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# Written Submission for the Pre-Budget Consultations in Advance of the 2025 Federal Budget

March 2025

**Please note that this is the second version of Research Canada's pre-budget submission, with the first version having been formally submitted to the Standing Committee on Finance in August 2024. Kindly refer only to this version when considering Research Canada's recommendations.**

# Made in Canada health research and innovation in the national interest

Even before recent events jeopardized the free trade of complementary goods, integrated supply chains and a long history of cooperation with the U.S., Research Canada and its members across the health research and innovation ecosystem were calling for the strategic pursuit of long-term and substantive gains in Canadian productivity, prosperity and quality of life.

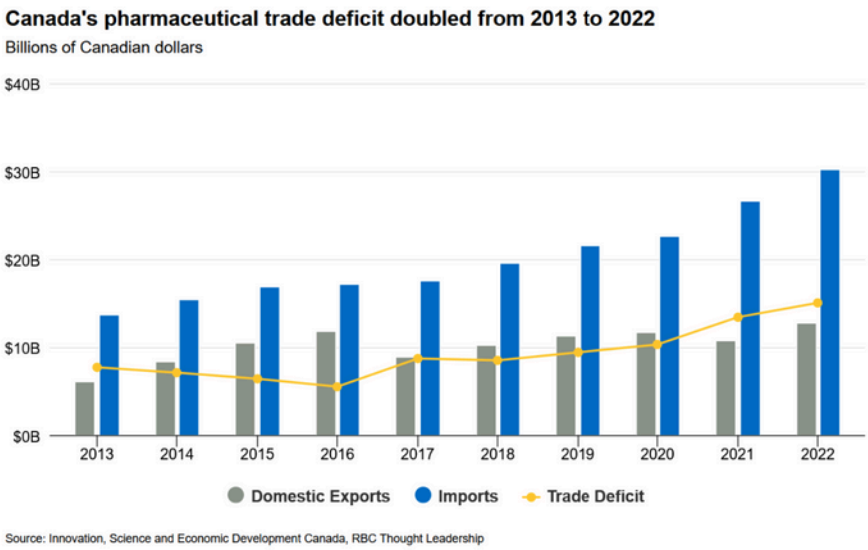
Now, at a fork in the road, and no longer able to use our proximity to the U.S. for an easy export market, Canada should take decisive action to address the byproducts of this historical over-reliance, including low levels of R&D investment, especially within the private sector. This is particularly important when one considers our aging population, changing immigration policies, sub-par productivity, and our widening competitiveness gaps with other countries.

Fortunately, Federal Budget 2024 made critical investments in the federal research granting agencies and long overdue increases to federal scholarships and fellowships. In the case of health, these investments in groundbreaking discoveries—which will improve patient care and the efficiency of our healthcare system, spur innovation, and boost Canada's competitiveness and social resilience—represent a commitment to the health and wellbeing of all Canadians.

Yet even these actions don't change the overall picture. When compared to 38 OECD countries, Canada has lost ground for the past two decades. And though we have the largest percentage of highly educated people in our workforce among comparator countries, we have not yet translated that into high levels of innovation and productivity.

This is having serious repercussions. Though Canada was once a net exporter of certain critical health-related goods, we are now a net importer of many health products we need for our aging population, which includes our front-line health workers. A recent report shows that our pharmaceutical trade deficit has tripled since 2016, and we are currently importing 85% of the vaccines and therapeutics we need.[1]

[1] RBC Thought Leadership, Canada's Biotech Reboot: How to keep the vital life sciences sector strong. November 28, 2024.




It doesn't have to be this way. Now is an ideal time to advance a vision for Canada that addresses lagging innovation, productivity and competitiveness, and in so doing, shows Canadians' intent to improve our living standards, our economy, our society.

