



# Unlocking Capital in the Life Sciences Sector

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# Contents

<b>About this playbook series</b>	<b>3</b>
<b>Action plan and four playbooks to transform the life sciences sector</b>	<b>4</b>
<b>Realizing the economic power of life sciences</b>	<b>6</b>
<b>Capital barriers for Canadian life sciences companies</b>	<b>7</b>
<b>The reality of the Canadian capital ecosystem</b>	<b>9</b>
Venture capital (VC)	10
Government funding programs	11
Institutional investors	12
Corporate venture capital	13
Capital markets	14
<b>What's at stake</b>	<b>16</b>
<b>Three actions to unlock capital for the life sciences sector</b>	<b>18</b>
Action 1: Strengthen our domestic investment ecosystem	19
Action 2: Develop growth-focused programs to accelerate startups' development journey	20
Action 3: De-risk investments through government incentives	20
<b>Looking Ahead</b>	<b>21</b>

# About this playbook series

The 'Winning Formula' series offers an action plan for the Toronto region's life sciences sector, supported with four in-depth playbooks that identify the critical barriers holding the sector back.

The Toronto Region Board of Trade ('the Board') has long recognized the life sciences sector as a critical economic engine for the region. For over a decade, the Board has demonstrated thought leadership in this space, championing the sector's potential through events, reports, and rallying support across government, industry, and academia. This work is deeply aligned with the Board's broader mission to build a globally competitive, resilient economy anchored in innovation and inclusive growth.

## Toronto-Waterloo Corridor Definition

Throughout the series, the area described as the Toronto-Waterloo corridor or 'the region' refers, unless otherwise specified, to the Toronto Census Metropolitan Area (CMA), Oshawa CMA, Kitchener-Cambridge-Waterloo CMA, Hamilton CMA, and Guelph CMA. Together, these areas encompass a functionally integrated, urban economic region that

the Board defines as the Innovation Corridor. In cases where data collection and comparison are not possible for the region, smaller geographic units will be used, including the Greater Toronto Area and/or the City of Toronto.

## Stakeholders Consulted

Insights in this report are informed by extensive engagement with stakeholders across the Toronto-Waterloo life sciences ecosystem, including multinational corporations, home-grown companies, post-secondary institutions, and industry associations. Contributions took various forms: some stakeholders offered direct input through individual consultations, while others shared their experience as speakers and panelists at the Board's latest life sciences events, including the following:

- **Life Sciences Symposium:**  
[Can Toronto be the Next Boston?](#)
- **Life Sciences Breakfast Series:**  
[Medical Isotopes Revolution](#); [Attracting Capital Investment and Anchor Companies](#); and [Toronto's Regenerative Medicine Frontier](#)

The authors are grateful for the invaluable insights, inputs, and resources shared by a wide variety of stakeholders, including:

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MedGeneus Inc.

Orchid Jahanshahi  
Thinkrbelle

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SpinUp

Rob Henderson  
Biotalent Canada

Scott McAuley  
Paradigm Capital

Sigrun Watson  
Canadian Entrepreneurs in Life  
Science

Simona Chiose  
University of Toronto

## Action plan and four playbooks to transform the life sciences sector

For too long, efforts to bolster the life sciences sector have been cautious and piecemeal—falling short in the scale and coordination required to build a world-leading life sciences ecosystem here in Toronto. This action plan lays out a path forward, recognizing that meaningful progress demands bold and simultaneous movement across four key pillars: capital, infrastructure, talent, and a fast path to market.

Building on this action plan, we developed four complementary playbooks that dive deeper into how each proposed action can address the sector's major challenges:



### PLAYBOOK 1

## Unlocking Capital

Life sciences companies in Ontario face barriers raising capital. Companies argue that the challenges boil down to a low risk tolerance amongst Canadian investors for the life sciences sector, given uncertainties with clinical trials and long product development cycles. Conversely, investors active in the sector often note that the challenge lies less in the availability of capital than in the state of readiness of companies for investment.

In the absence of opportunities to raise capital, firms increasingly look abroad for funding, taking with them the economic benefits of high-growth, high-potential companies (job creation, intellectual property, and export development capabilities).

**To unlock the capital needed for a growing sector, we must do three things:**

1. Strengthen the domestic investment ecosystem
2. Develop growth-focused programs to accelerate startups' development journey
3. De-risk investments through government incentives



### PLAYBOOK 2

## Accelerating Wet Lab Construction

Ontario's life sciences sector faces a critical shortage of wet lab space, meeting only 52% of the estimated two million sq. ft. demand causing innovative companies to stall growth or relocate. Wet lab facilities, essential for biotech and pharmaceutical research, cost up to five times more than standard office spaces, and developers typically require 60% pre-leasing with long-term commitments, an unrealistic ask for most startups.

