

Early Career Voices from a Changing Research System

Foreword

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Aotearoa New Zealand's research landscape is undergoing a profound transformation. Restructuring across universities, polytechnics, and newly formed Public Research Organisations (PROs) has reshaped not only how research is organised and funded, but also what it feels like to build a career within it. These changes are unfolding amid tightening budgets, growing geopolitical instability, and escalating climate pressures, alongside a broader global crisis of trust in research. This collection brings together the voices of early career researchers (ECRs), whose reflections show how a system in crisis is experienced and navigated at a human scale, while also highlighting the resilience, creativity, and solidarity that point toward pathways forward.

Across disciplines and institutions, a common pattern emerges: the research career pathway in Aotearoa has fractured into cycles of temporary contracts and financial uncertainty. "Research now relies on invisible, unpaid time and constant self-funding" one marine scientist observes, concluding "precariousness has become our normal" [2]. A geographer describes having "lost track of how many fixed term contracts I have had" [6]. Many ECRs describe the financial pressures shaping their careers and threatening their ability to pursue their ambitions as researchers. One reflects: "I feel like survival in this environment to date has been due to my ability to stretch my personal finances between opportunities as I do not have dependents" [11]. Postgraduate students "struggle to know what opportunities might be available for us as we finish our PhDs" [12], an assessment echoed by a PRO researcher, who writes that the situation has deteriorated to the point where "I feel taking on a [PhD] student would be a disservice to them" [4].

What emerges is not merely personal hardship, but a systemic pattern driving talented individuals out of research and out of Aotearoa. Many contributions speak candidly about abandoned research careers and colleagues who have left the country to pursue opportunities overseas. "Almost all of my [PhD] cohort has been forced to leave New Zealand—not because they want to, but because there are no jobs available," one contributor observes [1]. The result is a hemorrhaging of expertise, passion, and institutional knowledge. "[W]e have lost NZ-grown researchers, who were or will be the supervisors and mentors for the next generation of scientists," one contributor reflects [3]. Early career researchers whose mobility is limited—by visas, caregiving, or other personal commitments—face barriers

that compound into career dead ends. "Life choices—such as staying close to whānau, supporting a partner's career, or raising children—are entirely valid, yet the academic system often treats them as professional liabilities," one researcher reflects [10]. A contributor who, after over 70 applications, has been unable to secure a permanent job describes the bind: "as my children were still at school, and due to my partner's work, I was limited to staying in my home city and so could not apply for overseas post-doctoral positions" [6]. Together, these voices reveal a system that does not support the researchers it trains – a challenge that persists despite widespread recognition and repeated calls for change (Cameron et al. 2025; MBIE, 2021, (2022); Simpson et al., 2022; Truax, 2022).

Beneath these personal accounts lie structural tensions around the purpose and value of research. Many researchers were "drawn to this work by a kind of idealism and the belief that we could spend our days doing something that mattered" [2], a belief shaped by a time when research funding was more stable. This commitment to public good work now conflicts with a shift toward commercialisation and output-based funding (e.g. "incentivising commercial outcomes" and "to deliver growth to the New Zealand economy and value to the private sector"; MBIE, 2025). "We worry that the impact of research for public good will go unnoticed (and unfunded) because good, life-changing research doesn't always make money, at least not in a short-term or measurable way" two PhD candidates reflect [12]. Others describe pressures within a "corporate model" where every hour must be accounted for, profit is the priority, and long-term projects are difficult to justify [4,8]. Contributors reflect on the dissonance between their passion for work that expands the frontiers of knowledge and a landscape that "feels reminiscent of the consulting scene, rather than the public-good research sector" [8], feeling they "didn't sign up for this" [4].

Across PROs, universities, and polytechnics, contributors describe the impact of redundancies, shrinking budgets, shifting priorities, and vanishing resources. They describe financial cuts that "will have lasting consequences for the quality, capability, and future of research in Aotearoa" [9]. As one contributor writes: "I feel like my work has never been more important, yet at the same time it seems to me that the funding landscape is collapsing around us" [2]. The cumulative effect is an erosion of trust, optimism, and shared purpose. "[M]y mood is bleak," one

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PRO researcher admits [4]. “I’ve seen established mid-career scientists lose their livelihoods with no notice. As a young scientist, this has been quite demoralizing,” another observes [1]. A marine scientist describes how scarcity transforms community: “The generosity and curiosity that once defined this community are being replaced by fear and competition,” confessing “I’ve caught myself feeling jealous instead of happy for my friends and colleagues when they manage to secure funding, and I hate myself for it” [2]. The psychological toll is evident in stark assessments of career viability: “I feel like I’m on a sinking ship,” one contributor reflects [2], while a PRO researcher concludes that “[research] is not a career I’d recommend to my children” [4].

Yet amid the disillusionment, resilience and solidarity also shine through. Throughout, ECRs write with deep commitment to their work and to one another, finding ways forward within a system in crisis. “Research at ITPs [Institute of Technology and Polytechnics] has succeeded through grit of the researchers and out-the-box thinking and collaboration with industry and community” [7]. Across institutions, researchers support one another: “Despite the pressures on the polytechnic system, universities and public research institutes, many people have made time for me, worked hard to keep me involved, and even helped me circumnavigate funding freezes to attend workshops and conferences” [11]. Others describe maintaining mentorship commitments and investing in future generations: “Each year, I supervise three to four Master’s students and two to three summer studentships, as well as meeting high school students for outreach. It is a privilege to be able to provide

research training and mentorship, just as I was supported when I was a student” [3]. Some hold onto belief in the work itself: “I still believe in what brought me here and that there may be better times ahead” [2]. One looks to the future: “I hope that the science reform and new funding system encourage retention of emerging researchers, so that we can continue to pass the baton and keep NZ science opportunities open for the future” [3].

It is also worth considering who we are hearing from in these stories. Equally important are the voices of those who are not explicitly featured in these essays. A number of researchers responded eager to contribute something, but they simply did not have the time or capacity to collate their thoughts into a coherent submission. Also missing are those who felt they couldn’t contribute without prejudicing their future employment, even when given the option to publish anonymously. While on this page we can only guess at the stories those voices would tell, we encourage our readers to talk to the ECRs around them and hear the voices we were unable to print.

Early career researchers are the future of discovery and innovation in Aotearoa New Zealand, and they will inherit the system that is currently being reshaped in so many dimensions. Their reflections reveal the research environment’s strengths and vulnerabilities: the dedication, skill, and expertise that sustain it, alongside the pressures, uncertainty, and inequities that limit opportunities and shape career paths. Ultimately, these stories are not just about individuals, but about how we shape our future society and cultures.

1. Eroding Foundations of Science in Aotearoa: An International Early Career Researcher Perspective

Anonymous

As an international student, I came to New Zealand for my PhD in earth sciences, full of excitement and optimism. I chose to come here to work with specific supervisors, with the goal of joining the vibrant research community that I had interacted with in the early stages of my scientific career. In my department, the PhD students were nearly all international students who were drawn here from around the world, attracted by the expertise, lab spaces, funding and research landscape that New Zealand had to offer. However, over the course of my studies here, I have watched as our department and others across the university (and the country) have faced massive cuts to staff and resources. While universities are “saving money”, PhD students are paying the price both literally and figuratively. Without technical staff, postgraduate students continue lab and field work unsupported. Timelines are extended as the loss of technical expertise places more and more burden on students – who are then left to pay the bills when scholarships end. These losses also make New Zealand programs less attractive to potential new students. In my own department, senior professors were forced to apply for “voluntary redundancy”, retiring early to save the university

some cents, rather than being celebrated for their long careers and commitment to New Zealand science. Outside of the university space, the same pattern of loss of jobs and loss of resources has blighted New Zealand’s Crown Research Institutes. I’ve seen established mid-career scientists lose their livelihoods with no notice. As a young scientist, this has been quite demoralizing. More and more of my peers are turning away from academia in search of job security and a liveable wage.

