



# **Contents**

About this playbook series	3
Action plan and four playbooks to transform the life sciences sector	4
Realizing the economic power of life sciences	6
Ontario's life sciences talent pipeline	7
The gap in experienced talent	8
What is driving the talent gap	9
What's at stake	12
Three Actions to close the talent gap	13
Action 1: Leverage the advantages of short-term executive expertise and advisory	13
Action 2: Expand government support for talent development and retention programs	14
Action 3: Encourage entrepreneurship	14
Looking Ahead	15

## 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:

Allison Brown Medicine by Design

Tim Dutton Intellijoint Surgical

Barry Gee Toronto Innovation Acceleration Partners

Bethany Moir adMare BioInnovations

Bruno Paquin AtomVie Global Radiopharma

Cary Solomon Seeker Labs

Elaine Corbett Ontario Genomics

Erin Hennessey MaRS Discovery District

Geneviève Lavertu Johnson & Johnson Canada **Ghadeer Shubassi** AtomVie Global Radiopharma

Gordon C. McCauley Admare BioInnovations

Graeme Cooke Toronto Global

Jason Field Life Sciences Ontario

Jordan Thompson Ontario Genomics

Kristy Lonergan adMare Academy

Lisa Kimmel

Louise Pichette MaRS Discovery District

Magdalena Mahlstedt Canadian Alliance for Skills & Training in Life Sciences Mary Argent-Katwala
Ontario Bioscience Innovation
Organization (OBIO)

Maura Campbell
Ontario Bioscience Innovation
Organization (OBIO)

Matthew Bureau Roche Canada

Marzieh Zare Dreeven Technologies

Michael R. Jones Ontario Centre of Innovation

Neelam Bance MedGeneius Inc.

Orchid Jahanshahi Thinkrbelle

Parimal Nathwani Toronto Innovation Acceleration Partners (TIAP) Piru Perampalam Copoly.ai

Raquel De Souza 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 biomanufacturing workers, with only 25% of biomanufacturing 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 Al 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











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



# Ontario's life sciences talent pipeline

Boasting a highly skilled and educated population, Canada has all the talent ingredients to become a global leader in life sciences. Canada tops the G7 countries in terms of the total number of college and university graduates as a share of its population. Fifty-seven percent of Canadians aged 25-64 hold a college or university credential, and in 2023, 4.8 million degrees were awarded in science, technology, engineering, and mathematics (STEM) fields.<sup>1</sup>

Notwithstanding current changes to immigration policy, Canada is a top destination for international students. It welcomes hundreds of thousands of students at all levels of study every year, reaching over one million students with active permits in 2023. According to the Canadian Bureau for International Education (CBIE), the number of international students across Canada grew by 64 percent over the past five years and more than 200 percent over the last decade. In the same year, 70 percent of international students planned to apply for a post-graduate work permit, and 57 percent intended to apply for permanent residence.

In Ontario, the number of post-secondary graduates in life sciences-related fields or applications increased by 36 percent from 2017 to 2022 at all levels of education (see Figure 1). Biological sciences graduates bring expertise in understanding living organisms, forming the basis for advances in drug and new therapy developments. Skills in physical sciences, including fields such as chemistry, also play a crucial role in designing new materials for biomedical applications, diagnostic equipment, and nanotechnology, among others. The steady growth in total graduates has been driven mainly by an increase in engineering/applied science degree attainment, which includes molecular biology, statistics, and biomedical engineering, among other specializations.

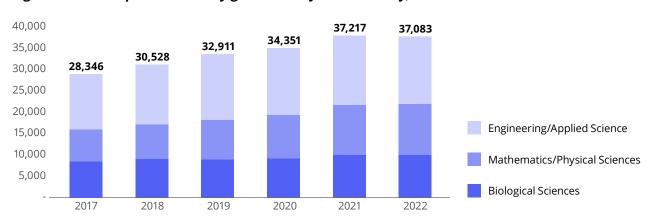


Figure 1: Ontario post-secondary graduates by field of study, 2017-2022

Note: Data includes post-secondary education at all levels of educational attainment, including bachelor degrees, masters degree and PhD and equivalents.

Source: Ministry of Colleges and Universities.