**To accelerate wet lab construction, we must do five things:**

1. Increase construction incentives
2. Provide rental guarantees
3. Establish public-private partnerships
4. Expedite permitting and adjust land use policies
5. Better connect demand with supply



### PLAYBOOK 3

## Strengthening Talent Pipelines

Ontario's life sciences sector faces critical workforce gaps, including a shortage of C-suite executives, experienced market-ready scientists, and bio-manufacturing workers, with only 25% of bio-manufacturing positions projected to be filled in the next five years. Despite a 36% increase in life sciences graduates from 2017 to 2022, the region struggles to retain talent due to lower average wages and fewer job opportunities compared to key competitors such as Boston and San Francisco.

**To close the talent gap, we must do three things:**

1. Leverage short-term executive expertise and advisory
2. Expand support for talent development and retention programs
3. Encourage entrepreneurship



### PLAYBOOK 4

## Streamlining the Path to Market

Accessing the Canadian life sciences market is challenging for life sciences companies given its fragmented regulatory, reimbursement, and procurement frameworks. While regulatory and reimbursement systems are complex to navigate, procurement policies focus on cost savings rather than value-added through innovation. For pharmaceuticals, this results in an average timeline of 2.5 years from global authorization to public reimbursement, compared to just eight months in the United States. For medical devices and other medical products, it means fewer opportunities to be commercialized, deterring the adoption of innovative technologies in the healthcare system.

**To accelerate companies' paths to market, we must do four things:**

1. Adopt international standards
2. Ensure transparency on pricing practices
3. Harmonize reimbursement processes
4. Adopt a value-based approach to procurement

**Meaningful progress demands bold and simultaneous action across four key pillars: capital, infrastructure, talent and a fast path to market.**



## Realizing the economic power of life sciences

Ontario's life sciences sector is a powerhouse of innovation, home to 3,500 firms contributing \$15 billion in GDP, and supporting 88,000 jobs with \$10 billion in wages. Yet, Ontario's potential remains underutilized. Despite generating \$86 billion in revenue and exporting \$13 billion in cutting-edge innovations worldwide, systemic barriers push promising companies to ecosystems like [California](#), whose mature market generated \$472 billion in economic output.

### Our Edge

The Toronto-Waterloo Corridor has the ingredients to lead in life sciences, including:

- Home to Canada's #1 life sciences research hub
- Five of Canada's top research hospitals
- 11 globally recognized universities and internationally renowned colleges
- A top 10 North American ranking in the Global Startup Ecosystem Index
- Home to the highest concentration of AI talent
- Over 720 university-spawned startups
- Robust pipeline of graduates in engineering, physical and biological sciences, mathematics, and AI
- #1 in active clinical trials per capita among all G7 nations
- Vast network of foreign and homegrown, high-potential companies



### Ontario's life sciences sector at a glance



**3,500**  
firms



**\$15B**  
in GDP



**\$86B**  
in revenue



**88,000**  
jobs



**\$10B**  
in wages



**\$13B**  
in exports

Source: TRBOT Calculations. For more information, check [The Winning Formula: An Action Plan to Unleash the Life Sciences Sector](#). [Pages 25-29](#).



# Capital barriers for Canadian life sciences companies

Finding and securing sources of capital is one of the most difficult tasks for small and medium-sized enterprises (SMEs). In the life sciences sector, founders face even greater challenges due to the large sums of upfront funding required to translate research into medical solutions. It is virtually impossible to start and grow a life sciences startup without the financial commitments to conduct research and development, secure space, and attract top talent.

From an investor perspective, backing life sciences companies often involves a significant financial commitment—often in the hundreds of millions or even billions of dollars before any revenue generation. The uncertainty of clinical trials, coupled with lengthy timelines required for regulatory approvals, are inherent risks for life sciences firms, and can deter investors who prioritize more immediate returns.

In the case of pharmaceutical companies, pre-launch costs to develop a new drug can vary widely, ranging from \$161 million USD to \$2 billion USD, and it can take between 10 to 15 years or more to reach customers.<sup>1</sup> 90% of drug candidates in the United States fail clinical trials, with many never advancing to the approval stage.<sup>2</sup> The scenario for medical device companies, though less expensive and complex than for drugs, still carries significant risks, particularly in the regulatory approval phase. Taking point-of-care diagnostic devices as an example, it takes six years to bring this product from concept to clearance, and the average cost of the process is \$34 million USD. Depending on the type of device that is being developed, timelines and total costs can differ significantly.<sup>3</sup>

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Startups need a compelling narrative that articulates the scientific rationale, market potential, and therapeutic impact of the innovation to capture investor interest. While presenting a compelling investment opportunity that resonates with funders is critical, the existence of robust capital networks that can support and sustain these ventures across all phases of development is equally important. Some significant players within those networks are:

- Angel investors
- Incubators and accelerators
- Venture capital (VC) firms
- Government agencies
- Universities
- Banks and financial institutions
- Private equity (PE) firms
- Corporate venture arms
- Public markets

Active collaboration between these players is a trait of successful jurisdictions that have fostered a strong life sciences. They often join efforts in various ways to de-risk investment and encourage long-term funding allocation. For example, it is common for angel investors to provide the first rounds of funding, which incubators and accelerators complement with additional funding and resources to refine the firm's business model and prepare for venture capital investment. Once a company has captured the interest of venture capitalists, multiple VC firms co-invest in a single life sciences company to spread risk across a wider pool of resources. As the company reaches a certain level of maturity, PE firms often partner with VCs to provide growth capital, positioning these companies for successful Initial Public Offerings (IPOs) or acquisition opportunities.

