President's column

The last few months have been a busy time for the Association. The judging of our annual awards has been completed, and I am looking forward to celebrating with our winners on 12 November, in Wellington. Council also made an extensive submission on the draft National Statement of Science Investment, with a list of broad recommendations for the science system in New Zealand, as well as detailed comments on the structure and content of the draft document from the Ministry of Business, Innovation, and Employment (MBIE). The outcome of the consultation process is yet to be announced; we look forward to hearing more from MBIE in due course.

Our survey of scientists' experiences with the National Science Challenges was a great success, as measured both by the number of responses, and by the detail contained in the comments, that expressed both widespread mistrust in the current process and hope for an improved final outcome. We hope that MBIE are listening to our feedback, which we reiterated in our submission on the National Statement of Science Investment. We also hope that the Minister, post-election, is willing to reflect on the value of opinion that he himself does not solicit.

A proposal for the creation of a Code of Public Engagement, contained within the report on MBIE's Science and Society project report 'A Nation of Curious Minds'¹, is currently under consideration by the Royal Society of New Zealand. This has been the subject of some public concern, and resulted in the creation of a second survey, in which we aimed to collect information about both the level of concern in the scientific community, and the context for that concern: Do scientists in New Zealand simply need encouragement to engage with the public, or are there deeper structural issues which need to be considered? We introduced the survey by pointing to discussion of the issue in the media² including the suggestion that these changes are intended to prevent scientists from speaking out³ and also pointing to the current Code of Professional Standards and Ethics⁴ of the Royal Society of NZ, which addresses public communication in its consideration of ethical behaviour by scientists. We also referred to the concerns raised⁵ about the ability of scientists employed in our Crown research institutes (CRIs) to speak publicly, an issue which NZAS addressed in our submission on the National Statement of Science Investment⁶ with a recommendation that the boards of CRIs should be required to support the Royal Society of NZ's Code of Ethics, and scientists who speak out in accordance with that code. On the other hand, despite the statutory protection of academics who accept a role as Critic and Conscience⁷ there are also concerns that funding pressures in universities can still disincentivise public engagement.

A summary of the survey responses is available on our website.⁸ So what did we learn?

We certainly learnt that there is significant concern about this issue, both based on the number of responses received within the week that the survey was open (384) and the number of (often extensive) written comments (713).

We learnt that scientists care about ethics, with many respondents saying that though they had not previously looked at the RSNZ Code of Ethics, they felt it was consistent with basic scientific principles and that it was a useful document.

We learnt that there is definite cynicism about the intent of the newly proposed code. Whether or not this cynicism is justified, it speaks to the experience that individual scientists have had in speaking in public about their science, and the likely negative effects of implementing a code which cautions scientists against advocacy of any kind, given this background.

We learnt that the factors that prevent individual scientists from speaking in public include pressure from management, and the fear that negative perceptions might influence future funding. These fears extend beyond personal employment to concern for the careers of colleagues and team members.

We learnt that scientists in both CRIs and universities have concerns: the level of direction from management varies widely, but the issues of access to funding and the fear of disapproval from peers are shared across the sector.

We learnt that there is confusion about how to deal with individual bias – the same confusion, in my opinion, which has led to the idea that scientists should not be advocates. This is the point which I think requires mature discussion by the science community, and if the proposed Code of Public Engagement gives us a means to have that discussion, I think it a very good thing. The story of a CEO of a CRI vetoing the provision of scientific evidence to an environmental NGO, on the basis that association with the NGO would be detrimental to the prospect of commercial work from major clients, is only one illustration of this problem.

Individual bias is not the same thing as bias in the science system. Individual bias is addressed in the Code of Ethics by the requirement that research results must be represented fairly and without bias; there is also mention of the need to treat colleagues without bias. If I am honest, I think that these provisions in the code would be significantly strengthened by a mention of implicit bias, the insidiousness of which is that we are unlikely to overcome it unless we recognise the extent to which we all have it. However, individual bias is not the critical issue here. What has come most strongly through in the survey results, and what we should all consider, is the pervasive structural or strategic bias in our science system. The question of what science gets funded; or how public good and commercial imperatives are managed within our CRIs and, indeed, our universities, and how these are incentivised by MBIE.

Biased outcomes from our science system as a whole are driven by structural incentives, and to be honest, it seems unlikely that we will ever get those perfect. It seems that the best we can hope for is a culture in which individual scientists are encouraged to speak up when they see such biases in the system: to keep us all honest.

Thanks for participating. If you feel strongly about this issue, feel free to get in touch – our 2015 Conference (10 April, Wellington) will deal with the theme of scientists speaking out, and build upon the information collected in our survey. I appreciate all those of you who have already been in touch to share your thoughts.

Nicola Gaston President NZAS

- 1. http://www.msi.govt.nz/assets/MSI/Update-me/Science-in-society-project/science-in-society-plan.pdf
- 2. http://www.radionz.co.nz/news/national/255991/fears-proposed-code-could-gag-science
- 3. http://www.radionz.co.nz/national/programmes/morningreport/audio/20151859/scientists-fear-they-could-be-gagged-if-new-code-gets-green-light
- 4. http://www.royalsociety.org.nz/organisation/about/code/
- 5. http://publicaddress.net/9488
- 6. http://www.msi.govt.nz/update-me/major-projects/national-statement-of-science-investment/
- 7. http://www.legislation.govt.nz/act/public/1989/0080/latest/DLM183668.html
- $8. \quad http://scientists.org.nz/blog/2014/survey-on-the-proposed-code-of-public-engagement$