# Inadequate resourcing for clinical science in New Zealand

A Mark Richards

Clinician-scientist researchers provide an essential link between laboratory-based fundamental discoveries and their translation to meaningful advances in the clinic. Without adequate support for both basic and applied biomedical research both will fail in the overarching aim of improving the nation's health.

In the article entitled: "Is a clinician-researcher career viable in NZ?" the authors argue "*that a clinician-researcher career involving publicly funded, investigator-led clinical research with meaningful end points to inform clinical care is currently not sustainable in New Zealand.*"[1]

The writers are two highly credible and typical exemplars of New Zealand academic clinician-scientists having conducted clinical research alongside clinical roles for over 20 years. They have been salaried via their university appointments and external funding (fellowships, scholarships). They have been competitive in winning numerous grants. Their peer-reviewed published output ranks within the top echelons of clinician-scientists anywhere in the world. The authors outline why, in 2026, the career trajectory they have travelled in earlier decades seems no longer possible in New Zealand. The typical job structure for full-time clinician-scientists in New Zealand comprises a half-time clinical commitment, leaving the other half time, usually as a university appointee, split between teaching, service and research, typically allowing a scant 8 hours/week for research.

Eight hours per week is insufficient to obtain in-depth background (national and international) knowledge of a clinical research domain; define key unmet needs; design research; complete application processes for funding (with a less than 10% overall chance of success for funding)—then (if, against the odds, funding is acquired) obtain ethics and assorted other institutional approvals; set up infrastructure (hires, equipment, procedures) and conduct the research; analyse data and publish in well-respected peer-reviewed periodical(s) and, finally, facilitate implementation of the findings to improve clinical care and outcomes. There is no suggestion here that resourcing of research should not be competitive. However, as the authors demonstrate, the attrition of time and money available in New Zealand to conduct research, through all the necessary phases, has now become so severe that it cannot sustain many excellent proposals that would be avidly approved and well supported in other Organisation for Economic Co-operation and Development (OECD) countries. Thus, New Zealand is inexorably moving towards irrelevance in the world of biomedical science, a key domain for maintaining and advancing modern societies, replete with societal and economic needs and opportunities.

The authors provide cogent analysis of the ongoing shrinking of resources provided by the only large funder of biomedical grants in New Zealand, the Health Research Council (HRC). The success rate of applications for HRC projects and programmes is less than 10%, and the real value of these grants has fallen profoundly over the last two decades. The funding available for a project grant has not changed in the more than 15 years since 2010, despite the increase in salaries of 75% and the consumer price index by 45%.

The overhead costs imposed upon HRC grants comprise 40% or more of the overall budget. For The University of Auckland and the University of Otago, overheads are budgeted at more than 100% of salaries included in the application. The justification for this level of overhead is far from transparent. Overhead funding rates are calculated according to different models between countries. However, overheads in New Zealand are high. The authors state: "*Australian universities typically use rates of 20–35%, United Kingdom funders will fund 80% of the full cost of the research expecting the university to fund the remaining 20%, and in the United States of America rates vary widely but typically are in the range of 30–70%.*"[1] Overheads, as currently calculated and imposed, clearly disadvantage New Zealand researchers. If a grant is won, a large proportion of it is removed from resourcing the research involved and redirected to overheads/salaries that universities are obliged to fund anyway.[2]

The parlous state of biomedical research funding in New Zealand is not new. Well-informed authors

have reported upon it repeatedly over the first 26 years of the current century. In 2000, Richards documented the rapid reduction of real grant numbers and value following introduction of "*full cost recovery*" policies for HRC grants.[3] In 2008, senior officers of The University of Auckland and the University of Otago reported to these institutions documenting static funding levels for the HRC over the previous several years which, due to high inflation in research costs, had resulted in a one-third decrease in the quantum of research funded over that time: "*This contrasted markedly with the patterns of health research investment in Australia and the United Kingdom, where there had been a long-term commitment to annual funding increases which had resulted in progressive growth of medical research activity in those countries. As a result, New Zealand's per capita funding levels were only a fraction of those in the countries with whom we compete for staff to run our hospitals and medical schools.*"[4]