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# The reality of the Canadian capital ecosystem

## Venture capital (VC)

Canadian startups find themselves seeking funding in an ecosystem that is inherently less willing to take on high-risk opportunities. Canadian investors tend to focus on businesses with proven revenue models and shorter timeframes to exit the public market. Risk aversion leads to more investment in generalist funds rather than sector-specific ones. Data from the Royal Bank of Canada (RBC) confirms this: Over the last ten years, 67% of all Canadian VC capital raised has been from generalist funds, while only seven percent of capital raised has been in life sciences.<sup>4</sup>

VC firms active in the sector often emphasize that the challenge lies not in the availability of capital but rather in the readiness of companies for investment. According to the Canadian Venture Capital & Private Equity Association (CVCA), life sciences is the second-largest sector with VC investment in Canada, following Information and Communication Technology (ICT). In 2024, life sciences saw \$2.3 billion across 128 deals, reflecting an 8.3% increase in dollars compared to 2020. However, VC investors note that most early-stage companies seek for funding without the ability to meet the criteria for venture funding. These criteria typically include a robust business model, scalable technology, and a clear path to profitability.

To help bridge the gap between the capital challenges faced by early-stage companies and ensure VC firms have the resources to invest in domestic innovation, government-backed fund-of-funds initiatives—such as the Venture Capital Catalyst Initiative (VCCI) and the Ontario Venture Capital Fund (OVCF)—have made meaningful progress in strengthening Canada's venture capital ecosystem. However, venture capital firms caution that to support the full lifecycle of high-potential life sciences companies—from seed stage through to scale-up—governments must commit to long-term, sustained funding through these type of programs.

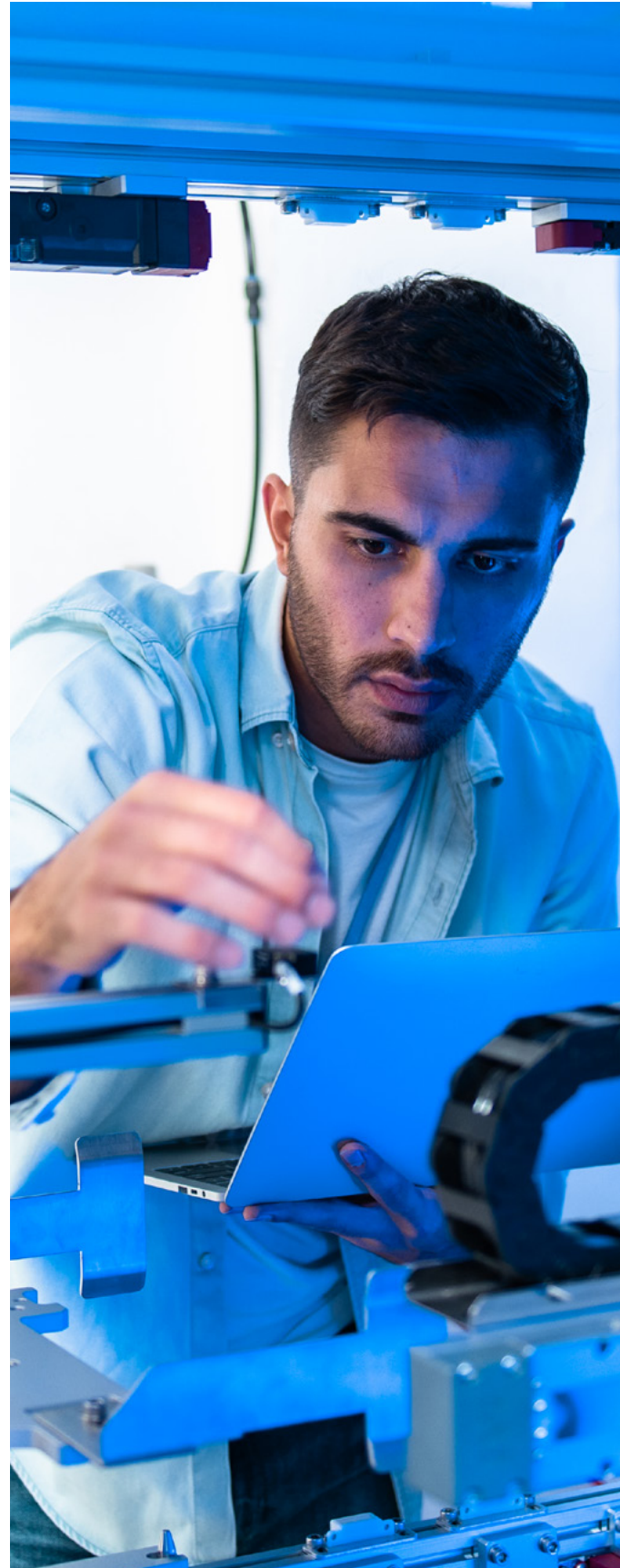
In 2024, life sciences saw \$2.3 billion across 128 deals, reflecting an 8.3% increase in dollars compared to 2020. VC investors note that many early-stage companies may not yet meet the criteria for venture funding.