# The gap in experienced talent

Data suggests that, in theory, Ontario has a well-educated talent pool with the skills needed to meet the technical demands of the life sciences sector. However, turning this robust pool of graduates into a high-impact workforce requires more than just high enrollment numbers. While Ontario has an exceptional supply of entry-level science talent, there is a critical gap across three categories of experienced talent:

## C-suite executives (e.g., CEOs, CFOs, COOs) and repeat entrepreneurs

Domestic companies face challenges in recruiting and retaining seasoned leaders who bring experience in achieving key milestones such as raising capital, accessing new markets, and securing strategic partnerships. Access to experienced C-suite executives and repeat entrepreneurs is crucial for guiding teams through complex, high-risk phases, and providing strategic vision. These professionals are critical, as they can accelerate success by applying insights gained from past ventures and organizations. Investors often consider them valuable assets as their track record can signal a higher likelihood of achieving impactful outcomes.

### **Market-ready scientists**

A study by MaRS Discovery District found that there is a shortage of scientists with experience translating science into commercial applications. The gap extends beyond traditional university-level training, with shortages in specialized experience in clinical applications and medical regulatory affairs. These professionals play a pivotal role in overseeing clinical trials, applying their expertise to ensure that novel therapies are tested effectively to comply with regulatory standards and successfully bring new treatments to market.<sup>2</sup>

### Bio-manufacturing and production workers

Ontario companies face significant challenges in recruiting bio-manufacturing and production workers, with projections indicating that only 25 percent of job openings in these areas will be filled over the next five years. According to Biotalent Canada's latest labour market intelligence report, the life sciences sector is expected to employ 53,500 workers by 2029 in Ontario, and to meet this forecast, the province will need an additional 2,170 biomanufacturing workers.<sup>3</sup>



# What is driving the talent gap

## The Toronto region offers lower salaries and has fewer large-scale firms

The COVID-19 pandemic underscored the competition for talent in life sciences. The pressure for growing needs for medical innovation means the sector will rapidly evolve to deliver breakthroughs in human life advancements and societal well-being. With an increased demand for specialized talent and pressure for higher salaries everywhere, Toronto companies find it difficult to recruit experienced professionals, as many find more attractive compensation packages and a more comprehensive range of employment opportunities in dominant centres of life sciences activity in North America.

While Toronto's cost of living is lower compared to metros like San Francisco and Boston, average hourly wages remain lower. Professionals in Toronto only earn a fraction of what their counterparts make in dominant US markets (see Figure 2). This discrepancy is in part driven by the prominence of these life science hubs and a burgeoning demand for high-skilled labour to drive success and growth for companies in these markets.

The San Francisco Bay Area and Greater Boston are home to some of the most well-established biopharma companies in the world. Major biopharma institutions include Gilead, BioMarin, Global Therapeutics (Pfizer), Moderna, Sherlock Bioscience, and Click Therapeutics, as well as a deep pool of promising startups that create thousands of jobs every year. Both the Bay Area and Greater Boston owe their dominance in life sciences in part to research institutions embedded in their ecosystem that pump a continuous stream of biopharmaceutical talent into the local workforce and generate copious amounts of patents.

Figure 2: Average hourly wage for select US and Canadian Life Sciences Occupations, 2023 (Values in CAD)

MARKET	BIOCHEMISTS & BIOPHYSICISTS	BIOMEDICAL ENGINEERS	CHEMISTS	COST OF LIVING FOR A SINGLE, WORKING-AGE ADULT
San Francisco Bay Area	89.78	86.15	84.46	118,996
Boston/Cambridge	82.90	70.66	78.22	95,462
New York/New Jersey	70.43	78.44	64.27	93,985
Metro Vancouver	50.30	46.00	46.70	52,961
Greater Toronto Area	31.25	46.15	31.25	61,654
Greater Montreal	38.75	44.71	38.75	33,252

Note: For this analysis, the US values were converted at an exchange rate of 1 USD = 1.36 CAD. The reference period for all data points is 2023.

Source: U.S. Bureau of Labor Statistics, Statistics Canada Labour Force Survey, CBRE U.S. Life Sciences Research Talent 2023 Report, CTV News Toronto.

The challenge of an increased need for a workforce with the competencies to fill today's roles begins with the mismatch between university programs and how they are preparing students for careers beyond academia.