Now that I am finishing my PhD, almost all of my cohort has been forced to leave New Zealand – not because they want to, but because there are no jobs available. Recent PhD graduates from NZ are all heading abroad, to Australia, Europe and the USA, in order to find the opportunities that are actively being cut in New Zealand. This is a massive tragedy for the New Zealand science community. So many bright minds from around the world are enticed to come here, and are then forced out with no way to give back to the universities and institutions that trained, paid and supported them.

As an early career scientist, the last few years have been quite bleak. My hope is that the new restructuring will

improve the New Zealand research landscape by valuing the expertise it produces in young researchers and creating pathways for secure careers. Amongst economic uncertainty

and global chaos, early career scientists are prioritizing stability at the cost of scientific innovation because there appears to be no overlap between the two.

2. The Price of Staying: An Early Career Researcher's Perspective on a System in Crisis

*Anonymous*²

Few of us became scientists to make money. Most of us were drawn to this work by a kind of idealism and the belief that we could spend our days doing something that mattered. For me, that meant understanding and protecting the oceans whilst enabling people to live, looking for “sustainability”. The tools I use allow us to do so with reduced harm to wildlife. The work is both technical and deeply human: it’s about understanding how we fit into the ecosystems we depend on and that’s why I love it.

When I moved to New Zealand a few years ago, I was full of hope. I had found a role that combined everything I cared about: marine science, fieldwork, and a culture and colleagues that valued teamwork. The first year was full of learning and excitement, I went into the field often, soaking up every bit of knowledge I could. Within months I was leading my own fieldwork which was a huge responsibility, but I loved it. Those were the good times.

The price many of us pay for this kind of sense of purpose is not small. My career has taken me far from home across the globe, and into long stretches of time away from my partner, friends, and family. I’ve spent months in the field, sometimes in places of staggering beauty, sometimes in places stripped bare by human pressure. I’ll never forget seeing a bleached and lifeless coral reef or searching for fish in an area where there simply weren’t many left to find. You can’t unsee moments like that. They make you both more determined and more tired.

In parallel with nature, I began to notice how fragile the work system felt as every hour of our work has to be charged to a specific project. When the hours run out, the work doesn’t stop it just moves to the evenings or weekends, quietly unacknowledged. I remember being given seventy hours to work on a high-profile project, knowing it wasn’t nearly enough. But I kept going, late into the nights, because I believed in it. I presented the results at a conference, proud and exhausted, thinking it was just the start.

It was, in a way the start of understanding how much of research now relies on invisible, unpaid time and constant self-funding. Since the recent budget cuts and restructuring, that precariousness has become our normal. The work that was once the backbone of my role has been cancelled or postponed. Now, I piece together hours where I can – helping with field prep, writing literature reviews and mentoring students.

I feel like my work has never been more important, yet at the same time it seems to me that the funding landscape is collapsing around us. The Endeavour Fund is no longer being advertised, removing one of the few remaining options for large-scale research. The Tāwhia te Mana Research Fellowships could have been a lifeline, but I fell through the cracks in eligibility. What I always loved about science was collaboration, teamwork, friendship, the shared values and the drive for new knowledge – all being eroded by scarcity.

Everyone is fighting for their seat at the table, their hours, their jobs. The generosity and curiosity that once defined this community are being replaced by fear and competition. I’ve caught myself feeling jealous instead of happy for my friends and colleagues when they manage to secure funding, and I hate myself for it.

I put my faith in this system. I brought my partner here, believing we were building a life in a country that valued science and sustainability. Instead, we are watching that vision crumble. We don’t own a home and just about can’t keep up with the rising cost of living. The security I once felt in my work has disappeared. And yet, I still believe in what brought me here and that there may be better times ahead if I just sit this one out. But then I see my friends and colleagues leaving, looking for jobs elsewhere and abroad, not because they were made redundant, but simply because they have had enough. I feel like I’m on a sinking ship, and because I want to stay and am too tired to start over somewhere else, I might just go down with it. I guess that all depends on what happens next.

3. Perspectives on the science reforms: Keeping the door open for a career in science for future generations

*Haruna Suzuki-Kerr*³

I am currently an academic researcher at the University of Auckland, where I co-lead a programme of work with my mentor, Prof. Peter Thorne, on a mission to develop a new approach to diagnose and treat sensorineural hearing loss, a permanent form of hearing loss. It is a great privilege

to be part of the research journey, which, if successful, will significantly enhance the treatment options available for this condition in the future. In this opinion piece, I share my perspectives as a researcher who was educated through the New Zealand science system.

²This essay reflects the personal perspective of an early career researcher working in marine science. It does not represent the views of any organisation or employer. ChatGPT (GPT-5 Mini) was used only for grammar and structural suggestions; all other content and reflections are my own.

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Whether it is fossils, insects, stars or the human body, science sparks curiosity in children, and some will later realise this as their calling. The changing research systems and science funding ask us to consider how we want to provide those children in Aotearoa New Zealand with opportunities to be educated as scientists, and to be given an option to pursue a science-based career. I was one of those children who wanted to be a scientist. Most memorably, my first real research training opportunity came when I had a 10-week summer studentship offered by the University of Auckland at the end of my 3rd year of a Bachelor of Science degree at the University. As an undergraduate student who aspired to be a scientist, I thought, “I get to be a member of a research team in the lab, learn how to use laboratory techniques and be mentored by supervisors who are amazing vision scientists! This is a dream come true!”. Because I loved the internship so much, I subsequently became a postgraduate student, pursuing my Bachelor of Science with Honours and then a PhD.

A PhD qualifies you to be an independent scientist, but this comes with a catch: in many University sectors, you need to secure your own research funding. “Having a job” at the University or a research institution is generally dependent on the funding, and each position is usually only available for 1–3 years. This is often called “survival” because you are constantly looking for the food (i.e. next funding) simply to continue your (research) life while balancing everything else. I received funding to work at the University of Tokyo, Japan, for a few years, and I then took a ~5-year career break to regain some balance with my parenting life. After moving back to NZ and re-joining the University of Auckland, I restarted my “survival”. I submitted over 60 funding applications to transition from a part-time to a full-time position at the University, with

tremendous support from my mentors in strategising and developing resilience. On the bright side, though, I had now become a supervisor and a mentor to the next generation of scientists. Each year, I supervise three to four Master’s students and two to three summer studentships, as well as meeting high school students for outreach. It is a privilege to be able to provide research training and mentorship, just as I was supported when I was a student.

