

# Minutes of 59<sup>th</sup> Annual Fellows' Forum of Royal Society Te Apārangi

The meeting was held on Wednesday, 16 April 2025 at Royal Society Te Apārangi, and via Zoom

**Present:** Geoff Chase (AEC Chair), Susy Frankel (AEC Deputy Chair), Jane Harding (President), Anthony Hōete (AEC Co-Convenor Māori Knowledge and Development), Tim Naish (AEC Domain Convenor Physical, Earth and Mathematical Sciences), Nancy November (AEC Convenor Humanities), Cather Simpson (AEC Domain Convenor Technology Applied Sciences and Engineering), Skelte Anema, Rodney Badcock, Richard Bedford, Dick Bellamy, Frank Bloomfeild, Neil Boister, Viginia Braun, Elissa Cameron, John Caradus, David Chapman, XiaoQi Chen, Andrew Cleland, Charles Clifton, Tony Conner, Fred Davey, Cornel de Ronde, Gill Dobbie, Renwick Dobson, Roberta Farrell, Nigel French, Neil Gemmell, Murray Grant, Christian Hartinger, Philip Hill, Simon Holdaway, Sue Huang, Lynda Johnston, Carwyn Jones, Estate Khmaladze, Susan Marshall, Stuart McNaughton, Snejina Michailova, Nicole Moreham, Wendy Nelson, Vincent O'Malley, Nigel Perry, Elaine Reese, Martin Reyners, Mark Richards, Mary Sewell, David Skegg, Murray Thomson, Yvette Tinsley, Hugh Tyndale-Biscoe, Qiao Wang, Bruce Weir, Colin Wilson

**Apologies:** Cliff Abraham, Doug Armstrong, Martin Banwell, Gil Barbezat, Barbara Barratt, Andrew Barrie, Richard Beasley, Alan Bollard, Ann-Marie Brady, Barbara Brookes, Neil Broom, Ian Brown, Rowland Burdon, Carolyn Burns, Garth Carnaby, Owen Catchpole, Murray Close, Marston Conder, James Crampton, Kevin Davies, David Elms, Cynthia Farquhar, Peter Fineran, Richard Furneaux, Gail Gillon (AEC Co-Convenor, Māori knowledge and Development), Janet Grieve, Parry Guilford, Jarrod Haar, John Harper, Debbie Hay, Judy Hewitt, Charles Higham, Rod Jackson, Geoff Jameson, Joanna Kidman, Carolyn King, Robyn Longhurst, Gaven Martin, Bruce Melville, Tony Merriman, Alan Merry, Miriam Meyerhoff, Roger Morris, Nick Mortimer, Ravi Naidu, Charmian O'Connor, Julian Paton, Ian Reid, Stephen Robertson, Anne Salmond, David Schiel (AEC Domain Convenor Biological and Environmental Science), Hamish Spencer, Rachael Taylor, Stephen Todd, Colin Townsend, Jadranka Travas-Sejdic, Kevin Trenberth, Jason Tylanakis, Barry Welch, David Williams, Shane Xie.

**In attendance:** James Henry, Paul Atkins, Marc Rands

## 1. Welcome

Geoff Chase welcomed Fellows to the Forum, and Anthony Hōete gave a karakia.

## 2. Valedictories

Geoff Chase announced the deaths since the last Annual Forum of the following Fellows and a minute's silence was observed:

- **Emeritus Professor Max Cresswell FRSNZ** (Victoria University of Wellington) 1939-2024. Max Cresswell was one of New Zealand's most original philosophers, working in logic and reasoning, becoming a world leader in 'modal' logic, and the theory of meaning in natural languages.
- **Professor Roy Daniel FRSNZ** (University of Waikato) 1943-2024. Roy Daniel was a renowned biochemist and co-founder of the Thermophile Research Unit at the University of Waikato, working on enzyme properties from organisms in New Zealand's hot springs and those in Antarctica.