Six years later an extended array of credible senior university officers from both our major research-based universities updated their review of research funding: "*From 2009 to the present funds for direct funding of research through the Health Research Council (HRC) have remained static at $54m. As a result of inflation of research costs (principally salaries) this represents a decrease of approximately one-quarter in the quantum of research funded by the HRC over the last 4 years. Current funding rates in the comparator countries, population-adjusted and converted to NZ$, are 3.4-fold higher in Australia, 4.5-fold higher in the United Kingdom and 9.7-fold higher in the United States.*"[5] The current report indicates that in 2026 the situation has not improved.[1]

The variation in funding of research, including biomedical research, within small first-world nations is starkly illustrated when New Zealand is compared to Singapore. Both are relatively affluent countries with a similar population size but one, (the "Switzerland" of Asia) has invested heavily and increasingly in its research and innovation sector as seen in Figure 1 summarising such investment by the government of Singapore since 1991. The key messages include:

1. Singapore has invested ongoing increases in overall funding amounting to a more than six-fold increase in dollar funding between 2001 and 2026.
2. A grand total of S$37 billion dollars is budgeted for 2026–2030 (S$~1.3xNZ$), i.e., about S$7.4 billion (at least NZ$9.6 billion) per year.
3. There is clear allocation of funds towards expanding research and strengthening core capabilities, and some funds are specifically allocated to developing talent.[6]

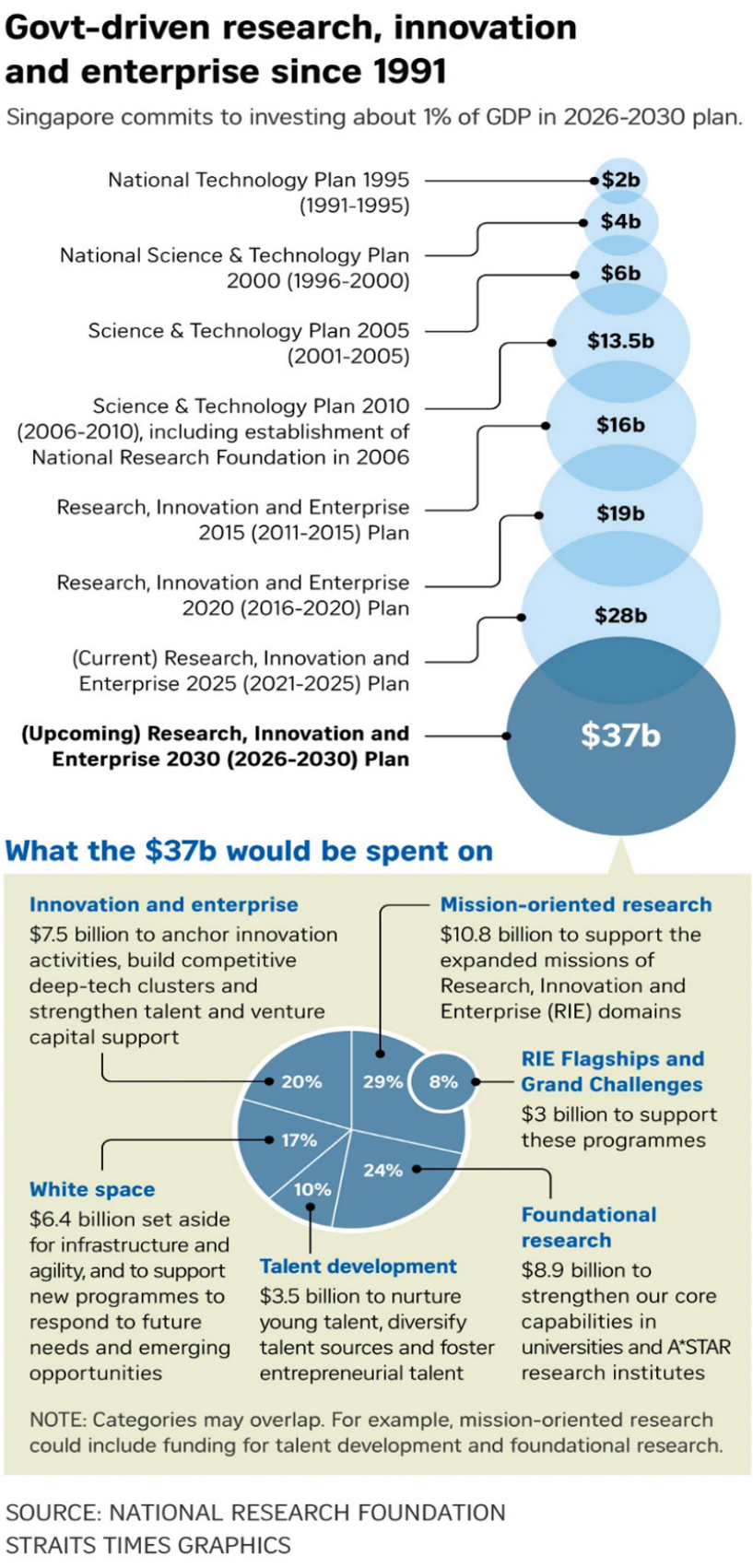
Meanwhile in its 2026 budget statement, the New Zealand Government outlines fiscal restraint directing existing levels of funding to structural reforms **rather than increasing the overall research and development budget**.

