In this issue

Science has long been based on individual and institutional competition. The 1990s reforms of the sector in New Zealand led to the formation of the Crown research institutes (CRIs), which had responsibilities for specific economic or environmental sectors, independence and separate governance. The bulk of funding came via the Foundation for Research, Science and Technology, with often intense competition for resources. This was exacerbated by the openness of the investment processes to universities, research associations and other research providers. Since then, there have been various attempts to encourage interdisciplinary and collaborative programmes, manage overbidding and establish alternative models, such as outcome-based investments, but significant transaction costs in the competitive bidding processes remained.

In their article, *From competition to collaboration: Challenges for New Zealand science,* David Penman and colleagues provide some perspectives on the system from a review of a large-scale global collaborative programme in marine biodiversity, the Census of Marine Life. The authors highlight some of the lessons relevant to policy development and science management in New Zealand.

In *Nurturing genius: the childhood and youth of Kelvin and Maxwell*, John Lekner aquaints us with the remarkable similarities in the childhood and youth of William Thomson (Kelvin) and James Clerk Maxwell. Both were Scots, both lost their mothers at an early age, both had fathers who nurtured them intellectually and were ambitious for their careers. Arising from John's recent work on electrostatistics, his historical note describes Kelvin's and Maxwell's respective completion of the Cambridge Tripos examination, and describes some of their electrostatic researches.

The indefatigable David Penny has brought to our attention, in *Principles of Scientific Method*, a series of lectures delivered by philospher Karl Popper at the University of Otago in 1945 at the invitation of John Eccles. Eccles was at that time Professor of Physiology at Otago and, in 1963, winner of the Nobel Prize in Physiology and Medicine.

Popper's lectures give us a very good idea of his views on science. His primary theme is that the best and most effective science is characterised by people who test hypotheses, but who refuse to believe their own hypotheses. Read and enjoy!

Finally in this issue we pay tribute to Paul Callaghan GNZM, FRS, FRSNZ, who died 24 March 2011.

On Paul's passing, technology columnist Pat Pilcher said:

Sir Paul was New Zealand's only scientific rock star, but why was that?

Why is it that we seem to have a nearly inexhaustible supply of sports people to idolise, yet only one high profile scientist? I don't know about you, but that strikes me as being more than a little bit alarming.[1]

I think you'll agree.

Allen Petrey
Editor

[1] http://www.stuff.co.nz/technology/6637654/Sir-Pauls-legacy-invest-in-the-future