The recent tightening of the science budget makes the tough “survival” of emerging researchers even tougher, from what has already been pointed out by many (Bennet et al., 2024; Lee and Ben-Tal, 2024). A number of NZ-grown researchers with genuine passion and talent for science have left academic research due to the lack of funding. On an individual basis, it’s one person’s dream job gone. But for NZ, we have lost NZ-grown researchers, who were or will be the supervisors and mentors for the next generation of scientists. I, along with many others, wouldn’t have had opportunities to be trained and to “have a go” at careers in science if it weren’t for our supervisors and mentors at the University. While the science-based job opportunities may broaden in the future, the educational training to become a scientist will still rest with the university. To support those science-minded children and to give them the opportunities to test their dreams of becoming scientists here in NZ, we need to retain a good pool of academic researchers who can support them.

The reform of science systems has an impact not just on current researchers. It is relevant to all of us who want the next generation in NZ to receive quality research training opportunities. I hope that the science reform and new funding system (MBIE, 2024) encourage retention of emerging researchers, so that we can continue to pass the baton and keep NZ science opportunities open for the future.

4. Corporate intent in the New Zealand science system

Anonymous

As an early career researcher at a New Zealand Public Research Organisation (PRO) my mood is bleak.

In the long term this is a consequence of systemic undervaluing and underinvestment in science in New Zealand generally. Combined with the corporate model of science delivery embodied in the PRO system, this results in high overheads and little money left for science. More immediately, this is due to losing experienced colleagues to redundancy to meet the shrinking government funding while the organisation maintained major capital expenditure projects. These events illustrate the expendable nature of science staff in the public sector, who in many cases have no other viable work options in New Zealand.

Compounding the redundancies is a recent shift in organisational values with the establishment of PROs. This is best summarised by Earth Sciences New Zealand’s (ESNZ) ~~mission statement~~ statement of corporate intent: “Driving economic growth and wellbeing through increasing returns from the use of New Zealand’s natural resources and environments, enhancing energy security, building hazard

resilience and increasing prosperity in a changing climate.”

This mission statement is arguably more focussed on resource exploitation than that of the world’s largest mining company (<https://www.bhp.com/aboutus>), and I think it would surprise many people, who would rightly expect one of New Zealand’s leading environmental research organisations to have a stronger focus on basic science (or even mention the word). I’ve overheard it said “I didn’t sign up for this”, and it’s true, most people who work at ESNZ have a commitment to science and to building our understanding of the natural environment, and in many cases have opted to not work in more highly paid positions in exploitative industries.

On the ground, growing overheads and shrinking budgets mean less core funding for long term science projects, and a greater reliance on commercial contracts. Large science projects increasingly rely on (and are encouraged to use) PhD students, who provide a cheap source of labour, however, few of these students will find jobs in New Zealand. Certainly the prospects for PhD students

are such that I feel taking on a student would be a disservice to them.

The requirement to bring in research funding and the difficulty of gaining funding, also contribute to dysfunction in the system. Incremental advances – the hallmark of real science – are not enough, and proposals must increasingly promise revolutionary breakthroughs to be funded. Desperation for billable hours means researchers will agree to unrealistic targets, as the alternative is to have

no funding at all. Even well funded projects are now spread so thin that a project allocation of 0.15 or 0.2 full-time equivalents is considered “good”. This thinly spread and compartmentalised way of doing science is not efficient.

For me, having invested over 12 years of my life in tertiary study for this career, I’m questioning my decisions. It’s not a career I’d recommend to my children. In the meantime there is valuable science that needs doing, and for now I’ll keep trying to do it.

5. International research students face financial obstacles and poor prospects in the Aotearoa research system

*Lauren Hitt*⁴

I am an international PhD student from the United States and will hand in my thesis in 2026. Securing visas for PhD study in Aotearoa cost me NZ\$3,860. I paid the \$375 application fee, plus an extra \$910 to engage a licensed immigration advisor, and flew round-trip from Alaska to Seattle in a day at short notice (\$850 in airfare) to undergo \$1,350 in required medical testing to complete my student visa application. I only received a one-year visa, despite acceptance into a three-year doctoral programme and three years of guaranteed funding for my stipend, fees, insurance, and research costs. Immigration New Zealand (INZ) claimed the short visa length was the university registrar’s fault; the university registrar claimed it was INZ’s doing. My immigration advisor said there was nothing he could do, and that he’d look forward to a new contract when my visa expired one year into the programme. Ultimately, I had to apply for another student visa and pay an additional application fee to cover three years of my PhD. Luckily this occurred before INZ doubled the price of visa applications (Immigration New Zealand 2024); other PhD students in the same situation now pay \$750 for each application. Other prospective PhD students in my department from my home country went through the same application process but received three-year student visas, highlighting how inconsistently INZ handled otherwise-identical applicants. The pricy, laborious, and unpredictable experience of securing student visas is one of many financial and bureaucratic obstacles that international research students like me face despite the growing share of immigrant students and scientists essential to driving the research system in Aotearoa (Cameron et al., 2025).

International students have poor coverage for the quotidian healthcare most relevant to a student population under the standard student health insurance plan (the ‘Studentsafe’ policy). Yes, Studentsafe would cover physio care after a bicycle accident or repatriate the body of a student if they died during their PhD. But in a university setting, with thousands of people living, working, and studying at close quarters, universities must ensure that the entire student population has easy, affordable access to flu jabs, sexually transmitted infection (STI) screenings, and contraceptives. However, none of these routine needs

are covered under Studentsafe (Table 1). For international students on already-tight budgets, there may be financial pressure to avoid preventative care and instead catch the flu, partake in risky sexual behaviours, or not undergo STI screenings until after symptoms appear. I faced a dilemma in my own care when assessing options for contraceptives: whether to routinely make room in my stipend budget for birth control pills and prescribing appointments, which can be as high as \$100 in a one-month pay period, or to dip into my savings to help cover the costs for an intrauterine device (IUD) since my student stipend alone was not enough to cover both IUD care and my monthly living needs, but with the advantage of not spending any more of my stipend on contraceptives after the upfront cost. Even such routine healthcare needs as contraceptives can put international students under financial strain with Studentsafe and stipends that do not reflect the cost of living (Patel et al., 2022; Simpson et al., 2022).

International research students also face obstacles to their degree completion and job prospects in Aotearoa. The end-of-degree process for PhDs in Aotearoa begins with the student ‘handing in’ their thesis to the university, which is then sent to an external researcher for critical examination, followed by an oral defense of the thesis by the external examiner, then a revision period in which the student incorporates the examiner’s critiques. Once the thesis meets this examiner’s approval, then the PhD degree is considered finished; the entire process from hand-in to final approval takes several months. PhDs in Aotearoa are openly advertised as three-year programmes (and are accompanied by three years of fees support, stipends, visas, and sometimes Studentsafe insurance), but this three-year period ends at the hand-in of the thesis: the examiner’s review, the defense, and revisions are not considered part of the programme, yet universities argue that students have not completed the degree until the thesis is defended and approved. This contradictory ‘limbo’ period at the end of the PhD presents difficult bureaucratic, geographic, and financial hurdles for international students, who face a catch-22 in which they are no longer ‘students’ but are still months away from completing their degree and reaping its benefits (Patel et al., 2022). With visas, insurance, and stipends ending on their hand-in date, students face

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difficult questions: how will they earn money during their defense and revisions? Do they try to stay in-country for the defense by applying for a post-study work visa (costing at least \$1,670), even just for the few months until their degree is completely finished? Do they return to their home country, managing their defense from half a world away? Will they make time to publish if they start a job abroad immediately? As my own hand-in date approaches, I am facing increasingly awkward questions from friends and family about my timeline and plans. Financially, it is difficult to justify staying in Aotearoa for the defense and revisions period if I have to pay for a costly work visa to remain but face poor prospects of finding a postdoc position (e.g., Truax et al. 2025) or other long-term employment, especially if I cannot show employers proof of the degree until months after my hand-in date. As the first person in my family to earn a doctorate, my relatives excitedly anticipate attending a graduation ceremony, but if I leave Aotearoa for financial or career opportunities after hand-in, it wouldn't be worthwhile for me and my family to travel back for commencement, as much as it would mean to them. They are also confused (understandably) when I say that although my degree programme ends in August,

I won't be done with the PhD until several months later, and that I won't know which graduation ceremony I'm even eligible to attend until this process is finished. Like many international students who moved to Aotearoa for a PhD, enjoy living here, and could make contributions to Aotearoa science and society, I am finding that the complex financial calculus of the end-of-degree limbo and poor postgraduate job prospects make it difficult to find reasons to stay (Nissen et al., 2020; Roy, 2021).