## University technology transfer offices

Universities, through their Technology Transfer Offices (TTOs), play an important role in nurturing and propelling ventures toward success. University spin-offs—new companies founded by a student, graduate, or professor—are created from research that is then brought to the university's TTO. Their functions include identifying promising innovations, securing intellectual property rights, and facilitating partnerships with industry. Canada has a great deal of potential to commercialize inventions from academic research, but many Canadian universities lag behind US ones in this regard. US University TTOs licensed patents at, on average, three times the rate of Canadian TTOs in 2022.<sup>5</sup>

There is an ongoing debate about whether TTOs in Canada are effectively bridging the gap between academic research and commercial application. One argument is that some Canadian universities have prioritized Intellectual Property (IP) rights licenses as a revenue source, demanding equity stakes in startups to maximize returns. This revenue-centric approach can lead to reduced ownership by the spin-off founder, which disincentivizes entrepreneurship and deters investment from other sources. In addition, ecosystem players have argued that some universities lack the in-house expertise needed to effectively support startups in their growth trajectories. Many TTOs are staffed predominantly by individuals with minimal entrepreneurship background or the skills required to navigate the complexities of startup development. This can lead to challenges in understanding market dynamics, business development, and scaling strategies.

Canada has a great deal of potential to commercialize inventions from academic research, but many Canadian universities lag behind US ones in this regard.







## Government funding programs

Bringing innovations to market and scaling startups into major companies demands substantial investment from both the private sector and the government. While there is currently a need for more private investment flows in Canada, what is the state of government support for the life sciences sector?

The federal funding approach is characterized by the creation of ad-hoc programs that operate independently, lacking integration under a cohesive strategy or agency framework. They often lack structured phases with defined timelines, funding brackets, and pathways that enable companies to scale and capitalize on opportunities within the multi-billion-dollar federal contracting marketplace.

In Canada, nearly 80% of funding programs are directed toward academic institutions and research centers, leaving limited resources for the translation of scientific discoveries into tangible economic and social benefits.<sup>6</sup> At the federal level, there is a gap in strategic funding allocation efforts that explicitly link R&D initiatives with industry applications. While programs such as the National Research Council of Canada's Industrial Research Assistance Program (NRC IRAP) and the Strategic Innovation Fund (SIF) have provided support to some life sciences companies, these initiatives lack a clear focus on leveraging scientific breakthroughs to address the specific demands of Canada's healthcare sector at a broad scale.

For many life sciences startups, accessing the NRC IRAP can be an uphill battle. The program was designed to help innovative companies grow,

but its eligibility requirements—such as providing early revenue or near-term economic impact—can be tough for life sciences firms still deep in research and early-stage development. These companies often spend years in the lab before they can bring a product to market, making it difficult to meet IRAP's financial benchmarks.

Another challenge is the program's evaluation process, which is overseen by Industrial Technology Advisors (ITAs). While ITAs are intended to provide technical and business guidance, many life sciences founders highlight a lack of specialized expertise among advisors needed to properly evaluate complex biomedical or biotech innovations. This gap can result in promising companies being undervalued, particularly when their technology doesn't fit neatly into more traditional evaluation frameworks. For startups working on cutting-edge science without early revenue, this mismatch can mean missing out on critical funding at a pivotal stage.

The Ontario government's recent move toward a more targeted life sciences strategy—through programs like the Life Sciences Innovation Fund and new Scale-Up funding streams—is a promising sign that funding is starting to align more closely with the sector's needs. These initiatives signal a clear commitment to supporting homegrown innovation, though it remains too early to assess their effectiveness. Their impact will depend heavily on how well they're rolled out, the clarity of their guidelines, and whether there's a clear roadmap for long-term funding under both programs.

## Institutional investors

Institutional investors, including pension funds, insurance companies, and large endowments, significantly influence the investment landscape due to their scale and capacity to determine capital allocation in an economy. Their investment strategies impact a wide range of activities, from public companies and startups to infrastructure projects and real estate. While institutional investors do not typically invest directly in startups, they provide capital to intermediaries (e.g., VC firms) that specialize in early-stage investments, acting as limited partners (LPs).