Toronto's higher cost of living but lower average wages relative to Montreal and Vancouver could be impacting its competitiveness. Professionals may weigh both wages and living expenses when choosing where to work, not to mention the growth prospects of each respective life sciences ecosystem. In Vancouver, the degree of coordination and proximity between its tight-knit group of universities, agencies, institutes, funders, and founders is unique in the country. Vancouver's life sciences sector is built around its leading companies committed to building billion-dollar businesses, including AbCellera Biologics, Xenon Pharmaceuticals, Stem Cell Technologies, and many others, which create thousands of new jobs and generate millions in revenue.4

Montreal's life sciences ecosystem has also grown exponentially over the last few years, anchored around over 1,600 companies sustaining over 55,000 jobs every year, according to the Investment Attraction Agency Montreal International. A key player in the sector is Bausch Health, Canada's largest company listed on the Toronto Stock Exchange. The presence of Bausch underscores Montreal's competitive edge in supporting and sustaining large-scale, globally competitive life sciences firms.

## Academia is still the dominant career path for science graduates

Life sciences is a knowledge-intensive sector dependent on highly specialized talent and subject-matter expertise to navigate its complex activities. The challenge of an increased need for a workforce with the competencies to fill today's roles begins with the mismatch between university programs and how they are preparing students for careers beyond academia. Academic programs for life sciences subjects are mainly focused on content and information transmission, with insufficient

attention on the skills and experience employers expect in potential hires.

Consider the case of trained scientists. While they possess a deep understanding of the fundamental concepts, principles, and processes within their field, they often lack the business acumen and real-world industry experience to take science and apply it to commercially viable solutions. Their education focuses primarily on acquiring technical expertise but often overlooks exposure to the business aspects of their field, such as commercial product development and healthcare market dynamics.

Recent data from Statistics Canada confirms that doctoral programs are primarily tailored to prepare graduates for academic jobs, which heavily influences their post-graduation plans. University professors and lecturers are the top occupations for many life sciences doctoral graduates, including biological science (33.3%), physiology (34.8%), biochemistry and molecular biology (28%), medical engineering (26.8%), and pharmacology (21.8%).<sup>5</sup> The findings reiterate the need to provide professionals with diverse career pathways and universities to encourage scientists to consider careers beyond academia.

# Are career paths chosen by scientists changing in the near future?

In the future, it is likely we will see a greater number of advanced graduates moving into industry roles. A study by the University of Toronto found an increase of 29 percent in the number of their PhD graduates pursuing careers in the private sector.

Ontario is not far from building a robust industryready talent pool, considering that its several institutions offer more multidisciplinary education and thousands of STEM graduates every year. Postsecondary institutions and ecosystem partners are already leading the way on ensuring resources are available for life sciences professionals to support their transition to private sector jobs.

The missing link is ensuring sciencetrained professionals can deliver what businesses need and are aware of the untapped opportunities of a career in the sector while focusing on developing skills and competencies relevant to success in the workplace that cannot be taught through books and lectures.



## **Programs supporting** talent pipelines in the Toronto-Waterloo corridor



**BioTalent Canada's Student Work** Placement Program (SWPP): an initiative to increase the job-readiness of students registered in STEM, healthcare, business, and other programs at Canadian post-secondary institutions.



adMare Academy's BioInnovation Scientist (BIS) Programs: BIS programs provide training that empowers earlycareer professionals with the fundamental knowledge and skills they need to succeed in the life sciences sector.



Medicine by Design's Series "Careers Beyond Academia": in partnership with the Stem Cell Network, UofT Medicine by Design hosts seminar series that profiles a wide variety of careers available to life sciences graduates to help them understand pathways to consider industry careers.



## McMaster University's Entrepreneurship Acces **Entrepreneurship Academy:**

The academy focuses on supporting researchers and students working toward commercialization. The program includes a competition for funding, lab space at a flat rate for one year and mentorship programs with McMaster mentors who have started their own company.



### Centennial College's Biomedical **Engineering Technology Program:**

providing a balance between theory and hands-on labs, this program prepares qualified college or university graduates with a background in electronics to access industry experience in biomedical equipment and engineering disciplines directly with companies.

## What's at stake

Talent is the cornerstone of any thriving ecosystem. A strong talent pool attracts investors and strategic partners, demonstrating the region's potential for successful commercialization and sustainable growth. Skilled professionals draw in both venture capital and operational support, providing the financial backbone essential for ongoing development. Ontario benefits from a steady pipeline of early-career talent nurtured by its world-class universities, which are well-equipped to prepare the future workforce for advancing medical breakthroughs.