International research students already make financial, personal, and social sacrifices for their degree (Cameron et al., 2025). The additional burdens of costly visa procedures, inadequate student health insurance, no guaranteed funding support for thesis defenses and revisions, and limited career opportunities further discourages international early-career researchers at a time when Aotearoa would most benefit from recruiting and retaining international talent. The Aotearoa research system needs to do more to maintain the depth and rigour of the research workforce by retaining the foreign talent it attracts for degree programmes and by respecting the sacrifices made by young researchers who relocate to Aotearoa for their PhDs.

Procedure/Medication	Cost for international students	% of monthly stipend (\$2500) [†]
Flu jab <i>Vaccines are explicitly not covered in student health insurance</i>	\$40	1.6%
GP appointment for symptomatic flu <i>Acute illnesses are covered under student health insurance. In this case, a student saves money by not getting the uncovered flu jab but seeking covered care for flu illness.</i>	\$0 (\$70 without student insurance)	0%
Intrauterine Device (IUD) Insertion <i>Contraceptives are explicitly not covered in student health insurance</i>	Pre-screening appointment: \$70 IUD Device: \$400+ [‡] Insertion appointment: \$130 Mandatory pregnancy test: \$40 Mandatory STD screening: \$40 Total: \$680	27.2%
Oral birth control prescription (for 1 year) <i>Contraceptives are explicitly not covered in student health insurance; Monthly budget cost is for the month in which the in-person appointment and first prescription pickup take place</i>	Annual in-person prescribing appointment: \$70 3-month pill supply: \$30 × 4 quarters = \$120/year Semi-annual telehealth prescription refill appointment: \$40 Total: \$230 per year	4%
Sexually transmitted infections (STI) screening <i>Screenings and prophylactic care are explicitly not covered in student health insurance. STI screenings are only covered if they lead to the diagnosis and treatment of an STI.</i>	\$40 if results are negative and do not lead to STI treatment \$0 if results are positive and lead to STI treatment	1.6% (negative) 0% (positive)
Monthly insulin supply (for 1 year) <i>Pre-existing conditions are explicitly not covered in student health insurance</i>	One month supply: \$300 × 12 months = \$3600/year	12%

Table 1: Itemized routine healthcare costs for international students at a university healthcare clinic.

[†] Calculated assuming an annual stipend of \$30,000. [‡] Dependent on brand.

6. Ageism in Academia and a reminder that not all ECRs are under 30

Anonymous

I returned to university in 2011 to complete a PhD in Geography. Prior to this, I worked as a resource planner for various councils and as a consultant for over 20 years. When I started my PhD, my children were 8 and 11 years old and so I opted to be part-time. I finished my PhD in 2015 and started applying for jobs. However, as my children were still at school, and due to my partner's work, I was limited to staying in my home city and so did not want to apply for overseas post-doctoral positions or positions in other cities within Aotearoa. Perhaps this is part of the motherhood penalty (Correll et al., 2007)? Over the next few years, I applied for over 70 jobs. I had quite a few unsuccessful interviews including a few for jobs as a lecturer at two universities in Aotearoa but eventually returned to work part-time as a resource management consultant for four years. During this time, I also had fixed term teaching contracts for 6 months each year for four years at a university and subsequently fixed term contracts as a teaching assistant, post-doctoral fellow and lecturer at another university, and this trend has continued. I've lost track of how many fixed term contracts I have had but the intersection between age and precarious employment status certainly seems relevant (Spina et al., 2022). To my knowledge, I still qualify (just) as an early career researcher, although in 2016, I remember being told at a job interview that I wouldn't be seen as one due to my age. A few years ago, I attended a talk about career breaks where someone said if you want to work, and are over the age of 45, you shouldn't leave a job unless you have another job to go to as the chances of getting another job are not good. People's perspective on age seems to depend on their own age. To a 20-year-old, 45 probably seems very old, whereas someone who is 45 probably wouldn't think so. As someone over 45, I agree with the statement about leaving a job after the age of 45 and conclude that ageism is alive and well in New Zealand, including in academia. The problem is also that without an ongoing contract of any length, there are limited grants or funding I can apply for, and instead I rely on other

people gaining grants and then employing me.

There is much talk at the moment in New Zealand about the lack of employment for young people, however, the lack of employment is also affecting other minority groups in society such as Māori, Pacifica and older people. All these groups could make significant contributions to research in Aotearoa, however, attitudes to employing these groups would need to change for this to happen. I am currently employed in a fixed term contract until the end of December, and have no work lined up for 2026. A six-month position will become available in our school next year, but I think I will be unlikely to get it as my age will count against me and after all, it's much easier to employ someone similar to yourself, someone young you can mould or someone who won't question you.

In academia in Aotearoa, a preference for applicants from overseas also seems to exist. I can understand the advantages of gaining diverse experience and knowledge within a school and people with international connections, however, people from within Aotearoa also have value, particularly when it comes to teaching and researching local and national issues. It always amazes me when academics new to New Zealand have never heard of Te Tiriti or claims to the Waitangi Tribunal and end up teaching students about them.

As an older early career researcher who has travelled extensively but lived my whole life in Aotearoa, I feel the odds are against me, but it would be great if this could change. Furthermore, as I'm now nearly 60 (*quelle horreur*), I feel the expectation of society is that I stay at home, knit and wait to die – well maybe I have another 5 years, but that's all, and other than through word-of-mouth and personal connections, no-one is likely to employ me as an early career researcher or anything else. I do however like working, mostly for the mental stimulation and the social contact and I am very grateful for the employment I have been given which I hope will continue in some form in the future.

7. Vocational Early Career Researchers have a place in the system

*Kristie Cameron*⁵

I am an Associate Professor at Unitec in Auckland. I am a lecturer, researcher of animal behaviour and welfare, and lead Early Career Researchers as part of my leadership role at Unitec, and Co-chair of the Royal Society Te Apārangi.

As a researcher at a Polytechnic in the transitioning Te Pūkenga network, it has been a time of instability and has put pressure on frontline teachers and researchers to adapt to changing policies, manage increased workloads, maintain high-quality teaching and continue producing meaningful research under challenging circumstances as part of disestablishment (New Zealand Government, 2025). Making research plans has been difficult due to shifting

goal posts in both internal capabilities to support and foster research, and the external availability and inequity of funding to researchers at Institutes of Technology and Polytechnics (ITPs) (Royal Society Te Apārangi ECR Forum, 2025). This is despite strong links with industry and excellence in applied research, which are central to current government research priorities (Cameron et al., 2025).