The Singapore equivalent of New Zealand's HRC is the National Medical Research Council (NMRC), which dispenses over S$600 million in funds per annum, in contrast to the New Zealand HRC at about NZ$120 million. The NMRC funding portfolio includes institutional capacity building grants (Centre Grants) of up to S$20 million over 5 years, Large Collaborative Translational Grants of up to S$25 million over 5 years and a large number of individual 3-year project grants at about S$1.5–3 million each. These grants generally provide overheads (typically 25% of the overall grant budget) added onto, rather than subtracted from, the direct budget for research. The largest grant the HRC funds is a Programme Grant at NZ$5 million over 5 years. Singapore also provides biomedical research funding from multiple sources beyond the NMRC, including funds managed by their ministry of education—plus a range of other institutions—which, in aggregate, more than double the public contestable biomedical research dollars beyond those managed by the NMRC. In contrast, in New Zealand, the HRC is the only sizable funder dedicated to this domain.

Why does all this matter? Why not simply import biomedical research New Zealand can use from elsewhere? The reasons are manifold and compelling.

As Reid et al. stated in 2014, "*Many doctors expect to remain research active as part of their clinical duties, and universities require research activity of their academic staff. As a result, opportunities to undertake research and its resourcing are key requirements for the staffing of our hospitals, general practices and medical schools.*"[5] The relative impoverishment of research funding is therefore "*a major challenge to the recruitment and retention of clinical and academic staff in our hospitals and universities*" because New Zealand cannot currently be seen as a favourable place to pursue an academic research-based career in biomedicine.[5] Adequate public contestable funding for biomedical

**Figure 1:** Singapore government–driven research, innovation and enterprise since 1991.

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research is necessary if the biomedical academic- and clinical-workforce is to retain excellence and competence comparable to Australia, the United Kingdom, the nations of western Europe, Canada and the Scandinavian countries. New Zealand researchers—knowledgeable of New Zealand's unique epidemiologies and key unmet needs—linked to and competitive with work performed elsewhere can best promote continuous informed streamlining and upgrading of national healthcare staff, equipment and procedures. Inadequate resourcing leads to attrition of talent, recruitment by default of people who do not expect to be able to undertake cutting edge research and steady degradation of the academic biomedical research workforce.