Health research, when commercialized, translated and implemented, can help reassert Canada's leadership, fulfil the government's industrial and economic policies, and strengthen Canada's health security in the face of serious global health threats. Through the B*iomanufacturing and Life Sciences Strategy,* the federal government has made significant initial investments into the country's life sciences research ecosystem. However, these investments are not competitive, even on a per capita basis, with the vast investments the U.S. dedicates to science and health.

Further, Canada has not adequately translated its investments in research and building a highly educated workforce into domestic innovation despite the economic promise of doing so:

- R&D in the pharmaceutical sector contributed **$16 billion of our GDP in 2021,** or about 0.7%.[2]
- the 3 largest biotech/life sciences firms on the NASDAQ have greater market capitalization **than all 128 Canadian oil and gas companies combined.**
- Novo Nordisk is considered a cornerstone of the Danish economy, a source of national pride, and has market value larger than Denmark's GDP, meaning **its growth significantly impacts the country's economy**, providing jobs and corporate taxes that significantly contribute to public finances.

[2] RBC Thought Leadership, Canada's Biotech Reboot: How to keep the vital life sciences sector strong. November 28, 2024.

Why is it that we do not yet have a homegrown global biopharmaceutical success story given our university system, our highly educated workforce and our publicly funded healthcare system? Such an achievement would transform our economy.

If we focus on this question, and on cultivating a well-resourced, competitive environment through broader access to capital and markets, effective and streamlined regulatory pathways, both domestic success and further attraction of foreign investment will follow.

Canada must move from an ‘across the board’ approach to one of choosing winners. Areas within the life sciences sector could become nation building endeavours if we develop a strategy that looks at the system as a whole—from research to the adoption of innovation by the healthcare system. Without this integrated approach and strategy, too much of our innovation gets stuck at the translation phase.

With a holistic approach, a sector-based and single market strategy (rather than provincial view), research institutes and postsecondary institutions, the private sector and government would play key roles and help de-risk all forms of R&D and a much-needed innovation, productivity and competitiveness renewal could follow.

The health research and innovation ecosystem supports a bold, comprehensive and ambitious strategy and the identification of priority areas for Canada. Tinkering at the margins of our research and innovation ecosystem, adjusting structures, programs and policies is needed, but not as critically as an overarching vision.

**Recommendation 1:**

Foster F/P/T alignment on strategic public procurement of Canadian health discoveries and innovations to spur domestic economic activity and the transformative change Canadians need and expect of their healthcare system.

Businesses need to be profitable from both domestic and export sales if they are to increase their own investments in R&D. Working together, governments at all levels can support a Made-in-Canada strategy that supports innovation-friendly procurement processes that help businesses of all sizes sell into the Canadian market and increase their export revenues

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A collaborative approach is necessary to overcome fragmentation and complexity in the Canadian health care system where each jurisdiction is responsible for purchasing their own health products and services. Further, decisions based just on price alone, or a desire to avoid risk or change, as well as lengthy procurement processes and complicated policies are all diminishing the ability of the health care system to receive and implement new health discoveries and innovations. Thus, the ability of health care practitioners to provide patients with the best available, already-approved treatments, medications, and devices, as well as organizations' capacity to effectively mobilize technology, is compromised.

**Recommendation 2:**

Pursue a transformative industrial strategy that incentivizes greater uptake of health research discoveries by those who can translate them into new treatments, medicines and services. This approach will not only drive job creation but also stimulate economic growth in Canada.

To remedy inferior performance when it comes to business R&D, Canada can better leverage its research investments through creating a thriving innovation system that supports clinical trials, patenting, the scaling of companies and investment.

The discoveries made in our academic institutions and research hospitals lead to new life sciences companies. Without investment in health research, the talent, creativity, novel discoveries, intellectual property and commercialization that are the products of a well-nourished ecosystem and fundamental to a competitive life sciences and biomanufacturing industry will not be there to support it.[3]

[3] As expressed by BioCanRx, Submission to the Standing Committee on Science and Research, March 2022.