Unitec is one of many ITPs which has stayed the course in their support for Emerging and Early Career Researchers with opportunities for contestable funding and support in the form of mentorship and publication costs. Research at ITPs has succeeded through grit of the researchers and

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out-the-box thinking and collaboration with industry and community (CRAFT, 2025). This is not the same at all ITPs with research offices shared across regions and small budgets for facilitating research activities – which will only get worse when Te Pūkenga disbands at the end of 2025.

Researchers at ITPs have united by forming a group called CRAFT (Community of Researchers of Applied & Future-focused Training). We aim to support ‘unmoored’ researchers by offering support, opportunities for networking and collaboration with other early career researchers (ECRs) and by the sharing of resources. We are also a voice for ITP ECRs to gain fair recognition and consideration with universities and research institutes in securing funding and being part of the conversation for change.

The ITP voice has been largely ignored by the University

Advisory Group and Science System Advisory Group consultation for the development of the New Zealand science system, except that this group has the most to offer in terms of navigating industry-connected relationships and producing robust science with commercial and applied outcomes that benefit communities and the commercial marketplace (University Advisory Group, 2024). It is frustrating to be overlooked when we lead in the applied research space.

With strategic perspective, and if the decision-makers were to listen, we could collaboratively build a sustainable science system that trains graduates in an affordable, integrated applied and academic environment, and reap the benefits of outcomes in the development of new technologies, creating jobs and evolving industries.

8. Grey clouds and quick science

*Hadee Thompson-Morrison*⁶

I write this perspective as an early career researcher (ECR) employed by a Public Research Organisation (PRO) and start with the caveat that these views are not exhaustive – for the sake of the reader, I am keeping to a couple of points only, although there are many I feel I could put forward.

The options for medium- to long-term research projects (e.g. Endeavour and Marsden Funds) have become substantially limited. Funding cuts have stripped away opportunities for many scientists to be a part of multi-year research programmes. Uncertainty within PROs around the continuation of Strategic Science Investment Funding has meant that, at the time of writing, internal projects are limited to one year. This is in stark contrast to the science landscape 10 - 20 years ago, when 7 - 10 year long programmes were the norm and researchers were given the time to develop their science stories. Now, there is a focus on quick wins, short projects and fast publishing. The ability to develop a solid research base is limited in this landscape, where we must instead become jacks of all trades and masters of none, jumping from project to project to project, rather than developing our knowledge and expertise in an in-depth way on a particular subject. The PRO landscape thus feels reminiscent of the consulting scene, rather than the public-good research sector.

This feeling is amplified by the focus on commercially driven science, and the way in which a lot of our research ends up in client reports rather than peer-reviewed journal papers. The changing direction of the PROs in New Zealand has potential to disproportionately hinder the careers of current ECRs, as our opportunities to produce traditional research that is published in peer-reviewed journals – thereby contributing to our publication record and h-index⁷

– seem sure to be diminished. Although there are issues with the use of the h-index (which are beyond the scope of this piece), it remains true that the metric is widely used in research, and is particularly relied upon when applying for international opportunities. The move towards commercially oriented research, which may not be published academically due to intellectual property restrictions, or clients’ preference for technical reporting, has potential to set New Zealand ECRs working within PROs behind the bar of the rest of the world.

After discussing the current changes, a colleague sent me an article published in *The Press* in 2009 entitled ‘*Science suffering under business model and demand for profit*’. This article’s title makes the content relatively self-explanatory, and echoes many of the sentiments that are making the rounds in the science sector today. This could be seen with multiple lenses – one being, that things have not changed for the better in the last 15 years, and the science landscape has been growing dimmer due to the increasingly commercial demands placed on science. The other being, that things seemed very bleak in 2009 according to this article – it states ‘*75 per cent of scientists would not recommend science careers to the next generation, while 20 per cent of New Zealand science graduates go overseas*’. However, the science community has survived thus far, and continued to produce good, solid science. Though this view begs the question, is this due to, or in spite of, the systems we work within? I’d like to think that while what we’re facing now seems difficult to navigate, perhaps we won’t look back and see quite the grey cloud hanging over this time of change that currently seems to be dominating the horizon – but as of yet, I haven’t settled on a perspective.

⁶Bioeconomy Science Institute – Manaaki Whenua Group

⁷The h-index is a widely used (and criticised) measure of research productivity derived from both publication numbers and citations.

9. From aspiration to action: Strengthening support for Early Career Researchers

Abby Dalgety⁸

I am a senior academic staff member at Wintec in the School of Media Arts. Although not from a science background, I am a new and emerging researcher, and I am a founding member of the Early Career Researchers from the Institutes of Technology and Polytechnics (ITP) Network in Aotearoa New Zealand, **Community of Researchers of Applied and Future-Focused Training & Technology “CRAFT”**. Through this group, we are currently conducting research to better understand and support new, emerging, and early career researchers across the ITP network in Aotearoa New Zealand, representing a wide range of disciplines. We recognise that vocational researchers bring valuable, hands-on experience to their work, yet they are often overlooked and underfunded compared with their university counterparts.

Compared with universities, vocational education providers (e.g. those within the former Te Pūkenga network) often prioritise the provision of practical training for students over staff research. This means that many staff come to teaching direct from industry. They bring rich, hands-on experience from their professional backgrounds, which is one of the great strengths of vocational disciplines. However, there remains a NZQA requirement that half of the staff teaching on a degree programme must be research active. This poses a challenge in that new staff are required to undertake research, but without the background and experience in this area. Emerging and early career researchers in these institutions often face challenges such as limited support, mentorship, and opportunities to develop their research capacity. With fewer institutional resources, it becomes harder to strengthen individual researcher capability. Resource constraints also lead to inconsistent practices and processes, while a smaller pool of researchers results in less institutional knowledge.

CRAFT has been established as a network of Early Career Researchers from the ITP sector in Aotearoa New Zealand. Its purpose is to provide support and help bridge existing gaps, recognising that vocational researchers are a vital pillar of the New Zealand research economy.

Many of our academics bring rich, hands-on experience

from their professional backgrounds, which is one of the great strengths of vocational disciplines. This practical expertise offers a unique and valuable lens through which to approach research.

As a Māori, Pacific and an early career researcher, I knew it was important to establish a group that’s core focus was to help amplify the voices of underrepresented researchers, and provide them with some tools for their research kete so we can play on a level playing field within research in New Zealand. Our group is a selection of early career researchers from across multiple Te Pūkenga institutions, working at establishing real ways in which we can amplify our research voices.

Researchers within the Te Pūkenga network have already weathered years of upheaval and uncertainty. Now, with further financial cuts to the sector, we risk losing not only the invaluable institutional knowledge held by our research leaders, but also our ability to compete on a fair footing with universities. These losses will have lasting consequences for the quality, capability, and future of research in Aotearoa. We have already seen within vocational institutions extremely limited international conference travel permitted due to financial cuts, which limits the potential for research reach, collaboration and networking, and the advancement of research from Aotearoa on an international platform.

My hope for the future of research within Aotearoa, is that more emphasis is put on supporting early career researchers, with a particular focus on those transitioning from vocation into academia. These researchers offer a unique opportunity for industry-led insights and often simply need more manaaki and guidance to navigate what can feel like a daunting, unfamiliar, and jargon-heavy space. (Even the multiple ways in which we define early career researchers and new and emerging researchers is inconsistent and a bit of a headache!)

