

British Funding Growth Shames Australia

England may have comprehensively lost the cricket Tests to Australia, but a visit to the UK confirms that the Poms' commitment to science is racing away from the Aussies. With embarrassing irony, direct influence on the British resurgence has come from expatriate Australians. A concerted campaign of recovery there overshadows anything in Australia.

When "Iron Lady" Margaret Thatcher ruled the rainy isles she laid into universities with gusto, leaving institutions and researchers reeling. A decade later, John Howard's new government did much the same in Australia. But, 7 years into office, the Coalition is starting to recognise the damage to the nation of high stress in higher education.

While the Coalition bruits its 2001 Innovation Statement as the greatest boost to Australian R&D, the \$2.9 billion package is only stemming the slide relative to growth in the economy generally. The Statement (called *Backing Australia's Ability* by ministers and bureaucrats, to the mystification of the general public) has done little to enable the national R&D effort to compete with comparable nations. The average commitment to science by OECD countries is rising annually as the gap with Australia widens.

Thatcher's successor, John Major, responded positively to realistic scenarios by Australian Professor (later Sir and now Lord) Robert May, who became his Chief Scientific Adviser in 1995. Forcefully, May demonstrated how closely national investment in R&D is linked to subsequent long-term economic growth, stagnation or decline.

The momentum grew after Tony Blair's New Labour displaced Major's Conservatives. May continued in office and realised even greater results from his advocacy for enhanced government support.

Secretary [Minister] for Trade & Industry, Patricia Hewitt, is also Australian-born and educated (daughter of the redoubtable former Public Service head, Sir Lennox Hewitt). She has obtained substantial increases for UK Research Councils that, like their Australian counterparts, allocate competitive grants.

Science Minister, Lord David Sainsbury, told *Australasian Science* in London: "Spending on science and research via the Trade & Industry's science budget will accelerate from \$2.0 billion (A\$5.2 billion) in 2002-03 to \$2.9 billion

(A\$7.6 billion) per year by 2005-06, an average annual increase, in real terms, of 10%. Then, the science budget will be more than double that of 1997-98. This compares with an average annual increase of 7% during the previous 2 years."

This is mainly benefiting universities and does not include substantial support via operating funds and huge monies from the charitable Wellcome Foundation. By overall comparison, Australia is marking time.

Sainsbury is well-regarded in British scientific circles as he, Hewitt and Blair have delivered the goods. He became a Life Peer in 1997 after decades of wealth generation in his family's eponymous food company. That ended in 1998 when he took on the ministry.

Like Australia's Science Minister, Peter McGauran, Sainsbury is not in Cabinet but he voluntarily declared he would not draw a salary, thereby securing a degree of independence from political machinations and self-interested lobbying. This is reflected in the marked forthrightness of advice from the Office of Science & Technology, headed by the Chief Scientific Adviser (his first was May; now it's Prof Sir David King, a South African chemist from Cambridge University).

A widely expressed concern of scientists, though, is the UK's shift to "tied grants" defining favoured fields of research for which funding will be acceptable. This has parallels to Australia's declaration of "research priorities" and preference for short projects, rather than undefined "block grants" that scientists prefer for pursuing major questions in fundamental research as they arise – with unpredictable spin-offs.

Also, new schemes in both nations are not as generous as presented, when they require universities to provide "matching funds", which have to be squeezed from existing areas.

Oxford Commercialises

It is fashionable in Australia to despair of the prospects of generating a profitable cycle of research-led innovation. An encouraging model, observed at first-hand, is the rapid transformation of the Oxfordshire county from a depressed agricultural area into one of the most productive regions of the UK.

This has been achieved by tapping into its famous University, which had traditionally not bothered with commercial applications of its research. The non-profit Oxford Trust and its vibrant spin-off, Oxford Innovation Ltd, have nurtured the revolution. Now, 1400 high-tech firms employ more than 37,000 people (growing by 40% annually), and Oxfordshire is catching up with Cambridgeshire, which started down this track two decades earlier.

Geography Professor in Oxford University, Dr Gordon Clark, compares his native Australia unfavourably with the Oxfordshire achievement: "Successive UK governments have valued university-led research highly for being central to the nation's future. This stands in remarkable contrast to Australian govern-

ments' lack of commitment to universities. Here, we have a commitment to the long-term and more of a hands-off attitude."

Nelson's Trafalgar

For Australian R&D, much rides on the May Budget and Nelson's "reform" of universities. Speculation is rife and university leaders have been anxiously issuing statements to influence, probably vainly, the outcome.

President of the Australian Vice-Chancellors' Committee, Prof Derek Schreuder, has "challenged the government and the Parliament to make major changes in the funding and policy framework currently in place".

We now have some explanation from the government on its refusal to release the recommendations on National Research Priorities by its "Expert Panel" of scientists (*Razor*, March 2003). During a briefing with science reporters, Science & Education Minister, Dr Brendan Nelson, explained: "It was their work. I didn't think it was appropriate to release it. In the end, as the Minister, you have to make a decision yourself about what you're going to accept. You'll find that what was announced is very consistent with what they recommended. I said to them: 'I think we can cover what you've recommended in an even simpler way,' and they were very happy with it [the four key areas]."

Asked if it was a political judgement as to what would sell, Nelson replied: "Not everybody in the scientific community was as cooperative with them as they should have been, and for that reason I didn't think it was appropriate to release their report. I said to Jim [Dr Peacock, President of the Australian Academy of Science], 'I think we can cover everything that you have recommended to me in these four things,' and they were very happy with that."

So, the government did influence the Panel's recommendations. Questions about the unamended submission will

remain a running sore among those scientists who, Nelson alleged, were not "cooperative".

The government should not be adding more fog to war by hiding who drafted the fourth area. Its focus on national security seems to justify the contentious inclusion by CSIRO of the field of "defence research" in its agenda even though its purely civil role is defined legislatively.

CSIRO Budget is Crucial

In his briefing of science reporters, Nelson was quizzed on repairing the funding of CSIRO, which has been cut progressively in real terms since 1996. He responded guardedly but at least did not rule out some recovery:

Everything budgetary [is] considered with background of drought, slow world economies, war, money being spent on terrorism. I understand CSIRO's needs and it is one of the priorities in my portfolio... I certainly appreciate that CSIRO's sometimes got to take decisions and needs to support things that, if they were a purely commercial organisation, they wouldn't.

Questions continue to be asked, though, on how much Chief Executive, Dr Geoff Garrett, has shifted precious funding into expanding CSIRO's "business" area in the hope of greatly increasing its "external" income. Labor's Science Shadow Minister, Senator Kim Carr, has extracted from CSIRO that its Business & Commercial operation, directed by Mehrdad Baghai, has nearly doubled its expenditure from 2001-02 to a projected \$10.25 million this year.

Sustained probing has failed to clarify the prospects that Garrett will achieve his "stretch target" of \$1.3 billion from increases in both government appropriations and external earnings. There is no indication of a fallback position. What can Garrett do with his "Flagship Programs" if, as is widely tipped, he falls short of the target?



Lord David Salisbury
Photo: Peter Pockley