- **Professor Diana Hill CNZM FRSNZ** (University of Otago) 1943-2024. Diana Hill contributed to major global advances in molecular genetics, developing novel DNA, protein analytical methods, and to the application of molecular tools to human medicine and farm animal genetics.
- **Professor Roger Keey FRSNZ** (University of Canterbury) 1934-2023. Roger Keey was a chemical engineer who conducted cutting-edge research into drying science, including the batch drying and kiln-drying of timber, and a variety of manufactured goods.
- **Professor Angus Macfarlane CNZM FRSNZ** (University of Canterbury) 1946-2024. Angus Macfarlane earned national and international standing in developing indigenous and sociocultural imperatives that influenced practice within education and psychology.
- **Professor Tony Macknight FRSNZ** (University of Otago) 1938-2022. Tony Macknight studied the transport pathways involved in the production of the aqueous humour and developed a computer-based data recording and analysing system for physiological signals for use in biomedical teaching and research.
- **Emeritus Professor Sir Harold Marshall KNZM FRSNZ** (University of Auckland) 1931-2024. Harold Marshall was head of the Acoustics Research Centre working on the acoustical design of performance spaces and the development of the "MIDAS" software for digital acquisition of acoustical data.
- **Emeritus Professor David Penny CNZM FRSNZ** (Massey University) 1938-2024. David Penny was a theoretical biologist who improved mathematical methods for evolutionary analysis of DNA sequences, and testing whether the processes of microevolution (genetics and population processes) were sufficient for long term evolution.
- **Emeritus Professor Alan Poletti FRSNZ** (University of Auckland) 1937-2024. Alan Poletti was Professor of nuclear and quantum physics at the University of Auckland, and a member of the international advisory committee that studied Mururoa Atoll, and the safety of nuclear-powered ships.
- **Emeritus Professor Raymond Ralph FRSNZ** (University of Auckland) 1932-2024. Raymond Ralph was a molecular biologist working on the control of plant and animal cell growth and cancer, including the mechanisms of plant virus replication and the action of topoisomerase inhibitors as anti-cancer agents.
- **Emeritus Professor David Vere-Jones FRSNZ** (Victoria University of Wellington) 1936-2024. David Vere-Jones made fundamental research contributions in probability, statistics and the mathematical sciences in general, and is best known for his work on forecasting earthquakes and earthquake risks.
- **Emeritus Professor Ian Wood FRSNZ** (University of Canterbury) 1930-2025. Ian Wood was an international leader in fluid engineering and fluid mechanics, focusing on the flow of stratified fluids and the problems involved in power station cooling ponds, the dispersion of effluents in rivers, and the prevention of cavitation on large spillways.
- **Dr Dianne McCarthy CNZM ONZM CRSNZ**, 1949-2025. Dr McCarthy served as both as both Council member and Chief Executive for the Society. Dr McCarthy was recognised for her research in behavioural neuroscience but will be most remembered for her leadership in science, research, and education, particularly for women.

Obituaries have been or will be lodged on the Royal Society website as they are provided.

### 3. Report of Academy and remarks from Chair of Academy, Distinguished Professor Geoff Chase FRSNZ

Good morning everyone and welcome to the 59th Annual Fellows' Forum of the Royal Society Te Apārangi. Yesterday we welcomed 23 new Fellows into the Academy, and the selection panels for this year's Research Honours Aotearoa medals and awards are currently being put together. There are three positions on the Academy Executive Committee currently inviting nominations, Domain convenors for: Biological and

Environmental Sciences, Social and Behavioural Science, and Technology, Applied Science and Engineering. Thank you.

## 4. Report by the Chief Executive, Paul Atkins

Nau mai haere mai. Welcome. Ko Paul Atkins toko ingoa.

I'd like to take this opportunity to offer a very warm welcome again to our new Fellows. The Society's Academy is a central pillar of the organisation and it is a great privilege to welcome you into it. One of the messages we have received very clearly over the past year or so is the desire for our Fellows to be more engaged in the activities of the Society and we continue to explore new ways of doing this. The development of the Expert Perspectives work is a case in point where we are asking experts, largely (but not exclusively) from the Academy to provide insights on various topics from different expert perspectives. The first of these are due to be published on our website in May, , developing 5-6 different perspectives on a subject, not seeking a consensus but offering different viewpoints. We are also continuing with the additional opportunities for our Fellows to meet and discuss topics of interest, scheduled around the annual Research Honours events in November. We have also started a trial of a mentoring scheme for Fellows and ECRs – something requested in the past and now up and running. My hope is that can be widened out in the coming year. If there are other ideas, please talk to Marc.