LPs are the primary source of capital for VC firms, which need to raise funding that will then be used to invest in startups. The relationship between LPs and VC firms is symbiotic: LPs allocate capital that VCs need to make investments, while VCs manage that capital to generate returns. For venture capitalists in the life sciences sector, delivering strong returns is often more uncertain than in other sectors. It can take years for a startup to mature, if it doesn't fail, before achieving profitability. The path from groundbreaking science to a multi-billion-dollar enterprise is long and complex, often requiring decades to reach liquidity, with only a few achieving this level of success.

A study by the Global Risk Institute and McGill University found that Canadian institutional investors, particularly pension funds, are highly

involved in venture funds and other assets outside of Canada, placing them at the top of their global peers in performance and risk management.<sup>7</sup> However, participation from Canadian pension plans in the Canadian life sciences sector remains limited. Despite the sector's robust performance in recent years and notable success stories showcasing its potential, only a handful of pension plans are actively investing in life sciences venture funds.

Experts agree that the challenge lies in the fact that pension funds generally perceive life sciences VC funds as too small and high-risk to justify an investment. These funds manage vast pools of capital and are primarily focused on generating stable, long-term returns for their beneficiaries. To meet those objectives, pension funds often prefer to deploy large amounts of capital, typically in the range of hundreds of millions of dollars, into safer, more predictable asset classes.<sup>8</sup>

The inherently volatile and high-risk nature of early-stage investment deters pension funds from committing capital to venture funds that may not meet their return expectations. Given that pension funds are mandated to prioritize the best risk-adjusted returns for their beneficiaries, what they need is a competitive business environment domestically that offers investment opportunities as attractive as those available internationally.



### Example of a Canadian pension fund contributing to economic development

[Pension Funds in Quebec](#) operate under a dual mandate that balances financial returns for pensioners and economic development impact for the province. For instance, [Caisse de dépôt et placement du Québec \(CDPQ\)](#) has invested in Amplitude, a Québec-based life sciences fund that finances and supports biotech, medical device, and health information technology start-ups.





## Corporate venture capital

Unlike traditional VC, which comes from independent investment firms, Canadian corporate venture capital (CVC) funding refers to investments made directly by public or private companies in early—or growth-stage startups. Startups backed by CVC often benefit from the corporation's resources beyond financials, including access to infrastructure, customer base, and industry expertise.

A 2024 report by Deloitte Ventures and the Business Development Bank of Canada (BDC) Capital reveals that Canadian CVC funds are predominantly investing outside of Canada, with over 50% of their capital directed to foreign firms.<sup>9</sup> At their highest, domestic investments have accounted for around 40% of total domestic CVC activity. The report analyzed 30 Canadian corporations that were identified as CVC funds and had completed at least one venture capital deal since 2019. In 2023, the average deal size dropped to \$35 million after peaking in 2020 at \$52 million — the highest over the last five years. Only one Canadian CVC firm, WELL Health Technologies, reported investments in the life sciences sector. Of a total of 13 companies in WELL Health's venture capital portfolio, nine are based in Canada.

There are substantial differences in corporate investment in venture capital between Canada and the United States. While there are some exceptions, most CVC funds are backed by a public company generating more than \$1 billion in annual revenue. Only 6% of Canada's 214 public companies at this revenue level participated in a direct deal. By contrast, 40% of US public companies with similar revenues engaged in direct VC investment that same year. A recent report by Silicon Valley Bank reported 257 CVC funds in 2024, marking a significant increase from 209 participants in 2023.<sup>10</sup> In contrast, despite a

challenging macroeconomic landscape marked by rising interest rates and tightening capital markets, CVCs in the United States (US) maintained a high participation rate, investing in 72% of domestic venture capital deals. These funds represent an average of US\$ 11 billion in annual investment, invested across 8,000 active companies in their portfolios.

The US VC ecosystem has a strong domestic focus, with approximately 75% of US venture-backed deals involving US-based CVCs. What stands out is the high investments in early-stage companies. 87% of CVC-backed deals were directed toward pre-seed and early-stage companies in 2023. Most CVCs prioritize investments that align closely with their strategic goals and are focused on innovations that can enhance or complement their existing business lines. Prioritizing of early-stage companies allows CVCs to access disruptive innovation and emerging technologies that not only align with their corporate strategies but also generate substantial financial returns. **The contrasting trends between Canadian and US CVCs reveal critical differences that have far-reaching implications for each country: a much smaller economy can imply a less mature VC ecosystem.**

On average, Canadian-headquartered deals see lower proportions of their investment activity coming from Canadian corporations. In 2023, only 39% of Canadian startups received any investment from Canadian funds. These figures are reversed in the United States, with US-based CVC firms taking part in 75% of VC deals with US-headquartered startups. The strong track record of high impact investments drives this trend, as well as high-reward US ventures built in mature ecosystems, focused on providing resources for companies to grow there.