I would love to see vocational institutions fully embed research into their roles, as it is often perceived as an ‘add-on’ or luxury, with their core focus to be on their teaching. With time constraints, job losses within the industry, and financial pressure, research can often take a back seat.

10. Postdoctoral Mobility and the Early Career Researcher Dilemma

Rodrigo Gomez Fell⁹

There is an unwritten rule in academia that many of us internalise early: after completing a PhD, you should take a postdoctoral position away from the university where you trained. The logic is simple; mobility expands collaboration opportunities, exposes you to new approaches, and helps diversify research expertise (Kim, 2025). In many research systems, particularly in Europe and North America, this expectation is supported by well-resourced networks of short-term postdoctoral positions.

But what happens if you cannot leave? For many early

career researchers, mobility is constrained by responsibilities to family, partners, or dependents. Life choices—such as staying close to whānau, supporting a partner’s career, or raising children are entirely valid, yet the academic system often treats them as professional liabilities. In Aotearoa, the lack of sufficient local opportunities amplifies this challenge. Remaining in New Zealand can mean either changing fields entirely or exiting research altogether. Highly trained researchers, skilled in knowledge creation and innovation, often end up in roles that could be equally well filled by

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⁹Waterways Centre of Freshwater Management, University of Canterbury, Christchurch

those with a master's or bachelor's degree.

The problem is not simply one of individual choice but of structural design. While not every PhD graduate will remain in academia, there is little absorptive capacity for research talent outside universities or Crown organisations. Without sustained investment in research and innovation across industry, government, and community sectors, the system cannot provide meaningful pathways for researchers who wish, or need, to remain. This raises a broader question: what kind of research system does Aotearoa want to build? One where mobility is the only measure

of merit, or one that recognises the value of rooted researchers who remain embedded in their communities and institutions? Supporting both models would mean rethinking how we design funding, career structures, and national research priorities to better match the diversity of researcher circumstances. At a time of restructuring and uncertainty, this is not simply a matter of fairness to early career researchers. It is about safeguarding New Zealand's ability to retain and benefit from the research talent it has already invested in.

11. Early Career Researcher in the Institutes of Technology and Polytechnics

*Martin Forbes*¹⁰

I am an early career researcher (ECR) teaching mechanical engineering at Otago Polytechnic. Like everyone else I am concerned about the shrinking availability of research funding. However, I would like to focus on how other funding pressures on tertiary institutions also affect research in Aotearoa New Zealand. After completing my PhD, I chose to join the polytech as a lecturer rather than moving overseas for a postdoc. I went into this knowing that the teaching load would be relatively high but also with the expectation that part of my full-time equivalents (FTE) would be devoted to maintaining my own expertise through research. My experience has been mostly positive, thanks to great (although understandably stressed) colleagues, patience from my research collaborators, and a set of strong onboarding policies that seem to be dissolving behind me.

At my polytechnic, I am being trained to become a better tertiary educator. I am learning how to design learner-centred, activity-based classes and fair, authentic assessments. At the same time, my 12.57 colleagues and I are collectively responsible for 97 courses per year. Soon, I will be either made redundant or become part of a reduced team of 9.47 colleagues charged with delivering a similar number of courses. We might be able to cut two or three of those but this comes at the cost of student choice. The fractional colleagues are driven by equivalent full-time student (EFTs) to FTE ratios required to fit within the available funding.

Maintaining my research activity is going to be a

challenge. The environment was already challenging and the 0.2 FTE I had envisioned and discussed with my manager was more aspirational than actual. But it was also the pathway to maintain professional community networks and the disciplinary expertise my students should expect of me. I was (and am) committed to making it work. The frameworks for staff reduction, in which our various attributes are evaluated, do not include these external factors in their accounting. At the same time, the administrative and technical staff who have helped me to keep it all going are stretched thin themselves. This is not a conducive environment for research.

I do not regret the choice to become an ECR in Aotearoa New Zealand. I continue to receive widespread support from colleagues, both at the polytechnic and in other research institutes where most of my collaborators are based. Despite the pressures on the polytechnic system, universities and public research institutes, many people have made time for me, worked hard to keep me involved, and even helped me circumnavigate funding freezes to attend workshops and conferences. But the increasing pressure is closing too many doors. My survival (so far) has been underwritten by my ability to stretch my personal finances between opportunities and the fact that I do not have dependents relying on me for support. How do we change the system so that individuals are not left to pick up the shortfalls for themselves and others, and early career research is given a chance to flourish, rather than just persist?

12. Care, cuts and the crisis of commercialisation

*Anjuli Clare^a and Bethany Cox^b*¹¹

Most people begin their PhD's with a certain amount of trepidation (What on earth have I signed up for?!) as well as energy and enthusiasm, particularly for the topic they're about to explore. As well as these feelings, we, the authors, also began with high hopes and aspirations for the positive contribution we'd be able to make to Aotearoa's research system. Although we come from different disciplines (Design and Geography), and our research focused on

different topics, both of us aimed to make a difference to how research is done — at a systemic level and for the individuals involved. Challenging research and academic systems, no matter how gently it's done, is somewhat daunting, and also inspiring.

However, in the time since we both began our doctoral journeys in 2022, the research and academic landscapes have changed considerably — largely due to changes to

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the funding of research (Gordon and Argue, 2024). The beginning of our PhDs marked a, perhaps, more hopeful time in Aotearoa's research system. Despite widespread cuts, redundancies and precarious environments following the emergency response phase to the Covid-19 pandemic, the proposed research system reforms of the time (Te Ara Paerangi Future Pathways: MBIE, 2022) in 2022 placed an emphasis on society, environment, and improving opportunities for researchers themselves, as well as research outcomes and impactful research for society at large. This is not to romanticise Te Ara Paerangi, but it did have breadth and provide hopeful spaces of opportunity to a range of people.

Jumping forward to 2024 - 2025 we are still in a major period of uncertainty where the overarching goals of the research system as directed by the current government are becoming increasingly narrow, focused on economic returns (MBIE, 2025), with very little interest in society directly or research outside of the fundamental sciences (unless it can be commercialised!). As researchers working (trying to 'work') in the social sciences, the cuts to research

funding and lack of (government) interest and prioritisation of work like ours (and many other scholars in the social sciences, humanities, and Indigenous research spaces) makes it difficult to see any opportunities for positive contributions to improving research practices itself, let alone contributions to society at large (Sarpong, 2025). In the face of prioritising the commercialisation of research, we worry that the impact of research for public good will go unnoticed (and unfunded) because good, life changing research doesn't always make money (in a short-term or measurable way).

In the face of these changes, our enthusiasm and energy has somewhat waned — it's easy to feel like our work is pointless, when the systems are rapidly changing in the opposite direction to what our work advocates for. Between job losses, funding reductions, and changes to funding that excludes the nature of our work, it's a struggle to know what opportunities might be available for us as we finish our PhD's. However, our intentions and aspirations remain — our work, which advocates for a politics of care (Shefer, 2020) within all aspects of research, has become an act of resistance, and is needed now, more than ever.