This means building on sustained and predictable levels of investment in research to:

**Support commercialization for research and reduce regulatory and other barriers**

Higher education R&D needs technology transfer and commercialization pathways to drive economic benefits.[4]

**Help early-stage companies grow domestically and attract foreign investment**

The challenge Canadian companies face in scaling domestically is due in part to inadequate access to venture capital for R&D, product development, and market expansion.

A national competitiveness and innovation strategy would help build homegrown companies and attract multinationals. In both cases, firms that can innovate, as well as produce, and leverage Canadian knowledge, supply chains and infrastructure should be prioritized to drive additional benefits to other companies.

**Unleash the potential of health innovation**

Canada has an opportunity to remove impediments to translational and clinical research and commercialization of new health products, services and procedures that are implemented within the system and available to all Canadians.

In late 2023, the government shared an update about its plans to:

1. Seek input on a cost-neutral modernization of the Scientific Research and Experimental Development (SR&ED) tax incentive program.
2. Act on the recent legislative review of the Business Development Bank of Canada (BDC) and recommendations that would expand its reach, align better with other supports, and provide financing to entrepreneurs and small businesses.
3. Transition the National Research Council Industrial Research Assistance Program (NRC IRAP) to the Canada Innovation Corporation (CIC) to better support thousands of Canadian small and medium-sized enterprises with full implementation expected by 2026-2027.

Given the alarming trajectory of Canada's innovation, productivity and competitiveness performance, compounded by the trade issues, we strongly urge the government to accelerate its plans and programs to support innovation and its adoption by the health system.

[4] Assessing Canadian Innovation, Productivity, and Competitiveness. Atkinson, Zhang, April 2024.

## Recommendation 3:

Ensure adequate, predictable and sustained funding for the health research and innovation ecosystem to increase self-sufficiency and protection from health security threats.

To realize the promise of modernizing the federal research agencies, the multi-year and ongoing investments earmarked in Budget 2024 for the granting agencies and talent must flow as planned. Further, to the extent possible, future investments should grow proportionally with inflation, global peers, and overall increases in federal research.

Given the looming health security issues—including Avian Influenza, measles, anti-microbial resistance and future pandemics—a clear and appropriate budget for mission-driven, multi-disciplinary and international research, over and above funds earmarked for investigator-initiated research is essential.

The COVID-19 pandemic laid bare the lack of robust medical production capacity in Canada, and it strained our healthcare system and supply chains. Now more than ever we need to be able to support in times of health emergencies and crises which are predicted to grow in frequency around the globe due to climate change and globalization. Our capacity for domestic vaccine and therapeutic manufacturing must grow so we can meet growing security risks and increased demand for all health-related products as our population grows and ages.

## Conclusion

An unprecedented threat to Canada's economic well-being has been made in the form of tariffs. As we move swiftly to mitigate the damage in the short-term, we have an opportunity to use this as a wake-up call to prioritize innovation and productivity. Already we can see leaders and policymakers within the country using this as impetus to address age-old domestic trade barriers and looking at ways to use procurement to drive innovation.

There is growing consensus from the broader research and innovation ecosystem stakeholders and Research Canada members (universities, colleges, hospitals, academic health science centres, research institutes, provincial health organizations, private companies, health charities) that status quo is not an option.

Now is the ideal time to take advantage of alignment and interest to make ambitious plans for research and innovation and in so doing, alleviate the growing frustration of Canadians in the face of declining quality of life and health outcomes. Moving boldly forward means ensuring our healthcare system is a dependable partner in innovation and one that can adopt innovation readily. This is key to benefiting from the fruits of research investments.

As Canada aims to transform how it funds and advances science and innovation, Research Canada and its members look forward to continuing to work with the government to ensure Canada's health research and innovation ecosystem is a driving force in achieving a healthier and more prosperous future for Canadians.

## About Research Canada

Research Canada is a national alliance dedicated to collaborative advocacy and engaging government, academia, industry and non-profit sectors to build support for long-term investments in health research and innovation.

For more information, visit www.researchcanada.org.