New Zealand has long proved it can produce top-echelon research talent, and this should be seen as a national asset to be developed and retained rather than neglected and lost because our people can find better opportunities overseas. Rutherford, Wilkins, Liley, Barrat-Boyes, Liggins and a long series of others demonstrate New Zealand has produced researchers contributing to the greatest and most revolutionary discoveries of the twentieth century. Even now, in the author's own sphere of activity, New Zealanders exert influence worldwide—optimisation of biomarkers in managing acute coronary disease as pioneered in New Zealand has heavily influenced procedures in emergency departments globally. Likewise, the advice of New Zealand researchers is valued. Clinician-scientists of the Christchurch Heart Institute are consulted frequently by the major international pharmaceutical companies, international diagnostics corporates, start-up entities and investment houses on the biology and clinical applicability of cardiac natriuretic peptides and their analogues, the potential of urocortin analogues in treatment of heart failure and on many other aspects of the neurohumoral control of heart and vasculature—reflecting the institute's decades of internationally recognised contributions in these domains. The same is true for other New Zealand experts steeped in the research of a number of biomedical domains. New Zealand must sustain a pool of people who can contribute to, understand, apply and optimise either local or imported discoveries to our country's needs. A competent, adequately resourced research workforce will underpin start-ups needed to make New Zealand competitive in the biotech and biodiscovery worlds, generating new healthcare strategies, new diagnostic tests, new medical devices and new pharmaceuticals.

This is all well appreciated and well illustrated by Singapore. In 1990 New Zealand and Singapore had GDPs of about US$45 billion and US$36 billion respectively. By the late 1990s Singapore had launched a programme of heavy investment in the life sciences, which has been expanded dramatically at 5-year intervals ever since (see Figure 1). More recently, New Zealand's GDP grew 5.2% (from US$250 billion to US$263 billion) from 2021 to 2025, while in Singapore GDP increased by 32% (from US$435 billion to US$574 billion—now more than double New Zealand's GDP) over the same interval. The biomedical sector is listed as one of the key drivers for Singapore's remarkable increment in national productivity.

The lack of attention to biomedical research capacity and translation to clinical and economic outputs in New Zealand reflects the small numbers of researchers and the generally self-effacing, low profile of this sector on the public stage, and the therefore lack of electoral leverage. The political community is focussed upon a 3-year electoral cycle and issues at front of mind for large proportions of New Zealanders—especially cost of living and the provision of healthcare (rather than biomedical research)—and presently politicians suffer no immediate downside by largely ignoring the health research sector.

The solution is to invest competitively in the sector. However, this long-term ongoing need is happening in a time of major turmoil for New Zealand research infrastructure. The Science System Advisory Group (SSAG) was established by the Ministry of Business, Innovation and Employment – Hīkina Whakatutuki (MBIE) in March 2024 to advise the government on strengthening the science, innovation and technology system.[7] Changes announced in October 2025 include disestablishment of the key entities currently providing contestable funding for biomedical research: the Marsden and Endeavour funds, components of the Strategic Science Investment Fund (SCIF) and the HRC.[8] These changes are proposed without any interim increase in overall funding. The planned merging of funds in a new single New Zealand Research Fund (NZRF) is likely to be attended by delays and administrative missteps perhaps extending over some years until the new system is fully established. During this time the consequences of inadequate funding can only worsen. The best course would be to accompany the restructuring with a rapid boost in resourcing to match or exceed OECD averages as a

percent of national GDP. As the SSAG report states: "*Most European democracies and the Eastern 'tiger economies' have set GDP targets of about 3% research intensity, 1% from governmental sources and 2% from the private sector … The 2024 Statistics New Zealand Research and Development Survey data suggests that the Crown spends 0.57% of GDP on R&D and the private sector spends 0.97% of GDP, for an overall research intensity of 1.54% of GDP.*"[7]

The New Zealand biomedical research community needs to make its case more compelling to both the general public and the relevant public and private decision-makers and purse-string holders in both education and health.

**COMPETING INTERESTS**
Nil.

**CORRESPONDING AUTHOR INFORMATION**
A Mark Richards, BA, MBChB, MD, PhD, DSc, FRCP, FRACP, FRSNZ: New Zealand Heart Foundation Professor of Cardiovascular Studies, Christchurch Heart Institute, University of Otago Christchurch, New Zealand.
E: Mark.Richards@cdhb.health.nz

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