## Capital markets

Accessing public markets is a critical pathway for raising substantial capital, offering distinct advantages that are challenging to achieve through private financing alone. Unlike private funding rounds, constrained by the limitations of private equity or venture capital firm capacity, public markets enable companies to scale their capital-raising efforts. Moreover, public listing enhances a company's valuation by increasing market visibility and demand, enabling companies to secure funding on more favourable terms. In many instances, going public provides liquidity to investors and employees, offering a strong incentive for ongoing investment in earlier funding rounds by offering a more straightforward opportunity for eventual returns.

The Toronto Stock Exchange (TSX) is the primary equities exchange in Canada and one of the largest stock exchanges in the world. The TSX has approximately 1,800 listed issuers, predominantly composed of three industries: banking and financial institutions (30%), oil and gas exploration (17%), and goods movement (13%).<sup>11</sup> Stocks in life sciences represent less than 1% of the stock market. This is not surprising as the Canadian economy has historically relied on more traditional industries with more predictable results.

Having domestic companies listed on domestic public markets is important for several reasons. It supports economic growth by offering investment opportunities that keep capital within the country rather than flowing abroad. When well-known domestic companies go public locally, it builds confidence among domestic investors in the strength of the local market and its ability to support successful, profitable businesses. This confidence can also encourage more cautious investors, who might otherwise avoid riskier ventures, to invest in these types of companies. Over time, if the domestic market develops a strong appetite for investments in sectors like life sciences, companies may be less likely to seek funding from abroad.

A closer look at Canadian-built companies listed on the TSX reveals that only a select few with valuations over \$1 billion-dollar valuation participate in Canada's most prominent public market. In contrast, many US life sciences companies have reached multi-billion- and even trillion-dollar valuations.





The table below lists the top 10 Canada-based life sciences companies on the TSX based on price gains<sup>12</sup> and the TSX Venture 50<sup>13</sup> (See figure 1).

**Figure 1: Top 10 Canada-based life sciences companies listed on the Toronto Stock Exchange**  
NOVEMBER 2024 DATA

#	NAME	LOCATION	ENTERPRISE VALUE	MARKET CAPITALIZATION	INDUSTRY
1	Bausch Health Companies Inc.	Laval, QC	\$25 billion	\$3.41 billion	Pharmaceuticals
2	WELL Health Technologies Corp.	Vancouver, BC	\$1.54 billion	\$1.5 billion	Medical Technology
3	Canopy Growth Corp.	Smiths Falls, ON	\$1.15 billion	\$719 million	Pharmaceuticals
4	Knight Therapeutics Inc.	Montreal, QC	\$467 million	\$572 million	Pharmaceuticals
5	Cipher Pharmaceuticals Inc.	Mississauga, ON	\$321 million	\$386 million	Pharmaceuticals
6	Medicenna Therapeutics Corp.	Toronto, ON	\$158 million	\$194 million	Biotechnology
7	NervGen Pharma Corp.	Vancouver, BC	\$155 million	\$181 million	Biotechnology
8	Arch Biopartners Inc.	Toronto, ON	\$136 million	\$131 million	Biotechnology
9	BioSynt Inc.	Mississauga, ON	\$116 million	\$132 million	Pharmaceuticals
10	Theratechnologies Inc.	Montreal, QC	\$103 million	\$77 million	Biotechnology

Notes: 1) Enterprise value is the total value of a company's outstanding shares, adjusted for debt and levels of cash and short-term investments. 2) Market capitalization is a measurement of a company's total value based on outstanding shares of stocks. 3) Share prices are the cost for a share of a company's stock. All values are approximate and subject to change based on market conditions (accessed in Nov 2024). The currency is CAD. Source: The Globe and Mail Markets Data, TMX Money and Stock Analysis.

Canada has other major life sciences firms, including [Abcellera Biologics](#), [Zymeworks](#), [Aurinia Pharmaceuticals](#), and [Repare Therapeutics](#) — but these are listed on a U.S. stock exchange and controlled by U.S. investors. Since there is no indication of a shift toward greater Canadian ownership, and several dual-listed companies have dropped their Canadian listings, their returns will continue flowing south of the border.

Canadian firms rarely achieve the same scale or public market access seen in other

sectors, with Bausch Health being the sole firm among the top 100 largest companies in Canada by market capitalization.<sup>14</sup> The smaller pool of high-valuation Canadian companies indicates a less mature investment ecosystem and underscores the challenges to build large-scale, market-ready companies in Canada. From an investor perspective, this means a less attractive and riskier market, with fewer experienced founders and repeat entrepreneurs—key ingredients that attract follow-on investment.



