President's Column

I hope this update finds you well. This is the first President's Column in a year, and my first, due to the two fabulous double issues on Science and Mātauranga filling an entire volume of the *New Zealand Science Review*. If you're receiving this and haven't worked your way through the wonderful contents of those special issues, please go put them on your reading list.

So much has happened in 2020, there's a lot of ground to cover — even just to recap my bimonthly email updates to members. The undeniable top issue for 2020 has been COVID-19. As a nation, we all owe a debt of gratitude to many scientists who have risen to the challenge, and to the Government for being as good at acting on the science as we could ever hope. The most visible scientists include former NZAS president Shaun Hendy, who has led and communicated modelling efforts, and Siouxsie Wiles, who has maintained a tour-de-force of science communication. Our councillor Kate Hannah also deserves special mention for being at the forefront of combatting disinformation, which is a core agenda for our Association.

The pandemic has also had serious consequences for scientists and institutions. Scientists in the spotlight directly addressing COVID-19 have faced highly stressful workloads. Let's all ensure there is some reward provided through a sense of achievement and congratulations. Too often, they've faced unfair attacks and abuse rather the appropriate mix of pats on the back and constructive criticism we would hope for. For rank-and-file scientists, the pandemic has disrupted research plans, international collaborations, and created uncertainties plus extra work. Many have felt relatively well supported compared to what other sectors of society have faced. Despite this, early-career scientists (ECRs) on fixed-term contracts face uncertainties that continue to ramp up to extreme levels.

NZAS Council, in April and in September, put forward statements proposing ways to stabilise and protect science and scientists from the pandemic's logistical and financial chaos. You can read these statements in this issue. The most concerning topic remains the precarious prospects of ECRs, as budgets continue to tighten, particularly in universities, combined with inseparable issues with diversity in the science workforce.

This year started with major findings from Ann Brower and Alex James that female academics earn markedly less during their careers than their male counterparts. Since then, multiple pieces of work by Tara McAllister, Sereana Naepi and others have shown how underrepresented Māori and Pasifika are in research, and specifically in science. The Royal Society of New Zealand has released a major report by ECRs about the ECR problem we face, highlighting a structural career

gap and its diversity consequences, and how dramatically worse it will become as a result of the pandemic.

Our ECRs and the interrelated issues with diversity are far from the only problems in our science system, but I think they deserve the most urgent attention. Recognition of this problem was a highlight of the panel representing the political parties, held with the Public Services Association and Te Herenga Waka Victoria University of Wellington's Centre for Science in Society. Despite recognising the problem, politics does not recognise a solution.

To solve the ECR problem, what we need is a solution resembling the proposal in our September statement: urgent funding for a minimum of 50 ECR positions, and a system that recognises and manages the ECR challenge New Zealand research, science and innovation (RSI) faces going forward. We desperately need to ensure two things: the energising role vibrant post-docs play in a healthy, diverse research system, and the career paths post-docs provide for science careers across research, academia, industry and government.

Wider issues were raised by the recent Crown Research Institute Review, known as Te Pae Kahurangi Report, and in a report issued in August by MBIE's three Science Advisors. Both find the pandemic's likely impact seriously concerning, with the latter group concluding, 'the financial and structural impacts of the pandemic mean that the RSI sector is currently vulnerable.' Our Council at NZAS has concluded that bold reform is needed.

We'll shortly be rolling out a proposed agenda for changes to stabilise and improve our science system. This is an important time for us to also try to strengthen NZAS as leader for the sector, building on the role of the NZAS President in the media, and on meetings and statements to get action behind the scenes. We'll be seeking new faces and new energy to join our Council, working towards developing an independent ECR group, as well as stronger links with other societies and wider representation across New Zealand. The upcoming year will be difficult for many of us, but also represents a great opportunity to stand together to build the science system that Aotearoa will be proud of for years to come.

Prof Trov Baisden

President – New Zealand Association of Scientists University of Waikato