Since we last met in 2024, our President-elect, Distinguished Professor Dame Jane Harding has taken over as President. Jane will give her report after this so I'll say no more other than to very warmly welcome you to the role you have been in for over 9 months now! I'm sure Jane will talk about the governance review in her presentation.

Last year I spoke about the turmoil being experienced across the whole system in which we all operate, and the pain and anxiety that was causing for so many. It is with some regret that I cannot say we are now past that period. In fact, the global situation has become far more challenging, adding to the ongoing uncertainty within our own national system. We will have the opportunity to hear a bit more about this from Jonathan Boston in a few minutes, and to discuss as part of this forum. At the national level the Society continues to engage actively with decision-makers and advisers within our own domestic system to inform and influence the changes being proposed.

On the world stage our membership of the International Science Council is an important element of the Society being able to be more engaged with and contribute to world affairs in our sector of interest, and especially through our close work with the Committee for Freedom and Responsibility in Science (CFRS), with our own Gustav Kessel being the Special Adviser to the CFRS. The ISC's recent publication of the CFRS's work on The Right to Participate in and Benefit from Science was considered by our Council at their last meeting and has been endorsed for further promulgation in New Zealand. This is the kind of work we at the Society do not have the capacity or reach to do on our own, but through the CFRS are able to contribute to and benefit from some very careful and excellent analysis and communication. I should note that not only did Gustav play a leading role in this work, but Associate Professor Krishil Watene from the University of Auckland was also on the committee.

Also on the topic of international partnerships, the Tri-Academy Partnership on Indigenous Engagement, a partnership between the Society, the Australian Academy of Science and the Royal Society of Canada, resulted in the first of three conferences being held in Vancouver in November on the subject of Cultural Heritage in an Era of Reconciliation. The conference explored how Indigenous perspectives on the sciences, social sciences, humanities, and other areas of scholarly endeavour may provide an important part of our journey toward reconciliation. The delegation from our Society included eight Māori Fellows of the Society, the President and

three staff. We will be hosting the second conference in this series in Auckland in November this year. More on that in due course. The third conference will be held in Australia in 2026.

At home, our work across all facets of the Society has continued in strength. There is far too much to be able to illuminate here, but I would like to mention the outstanding success of our publications in the past year, the impact we continue to have in schools, especially with teacher leaders, the very professional management of our contracts for research funding, especially when considering the pressures and changes of late last year.

There has, of course been very much more than this going on during the year and I would like to thank my colleagues in the Society for their outstanding work, our Council and AEC for their commitment of time, energy and injection of wisdom, and to Jane for her unstinting leadership and support.

Our Academy is the pillar of our organisation and we welcome new Fellows into our midst and thank our existing Fellows. I am looking forward to engaging with you in coming months and for us collectively and demonstrably making a difference for our country.

## 5. Report by the President, Dame Jane Harding FRSNZ

Tēnā katoa katoa. It is a pleasure to talk with you today and hopefully there will be time for discussion. I would like to acknowledge Paul's leadership of the many things that have been going on over the year. Repeating some of the points Paul has touched on:

First, there is a lot going on. It is a tumultuous time, and we need to look after each other during these times. Some of the announcements of the reviews of the Science and University systems have already had big impacts on our members and more will likely do so in the future. That is something we need to deal with and support our membership, while not turning into a trade union. We are not the employers of our members. We have the dilemma of wanting to support our members but needing to speak for the system as a whole rather than the affected individual. So, some may be unhappy how we haven't advocated on behalf of particular people, but our role is to focus on the system.

For the abrupt change in Marsden funding system, we had three days' notice of the change. This led to unhappiness of some members about why we didn't speak up about the changes much earlier. Some have wondered if it was because of our financial commitment to the running of the Marsden fund. We could and perhaps should have spoken up earlier about the implications of the changes for New Zealand. But the fact that we are contracted to administer funds must not ever impact on our statutory role to advise government. We had a contract to change the rules of the Marsden Fund, but a statutory obligation to say that we think those changes are wrong. The lack of funding for humanities and social science is short-sighted and needs to be addressed. So, we have a dual role in this and other areas, and. I hope you will help us with both of these roles.