# What's at stake

**Domestic life sciences companies are left with fewer funding opportunities, forcing some to relocate to places where capital is more accessible, and taking future economic returns with them.**

A significant portion of Canada's later-stage funding comes from foreign sources. Over the past decade, Canadian startups across all sectors have secured VC financing with only 27.5% sourced from Canadian-based VC firms. The reliance on international funding results in economic impacts being realized outside of Canada, as foreign investors often benefit from successful exits and the commercialization of innovations.<sup>15</sup>

When startups leave our ecosystem, we lose the opportunity to capture the financial returns generated by their success. In the early stages, local investors, incubators, and government programs may have provided critical support, whether through funding, mentorship, or infrastructure, to help these startups grow. If the company moves elsewhere, the economic, employment, and financial benefits occur there instead of strengthening the local economy. If the financial returns stayed in Canada, they could have been reinvested to nurture the next generation of startups.

## What are the outputs of reinvesting in the domestic ecosystem?

Reinvestment of capital in domestic startups fuels a cycle of economic benefits, including:



**IP ownership:** By securing IP rights, inventors can monetize their innovation through licensing, sales or partnership, providing financial rewards and encouraging further innovation.



**Job creation:** Startups typically expand their talent pool, adding jobs across various functions as they grow. If companies stay local, we secure more employment opportunities for the region.



**Export Development:** Growth-oriented companies often look to international markets for growth, bringing in export revenue that strengthens the local economy. By supporting them in the early stages and retaining them, we grow our export base and further strengthen our local companies and ecosystem.



**Economic growth:** Successful startups can stimulate the local economy by creating a multiplier effect that attracts talent, investment, and additional resources to the ecosystem.



**Without domestic champions, we lose the opportunity to benefit from our own R&D and entrepreneurial efforts**

Foreign investment plays a crucial role in strengthening Canada's life sciences ecosystem, with multinational companies bringing significant resources, expertise, and opportunities for collaboration. However, an overreliance on foreign acquisitions risks undermining the development of locally headquartered champions. Currently, mergers and acquisitions account for 60% of Canadian biotech investments, leading many domestic firms to be acquired by international players. This trend limits the potential to cultivate large, homegrown companies that can drive sustainable growth and reinforce the sector's global competitiveness.

Canada lacks a critical mass of large, self-sustaining anchor life sciences companies. Anchor companies are defined as those with substantial domestic ownership, prominent market leadership, and the capacity to employ a significant talent base (e.g., over 500 employees). Their influence extends beyond individual success, shaping the trajectory of the broader sector through their ability to stimulate innovation, attract investment, and function as a platform for the growth of smaller firms.<sup>16</sup>

In addition, anchor companies are key drivers of ecosystem resilience. Their proven ability to attract venture capital instills investor confidence and generates significant financial activity. They also play a crucial role in ecosystem development by fostering the growth of emerging firms through measures such as corporate venture funding, acquisitions, and spin-offs. These activities accelerate access to public markets, stimulate higher valuations, and enhance the overall competitiveness of the sector. Equally vital, anchor companies are magnets for top-tier talent. Their ability to offer competitive compensation, robust benefits, and diverse career paths positions them as attractive employers. This capacity to draw and retain skilled professionals transforms workforce availability into a sustained regional advantage, bolstering the long-term health of the ecosystem.

Securing the future of Canada's life sciences sector requires a strategic focus on fostering and scaling homegrown anchor companies. While foreign investment will remain essential, nurturing local champions ensures that talent, innovation, and economic benefits are deeply rooted within the country. By prioritizing the development of these firms, Canada can build a life sciences ecosystem that is both globally competitive and locally impactful.





# Three actions to unlock capital for the life sciences sector

What comes next is critical. In 2024, Canada's life sciences sector secured \$1.4 billion in venture capital — a record-setting year that reflects growing investor interest and sector strength.<sup>17</sup>

Despite this progress, significant challenges remain. Fragmented funding pathways and a risk-averse climate continue to limit the sector's ability to grow globally. At the same time, recent threats to the long-term economic relationship between Canada and the United States are reshaping capital flows and geopolitical alliances. These uncertainties reinforce the urgency of strengthening Canada's domestic investment ecosystem. We can no longer afford to rely on foreign capital to drive innovation and risk losing the companies that early-stage funding helped build. To unlock investment, governments must close funding gaps, offer targeted incentives, and build the conditions that attract and retain capital.

## ACTION 1

### Strengthen our domestic investment ecosystem

- The federal government should double investment funds under the Venture Capital Catalyst Initiative co-investment model to continue supporting life sciences companies with clear growth potential and market demand from the healthcare system. Increasing capital allocation would help ensure companies receive the scale-up funding needed to retain domestic IP and drive commercialization. To promote the growth of the sector, the Government of Canada committed \$50 million for life sciences VC funds in the 2021 Budget. We call for the federal government to consider increasing that commitment to \$100 million.
- The Ontario government should increase allocations to the Venture Ontario Fund support for life sciences by 55% annually—adding \$130 million per year—to meet its \$725M VC investment goal by 2030.
- An industry association should create an Ontario Funding Hub as a centralized platform designed to catalogue and streamline access to all funding options available for businesses, researchers, and organizations in Ontario's life sciences sector. This platform should:
  1. Include all available sources from federal and provincial governments, as well as non-governmental grants and private funding opportunities.
  2. Enable users to search and filter funding opportunities by company stage, size of funding, type of project, and area of focus (e.g., biopharma, MedTech, digital health).
  3. Offer step-by-step guidance on applying for each program, including timelines, required documents, and tips for successful applications.
  4. Highlight programs that can be combined (e.g., stacking federal and provincial tax credits or grants) and flag potential overlaps or restrictions.





