President's column

Science is global. It matters locally what happens internationally – especially in nations we are strategically aligned with socio-economically. A few weeks ago I attended the Australian Science Meets Parliament¹ where around 200 scientists sign up to meet with politicians. While they miss out on the architectural charms of the Beehive, the two-day event involves pitching ideas, science peer-networking and generally seeing how Parliament operates. But perhaps as importantly, it puts science on the agenda for politicians in a broad-brush sense rather than fire-fighting a single issue. For a month prior, the streets of Canberra were lined with promotional flags saying 'Science'.

With a recently signed Science and Innovation cooperative agreement spanning the Tasman², it is time for us in New Zealand to up our game in how science and politics interact. We have a Speaker's Forum where a select group of invitees get to meet and hear some talks. This has appealing facets but it has no public profile. It takes some skilful googling to even find out about what's on. New Zealand science needs more than this. At this point in time, how politicians address science and interact with scientists is pretty front-and-centre globally. In the face of things like: dismantling the US Environmental Protection Agency; our previous Prime Minister dismissing science as something where you shopped around for the desired answer³; and more recently, politics and science meeting around the debate over swimmable rivers, where science turned out to be either 'junk' or the truth⁴ – we need a greater understanding of science in our political corridors.

History judges these decisions and the politicians that make them – as long as we have the science to know, and the will to care. But it is more than reputation at stake. The 'Dunedin Study', based at the University of Otago, looking at longterm health trajectories, has recently revealed the impacts of a lead-soaked world of the 1970s and 1980s, showing that it actually impacted the cognitive abilities of a generation⁵. Geoff Gregory's NZAS history for 1974–1991⁶ details how initiatives to reduce lead were held back for a decade against scientific advice by political machinations – shame on them! How will today's decisions that fly in the face of evidence fare in decades to come? Nothing will change if voters and the wider public don't care about, or understand, science. Because of this, this year's NZAS Conference takes a slightly different tack to the recent past. We look at science at large in New Zealand. We may not always see them as such, but scientists are all around us, in our schools, boardrooms, our kitchens and on our farms. Their contributions can be found in our government, media, art galleries, and our imagination. If you've ever wondered where the science you learned at school has gone or where it could take you, then join us on June the 21st to look beyond the usual suspects and explore the world of New Zealand science at large. We'll be web streaming and archiving the talks for everyone to see.

We decided on the conference theme pre-Brexit, pre-Trump and before a politician held up a lump of coal in the Australian Federal Parliament to tell us how harmless it is while unprecedented heat waves roared across the country. Not wanting to go on about our prescience – but there's never been a more important time to understand the role science and knowledge plays in our societies, to understand the connections between science, belief and faith.

Unlike the warming-induced increased likelihood of extreme weather, there's little we can do about volcanic eruptions except early detection and workable response plans. In this issue of the *New Zealand Science Review*, Jenni Hopkins describes the complex volcano beneath New Zealand's largest city. The issue also contains an article focusing on the science communication achievements from the other end of the country. Jean Fleming, our 2016 Science Communicator medallist, leads an article on three decades of science outreach. There has never been a more important time to communicate science to all audiences, in any way that works.

Craig Stevens President

¹ https://scienceandtechnologyaustralia.org.au/what-we-do/science-meets-parliament/

 $^{^{2}\} https://www.beehive.govt.nz/release/australia-new-zealand-science-and-innovation-agreement-signed$

³ BBC Hardtalk, Broadcast 9 May 2011. news.bbc.co.uk/2/hi/ programmes/hardtalk/9480610.stm

⁴ http://www.radionz.co.nz/news/political/325235/water-quality-criticismbased-on-%27junk-science%27-smith

⁵ Reuben et al. *JAMA*. 2017;317(12):1244-1251. doi:10.1001/ jama.2017.1712

⁶ NZ Science Review 2014, vol 71(4): p. 89.