13. Who would a future focused research system work for?¹²

Jesse Whitehead¹³

I am demographer and health geographer working at the University of Waikato on health equity, rural health, and spatial demography, just a few kilometres from where I grew up. I never planned to become an academic but I'm very lucky to have stumbled into a job ("career" sounds too planned for what actually happened!) that suits my personality and skills. Change can be good, but uncertainty in an increasingly uncertain world feels like an unwelcome theme to the six years since finishing my PhD. COVID-19 threw the world into crisis, halted international student mobility – throwing our academic institutions into a financial spiral, and disrupted traditional ways of working. The health system underwent significant reforms, enacted through the Pae Ora (Health Futures) Act 2022, including the establishment of Te Aka Whai Ora to address deep and persistent health inequities, before its disestablishment in 2024 by the current government. And that's not to mention the global context, science system reforms, or research funding reductions!

I should note here that I am incredibly lucky. I have a permanent job, I work in great teams, with amazing people, doing meaningful work that I am passionate about. I haven't experienced many of the exploitative and discriminatory practices, or structural inequities that are rife across academia (McAllister et al., 2020a,b; Naepi 2019, 2021). I'm lucky that I'm a straight white male (and not yet stale) and to have had the support needed to be in a position where this job could be a reality. Even while raising three kids, I had the financial base, and family knowledge to get through a PhD and navigate the next steps.

But not everyone does, and these challenges are limiting the innovative potential of our research sector. A lot of time, energy and effort goes into aiming for success in a space with massive uncertainty and constantly shifting goal posts, and it feels like it's getting harder. In 2025, I led or contributed to 21 applications for research funding, from small internal seeding to a Marsden Fast-Start, multi-million-dollar Health Research Council program grants, and large international opportunities. These took many, many hours of collaborative work. Only two small external grants were successful. I'm lucky to be given the grace to fail and be supported with some small internal "strategic" research funding, but it's hard and feels like a lottery.

Changes that narrow the scope of research to government priorities, and that cap institutional submissions, will make it harder. Institutions will likely take a conservative approach to managing their allocation and aim to support "sure bets" - those with stellar track records and less risky ideas. But how can ECRs, especially those outside of major institutions, investigate boundary-pushing new ideas if we aren't even allowed to buy a ticket to the research funding lottery?

Government priorities in research risk excluding essential knowledge. The complex global challenges that we all face require collaborative knowledge production and the bridging of knowledge systems (Macfarlane and Macfarlane, 2019; Muir et al., 2023; Rayne et al., 2023). Research is central to the role universities take as "critic and conscience of society" (Jones et al., 2000) and diverse research areas must be supported, not just the political flavour of the

¹²Due to a technical problem, this submission was missing from the original version of this collection. The original submission has been updated to include system changes in the intervening period and it has been added in July 2026 ahead of finalisation of the issue for print.

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month. Furthermore, important scientific contributions can be serendipitous, giving unexpected results that differ from what was proposed in funding applications (Aslan et al., 2024), and providing Early Career Researchers with more opportunities to do ‘blue skies’ research will help us to hone our skills, develop collaborative connections, and contributes to the long-term health of the research system. The “soft skills” of so-called ‘economically unproductive’ disciplines like the arts, humanities and languages, are also the gateway to our success in large multinational collaborations such as Horizon Europe – our supposed research funding saviour.

We need to invest in our young people now for the benefit of everyone. We can’t afford to have high youth unemployment. We can’t afford to exclude young people from the opportunity to have a successful future on their terms. We need people who can think creatively, solve complex problems, and develop solutions to our biggest issues. And we have to support them well to do it. This isn’t woke or wishful thinking. The demographic reality of structural ageing means that we will need to be prepared, as a society, to do more with less. The costs of providing care,

pensions, and a dignified retirement to a growing elderly population, paid for by a shrinking tax-base will be huge, and is already causing major political challenges in France (Le Monde, 2023) and Japan (The Guardian, 2023). As our population ages young people are our most valuable resource.

Te Tiriti o Waitangi, our founding document, is reason enough to make these much needed changes. But it’s also the only real choice we have given another important demographic reality: the fact that our future is Māori and Pacific. Nationally, 43% of children under the age of 15 identify as Māori or Pacific (StatsNZ, 2023). In the Waikato Region this is closer to half, and in rural districts like Hauraki (50%), Taupō (54%), Waitomo (68%), South Waikato (76%), and Ruapehu (72%), most tamariki identify as Māori or Pacific (StatsNZ, 2023).

The success of our research and science system, and our success as a nation more broadly, depends how well we can lay the foundations for these kids to have a bright future. A fairer system is a better system, and all kinds of knowledge are important. “*On ne voit bien qu’avec le cœur. L’essentiel est invisible pour les yeux.*”¹⁴ (Saint-Exupéry, 1943)

References

- Aslan, Y., Yaqub, O., Sampat, B. N. and Rotolo, D. (2024), ‘Unexpectedness in medical research’, *Research Policy* **53**(8), 105075.
<https://dx.doi.org/10.1016/j.respol.2024.105075>
- Bennet, L., Campbell, R. and Gunn, A. (2024), ‘Devolution of New Zealand Research to a Gig Economy: Time for investment in university research’, *New Zealand Science Review* **79**(1–4), 26–32.
<https://doi.org/10.26686/nzsr.v79.9498>
- Cameron, K. E., Toldi, G., Owen, M., Kemper, J., Truax, O., Hughes, E., Burch, K. and Kang, J. (2025), ‘Early Career Researchers succeeding under a changing research system’, *New Zealand Science Review* **80**(In Production).
<https://doi.org/10.26686/nzsr.v80.9603>
- Correll, S. J., Benard, S. and Paik, I. (2007), ‘Getting a Job: Is There a Motherhood Penalty?’, *American Journal of Sociology* **112**(5), 1297–1339.
<https://www.doi.org/10.1086/511799>
- CRAFT (Community of Researchers of Applied & Future-focused Training) (2025), ‘Response to the new tertiary education strategy and research funding (<https://www.beehive.govt.nz/release/universities-focus-skills-innovation-growth>)’.
<https://www.linkedin.com/company/craftnz/posts/?feedView=all>
- Gordon, P. and Argue, M. (2024), ‘Government’s marsden fund cuts: All humanities, social sciences research funding slashed’.
<https://www.rnz.co.nz/news/national/535669/governm>
- ent-s-marsden-fund-cuts-all-humanities-social-sciences-research-funding-slashed
- Jones, G., Galvin, K. and Woodhouse, D. (2000), ‘Universities as critic and conscience of society: the role of academic freedom. New Zealand Universities Academic Audit Unit.’.
<https://www.aqa.ac.nz/sites/all/files/ASQ6%20Critic%20and%20Conscience.pdf>
- Kim, H. (2025), ‘Global mobility of the recent STEM postdoctoral workforce registered in ORCID’, *Quantitative Science Studies* **6**, 119–130.
https://doi.org/10.1162/qss_a_00341
- Le Monde (2023), ‘Strikes and clashes as over 1 million protest against Macron’s pension reform’.
https://www.lemonde.fr/en/france/article/2023/03/23/strikes-and-protests-underway-across-france-against-macron-s-pension-reform_6020420_7.html
- Lee, K. and Ben-Tal, A. (2024), ‘The impact on NZ university academic staffing over the pandemic years’, *New Zealand Science Review* **79**(1–4), 4–9.
<https://doi.org/10.26686/nzsr.v79.9469>
- Macfarlane, A. and Macfarlane, S. (2019), ‘Listen to culture: Māori scholars’ plea to researchers’, *Journal of the Royal Society of New Zealand* **49**(S1), 48–57.
<http://dx.doi.org/10.1080/03036758.2019.1661855>
- McAllister, T. G., Kokaua, J., Naepi, S., Kidman, J. and Theodore, R. (2020), ‘Glass ceilings in New Zealand universities: Inequities in Māori and Pacific promotions and earnings’, *MAI Journal: A New Zealand Journal of Indigenous Scholarship* **9**(3).
<http://dx.doi.org/10.20507/MAIJournal.2020.9.3.8>