**ACTION 2****Develop growth-focused programs to accelerate startups' development journey**

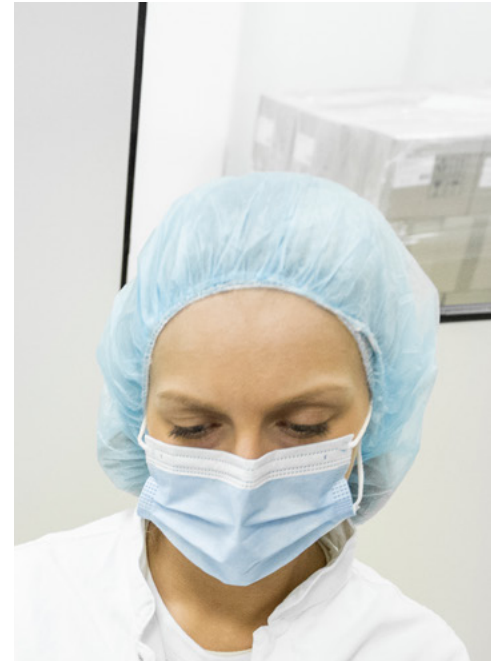
- The federal government should strengthen Canada's Industrial Research Assistance Program (IRAP) by focusing on commercialization in addition to R&D while advancing the following strategic priorities:
  1. Offer repayable grants in addition to research funding, to reinvest in future commercialization efforts. Examples of similar programs in other countries include [the START Program](#) offered by Japan's Science and Technology Agency, [Poland's Regional Development Funds](#), and the [United States NIH's Commercialization Readiness Program](#).
  2. Adjust IRAP's eligibility criteria to better align with the unique development timelines of life sciences companies.
  3. Ensure IRAP applications are reviewed by specialized personnel with expertise in the dynamics and complexity of Canada's life sciences sector.
- The federal government should prioritize domestic life sciences projects for federal funding through Canada's Strategic Innovation Fund and expand support under Canada's Biomedical Research Fund to life sciences projects with direct adoption into the Canadian healthcare system.
- The federal government should introduce a preferential federal tax treatment for Intellectual Property (IP) royalties in proportion to the investment made in developing life sciences patents. This measure, announced in the [2024 Fall Economic Statement](#), can ensure income generated from IP ownership and usage stays in Canada.

**ACTION 3****De-risk investments through government incentives**

- The federal government should introduce partial or full capital gains exemptions for investors in early-stage life sciences companies (i.e., pre-revenue or early revenue stage, Canadian-controlled corporation). Partial exemptions in taxable capital gains (e.g., 50-75% reduction) can be awarded for investments held for a minimum period (e.g., 3 years) and total exemption for investments held beyond 5 years. Global examples of similar initiatives include the UK Investment Scheme (EIS), the US Qualified Small Business Stock, and Australian Early-Stage Venture Capital Limited Partnerships.
- The federal government should strengthen the Federal Scientific Research and Experimental (SR&ED) credit to ensure this financial tool supports the full innovation lifecycle, from research to market, by adopting the following strategic priorities:
  1. Increase the annual expenditure limit for qualifying Canadian-controlled private corporations (CCPCs). As a point of reference, in the 2024 Fall Economic Statement, the federal government announced an increase from \$3 million to \$4.5 million, which could allow CCPCs to claim up to \$1.5 million annually.
  2. Adjust the taxable capital phase-out thresholds from the current \$10 million-\$50 million range to \$15 million-\$75 million to enable more companies to benefit from the tax credit.
  3. Allow eligible public corporations to access the tax credit for qualifying SR&ED expenditures.
- The provincial government should introduce an investment tax credit for angel investors and venture capital funds that invest in R&D-intensive life sciences companies. As a point of reference, [investors in the United Kingdom](#) can receive income tax relief of 50% on investments up to £100,000 per tax year in early-stage companies.

# Looking ahead

**We must rethink how we approach commercialization.** Canada has the opportunity to move beyond incremental improvements and siloed measures and embrace a bold, transformative business environment that drives game-changing breakthroughs. This mindset needs to be adopted across current and future initiatives with a comprehensive pool of capital supporting companies at all stages. The Toronto-Waterloo Corridor already benefits from strong collaborations among sector stakeholders—it is time to leverage this strategic advantage to strengthen the sector. At a time when Canada and Ontario face economic threats, sustaining and strengthening these partnerships in life sciences can be a key driver of resilience.



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