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# President's column

## 2012 stability or continued upheaval

Will 2012 be the year in which recent changes in the science and innovation system are allowed to bed in, or will we see further upheaval? The signs are not good. The Prime Minister announced on 15 March that the Ministry of Science and Innovation (MSI) will be subsumed into a new super-ministry on 1 July that includes Economic Development, Labour, and that odd bedfellow, Building and Housing.

Calls for fundamental change have continued from within and beyond the system. Some commentators bemoan a science system that fails to deliver the economic benefits it advertises. Others are alarmed at a perceived takeover of the sector and a marginalisation of science by an economic growth agenda. Will the science that underpins the long-term wellbeing of New Zealanders, including the environmental and health sciences, wither under the new Ministry? Even those that are comfortable with a greater focus on economic development will disagree on whether public investment should flow through the universities or through the CRIs. How will more fundamental science, such as that supported by the Marsden Fund, fare?

These concerns are not new. The difference today is that they are now debated at the highest levels of government. Sir Paul Callaghan's message of economic growth based on science and innovation has been absorbed by politicians of every stripe, and Sir Peter Gluckman's political dexterity has kept science and innovation in the mind's eye of government. The current leader of the opposition, David Shearer, has retained the science and technology portfolio he held before the election, a signal of his intent to make this a key part of his party's policies.

In such circumstances, change in our sector is probably inevitable. The spotlight is now firmly on us, and the expectations of performance, both internal and external, are now enormous. Yet if the sector is to deliver, change needs to occur as part of broader government strategy.

We need to acknowledge that the way science is practised is also changing. Big scientific problems require big teams these days and our current institutional arrangements, with their high transaction costs and researcher-scale accountabilities, are ill-suited to meet such challenges. Putting together large, multi-institutional teams to tackle complex problems remains depressingly difficult in the New Zealand environment.

It is also clear that scientists today require more specialised skills than they did a generation ago and many of these skills are now acquired post-PhD. One or more postdoctoral fellowships have become an important part of a modern scientist's training. It will be easy for a super-ministry to lose sight of its responsibility to ensure that the best and the brightest have sufficient opportunities to undertake postdoctoral fellowships.

Indeed, as I write there has yet to be any policy response to the issues raised in last year's open letter concerning the lack of postdoctoral opportunities in New Zealand. This affects science of all flavours. I know of one high-tech business that will only hire people with postdoctoral research experience because it needs to know that they will be able to hit the ground running. NZAS will be hosting a conference on 16 April to address the broader issue of career paths for early-career scientists. Confirmed speakers at the conference include the Hon. Stephen Joyce and David Shearer.

Reflecting on my own career path, I see that two of the tools I used to establish myself in the New Zealand science scene, the ISAT travel grants and the NZ Science and Technology postdoctoral fellowships, are no longer with us. These schemes were both vital to my success in changing fields upon returning to New Zealand. They also helped me learn the craft of writing grant applications.

What are the most important gaps in the support for emerging scientists as they struggle to find their place in the New Zealand science system? Has the Performance Based Research Fund reduced the number of opportunities for emerging scientists ahead of the 2012 assessment? It is not easy to find answers to these questions. MSI struggled last year to ascertain even the number of postdoctoral fellows that were employed in New Zealand.

This highlights perhaps the biggest challenge facing the sector, which I believe is a lack of openness and a consequent lack of self-awareness. MSI have laudably just opened a web portal (<http://data.govt.nz/dataset/show/2376>) that allows users to search by organisation or keyword for grants awarded over the last twenty years by FRST. This is a great start, but you will struggle to use it to find out who did the research or what the outcomes were. If you query the Ministry of Agriculture and Forestry over who has been awarded funding under the Primary Growth Partnership, as one of our members recently did, you will be rebuffed on the grounds that that such information is commercially sensitive.

New Zealand is always going to be a small player on the global science and technology scene, yet we make ourselves even smaller by taking a fragmented, opaque and often haphazard approach to doing science. If the new super-ministry can address this, I will be all for it.

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