Penny (Massey University): 'Charles Darwin as a scientist'.

Richard Winkworth (University of the South Pacific): 'Darwin and DNA: explaining the New Zealand flora'.

Simon Greenhill & Russell Gray (University of Auckland): 'Darwin, language, and the two great Pacific voyages'.

Chris Simon (Victoria University of Wellington): 'Using New Zealand examples to teach Darwin's 'Origin of

Species': lessons from molecular phylogenetic studies of cicadas'.

Alan Dixson (Victoria University of Wellington): 'Darwin, sexual selection, and human evolution'.

Jacque Bay (University of Auckland): 'Evolution of senior secondary school biology education in New Zealand: impacts of changes in biological science from 1878 to 2008'.

This issue concludes with an obituary to Dame Patricia Bergquist.

To conclude, NZAS is fulfilling its obligations and responsibilities to its membership with respect to *Science Review*. We are on track and can anticipate more of the same.

We gratefully acknowledge the roles of Allen Petrey and Geoff Gregory without whom publication of the journal would be impossible.

Hamish Campbell