¹⁴“It is only with the heart that one can see rightly; what is essential is invisible to the eye”

- McAllister, T. G., Naepi, S., Wilson, E., Hikuroa, D. and Walker, L. A. (2020), 'Under-represented and overlooked: Māori and Pasifika scientists in Aotearoa New Zealand's universities and crown-research institutes', *Journal of the Royal Society of New Zealand* **52**(1), 38–53.
<http://dx.doi.org/10.1080/03036758.2020.1796103>
- Ministry of Business, Innovation, and Employment (2021), 'Te Ara Paerangi Future Pathways Green Paper'.
<https://www.mbie.govt.nz/dmsdocument/17637-future-pathways-green-paper>
- Ministry of Business, Innovation, and Employment (2022), 'Te Ara Paerangi Future Pathways White Paper'.
<https://www.mbie.govt.nz/science-and-technology/science-and-innovation/agencies-policies-and-budget-initiatives/te-ara-paerangi-future-pathways/te-ara-paerangi-future-pathways-white-paper/white-paper/>
- Ministry of Business, Innovation, and Employment (2024), 'A simpler approach to funding science in New Zealand'. Accessed Aug 29, 2024.
<https://www.mbie.govt.nz/about/news/a-simpler-approach-to-funding-science-in-new-zealand>
- Ministry of Business, Innovation, and Employment (2025), 'A new funding strategy for the science system'.
<https://www.mbie.govt.nz/science-and-technology/science-and-innovation/refocusing-the-science-innovation-and-technology-system/a-new-funding-strategy-for-the-science-system>
- Muir, A., Duncan, A., Almack, K., Boucher, N., Dunlop, E., Febria, C., Ives, J., Lauzon, R., Lickers, H., Mattes, W., McGregor, D., McGregor, H. and Reid, A. (2023), 'Sharing across the space: Introduction to a special issue on bridging Indigenous and non-Indigenous knowledge systems', *Journal of Great Lakes Research* **49**, S1–S11. Supplement on Bridging Indigenous and non-Indigenous Knowledge Systems.
<https://doi.org/10.1016/j.jglr.2023.04.001>
- Naepi, S. (2019), 'Why isn't my professor Pasifika?', *MAI Journal* **8**(2), 219–234.
<https://doi.org/10.20507/MAIJournal.2019.8.2.9>
- Naepi, S. (2021), 'Pacific women's experiences working in universities in Aotearoa New Zealand', *Higher Education Research & Development* **40**(1), 63–74.
<http://dx.doi.org/10.1080/07294360.2020.1856792>
- New Zealand Government (2025), 'Regional governance will return to ten polytechnics'. Retrieved 30 October 2025.
<https://www.beehive.govt.nz/release/regional-governance-will-return-ten-polytechnics>
- Nissen, S., Naepi, S., Powell, D., Baker, T., Bolton, A. and Stewart, L. (2020), 'Early Career Researchers in Aotearoa: Safeguarding and strengthening opportunity after COVID-19'. Retrieved October 28, 2025.
<https://www.royalsociety.org.nz/assets/Aotearoa-ECRs-Post-COVID-August-2020.pdf>
- Patel, S., Baisden, T. and Yee, G. (2022), 'The Grim Realities of a Doctoral Student in Aotearoa', *New Zealand Science Review* **78**(1–4), 29–36.
<https://doi.org/10.26686/nzsr.v78i1-4.8347>
- Rayne, A., Arahanga-Doyle, H., Cox, B., Cox, M. P., Febria, C. M., Galla, S. J., Hendy, S. C., Locke, K., Matheson, A., Pawlik, A., Roa, T., Sharp, E. L., Walker, L. A., Watene, K., Wehi, P. M. and Steeves, T. E. (2023), 'Collective action is needed to build a more just science system', *Nature Human Behaviour* **7**(7), 1034–1037.
<http://dx.doi.org/10.1038/s41562-023-01635-4>
- Roy, R. (2021), 'Sorry NZ, but if my folks were rich, I would have gone to Harvard'.
https://www.researchgate.net/publication/357173364_Blog_post_Sorry_NZ_but_if_my_folks_were_rich_I_would_have_gone_to_Harvard
- Royal Society Te Apārangi ECR Forum (2025), 'Early Career Researcher Forum: Response to the Government's University Reform Announcement'.
<https://www.royalsociety.org.nz/early-career-researcher-forum/ecr-news/response-to-the-governments-university-reform-announcement/>
- Saint-Exupéry, A. (1943), *Le Petit Prince*, Paris: Gallimard.
- Sarpong, J. (2025), 'Funding Cut for the Humanities in Neoliberal Higher Education Systems: A Case of New Zealand's Marsden Fund', *New Zealand Journal of Educational Studies* **60**(1), 265–278.
<https://doi.org/10.1007/s40841-025-00388-0>
- Shefer, T. (2020), *Posthuman and Political Care Ethics for Reconfiguring Higher Education Pedagogies*, 1 edn, Routledge.
<https://doi.org/10.4324/9781003028468>
- Simpson, A., Jolliffe Simpson, A. D., Soar, M., Oldfield, L., Roy, R. P. and Salter, L. A. (2022), 'Elephant In The Room: Precarious Work In New Zealand Universities'.
https://figshare.com/articles/report/Elephant_In_The_Room_Precarious_Work_In_New_Zealand_Universities/19243626/1
- Spina, N., Smithers, K., Harris, J. and Mewburn, I. (2022), 'Back to zero? Precarious employment in academia amongst 'older' early career researchers, a life-course approach', *British Journal of Sociology of Education* **43**(4), 534–549.
<https://doi.org/10.1080/01425692.2022.2057925>
- StatsNZ (2023), 'Ethnicity (detailed total responses level 4), age (5-year groups), and gender for the census usually resident population count, for regional councils, territorial authorities and Auckland local boards, health regions, health districts, 2013, 2018, and 2023 Censuses'.
<https://www.stats.govt.nz/tools/aotearoa-data-explore/r/>

-
- The Guardian (2023), 'Japan's ageing population poses urgent risk to society, says PM'.
<https://www.theguardian.com/world/2023/jan/23/japan-ageing-population-poses-urgent-risk-to-society-says-pm>
- Truax, O. (2022), 'Building connectivity at the research-policy interface in Aotearoa through a public sector postdoctoral fellowship scheme', *New Zealand Science Review* **78**(1-4), 24-28.
<https://doi.org/10.26686/nzsr.vi.8084>
- Truax, O., Penney, C. and MacDonell, S. (2025), 'Indirect costs: the perverse consequences of Aotearoa New Zealand's research overheads system', *New Zealand Science Review* **80**(In Production).
<https://doi.org/10.26686/nzsr.v80.9848>
- University Advisory Group (2024), 'Interim report'.
<https://web-assets.education.govt.nz/s3fs-public/2025-08/UAG%20Interim%20Report.pdf?VersionId=iAGeUesyFnGwiip0FsWWly8RTqeYQSrH>