Then there have been the changes around the world, and particularly the threats to science systems, academic systems and freedom of speech. As Paul has already mentioned, we have recently endorsed the International Science Council statement on the [right to participate in and benefit from science](#). This is a helpful and clear statement on how important access to science is for the world. I hope we can all support that and the activities that will stem from it over the coming months.

My second point is around the change in the Society's governance structure, which started with consultation on a proposed change in September. There were over 100 submissions, roughly divided equally between pros and cons, many giving both viewpoints and coming from all membership groups. Taking on board these many viewpoints and after many subsequent revisions, Council has now adopted a revised proposal that was communicated in a letter to members recently. The aim of this change was twofold: first, to create an up-to-

date and efficient governance decision-making structure; and secondly, to enhance engagement with the Society membership. To achieve the first, the revised council structure is smaller, but without changes in representation for the Fellowship, the Māori electoral college or the Branches. The decrease in numbers is in the additional elected members, who will now be drawn from a broader electoral college. There will be a call for nominations from all members for the new Councillor to be elected to start in July, with a position description informed by the matrix of skills already available and also seen as desirable around the Council table. In terms of improving engagement with membership, the original proposal included an advisory group, but the revised proposal now adopted includes a forum twice a year for each membership group. Some of these already happen, but some membership groups do not currently meet at all. Each forum will be attended by some Council members, and the minutes and actions items from these fora will come back to the whole Council, to improve communications with Council. There will also be elected contact people for each membership group, who will be the points of contact with the Society staff. We hope that this will help with greater engagement of all members with the Society and its vision.

Thirdly, I would like to mention the centrality of the Fellowship for the society as a whole. There are approximately 1400 members in total, but it is the Academy of Fellows who make the greatest difference for our key objectives of advice to government, promotion of education, and support for disciplines as a whole. Geoff and Paul mentioned earlier there are some opportunities coming up, and we would love to hear from you about what you would like to be involved with. Last night I mentioned that the very fact we are a multidisciplinary academy is important, engaging across disciplines and across the country. We need to harness these strengths for the country and for the world, in this tumultuous time.

Finally, I would also like to mention the recent passing of Di McCarthy, who as CEO of the Society was involved in building the Society's new buildings, amongst her many other achievements, and who was a friend and mentor of mine and of many of you for a very long time. She will be sorely missed.

## 6. Presentation on the growing threats to truth, science and democracy: why it matters and what can be done (Emeritus Professor Jonathan Boston ONZM, Emeritus Professor of Public Policy, Te Herenga Waka – Victoria University of Wellington)

Professor Boston gave a presentation on the growing threats to truth, science and democracy: why it matters and what can be done and circulated the recent Trump Administration's letter to Harvard University.

Key points from the subsequent discussion included:

- Europe was emerging as a strong regional block. It was also felt that if people didn't have a stake in something, they were quick to want to destroy it. How was it that people didn't feel that they had a stake in universities, and in New Zealand how can we strengthen people's stake in universities?
- Is there anything we can learn from history? During the French revolution the French Academy of Science stood up to Napoleon, but the German Academy did not do the same to Hitler. Now the French Academy is strong but the German Academy is not.
- There is association between democracy and engagement with science. In Europe there is declining democratic action and declining engagement and participation in science. How do we counter this and encourage participation. Current science engagement seems tokenistic.
- I am an optimist about the place of education. We did have participatory science through the Nation of Curious Minds programme, which was recently cut. Perhaps this could be reinvented, as there was a weak response in its evaluation of engagement with communities. NZ English students are some of

the best in Civics education, and it is also covered in the revised maths curriculum around statistics, and in the History of Aotearoa curriculum.

- In the context of Academia, there are continual pressures and constant demands. When do we know the point of “business as usual” is no longer tenable? What is our job when this happens?
- The wealth gap of different parts of society can explain where we are. The gap is unprecedented and the challenge is that it further disenfranchises poorer communities. The language we use may also further disenfranchise those who don’t feel the same way.
- The current technological changes may be a solution to the ecological changes we are also facing, enabling us to engineer solutions.

Geoff Chase thanked Professor Boston for his presentation and the great discussion it prompted.

Anthony Hōete gave a closing karakia to end the meeting.