However, experienced executives are much needed to guide emerging businesses where insights from past successes and failures propel new ventures forward. Currently, our local ecosystem lacks the talent base required to support emerging companies to become billion-dollar entities. Without the skilled professionals needed to drive and reach such milestones, the Toronto ecosystem misses the chance to benefit from their experience and expertise reinvested into new ventures, limiting its ability to build a business environment where innovation, capital, and talent thrive.

## Bioscience companies cannot find the talent they need to grow

Ontario's bioscience industry faces a significant talent gap, competing intensely with other sectors for highly skilled workers in an already limited talent pool. As demand for these workers continues to rise, this shortage poses a serious and growing challenge: the gap is projected to widen by 2030, with four job openings for every available worker—double the current ratio.<sup>6</sup> Compounding this issue, the limited presence of larger companies further restricts talent retention. Unlike other industries, bioscience lacks a broad network of mid-to-large companies with deep talent pools, making it more challenging to recruit from within. As a result, 62 percent of bio-economy companies report facing significant difficulties in securing the skilled talent they need.

Bio-manufacturing workers are crucial for bioeconomy companies. These professionals bring the technical expertise necessary to produce complex bio-products, such as pharmaceuticals, vaccines, and bio-based materials. Their work encompasses translating research into scalable products that meet regulatory standards and market demands. With the right bio-manufacturing talent, companies can expand their production capabilities, reduce dependence on international manufacturing, and enhance supply chain resilience. A robust local talent pool in bio-manufacturing not only supports industry growth but also fuels a cycle of reinvestment as experienced professionals contribute back to the ecosystem. The bioscience industry's ability to secure and retain skilled biomanufacturing talent is, therefore, foundational to its sustainability, scalability, and impact—making workforce development an urgent priority for ensuring the sector's long-term growth and resilience in Toronto and beyond.

# Initiatives addressing workforce gaps



BioTalent Canada's Career Starter Program is designed to help small businesses access emerging talent by covering up to \$20,000 of a youth's salary for placements of three to nine months, contributing to a stronger and more sustainable industry workforce.



BIOVECTRA x Canadian Alliance for Skills and Training in Life Sciences (CASTL) Partnership has supported individuals interested in life sciences careers by providing a safe environment where they can learn, ask questions and make mistakes without disrupting companies' operations.



# Three actions to close the talent gap

#### **ACTION 1**

# Leverage the advantages of short-term executive expertise and advisory

- Industry associations should develop a robust network of domestic and international life sciences executives interested in fractional or short-term advisory roles. Canada's life sciences ecosystem relies on a small pool of professionals with the specialized knowledge and proven strategies to drive growth and navigate complex challenges. The ability to draw on a broader network of specialists and executives can fill the capacity gap for Toronto businesses. This network should encompass professionals with expertise across key areas of business growth, including clinical operations, regulatory affairs, and commercialization strategies.
- Industry associations should implement a structured matching program
  to connect fractional executives and consultants with domestic startups.
  This program should begin with a needs assessment for startups, identifying
  leadership gaps and strategic priorities to ensure tailored matches. The
  matching process can be facilitated through a centralized digital platform
  equipped with detailed profiles of executives, highlighting their expertise,
  availability, and preferred engagement models.
- Federal or provincial governments should fund exchanges or fellowships that embed entrepreneurs into established life sciences hubs. Entrepreneurs placed into larger, more prominent ecosystems would benefit from expertise and mentorship unavailable locally.
- The provincial government should provide a wage subsidy program to help high-potential businesses fill critical executive gaps.

#### **ACTION 2**

# **Expand support for talent development and retention programs**

- The federal and provincial governments should support an expansion of the Elevate program to Ontario. Delivered by the Canadian Alliance for Skills and Training in Life Sciences (CASTL), the 6-week training initiative provides younger workers, new Canadians, and diverse populations with the skills required for high-demand technician roles in biomanufacturing, as well as support in applying for new roles. The program offers self-directed and instructor-led remote learning along with hands-on experience at a CASTL training facility. In addition to technical training, participants benefit from professional development, networking opportunities, and job coaching. While CASTL delivers training at its facilities in other provinces, it doesn't have a facility in Ontario. With targeted investment, Elevate could be expanded and rooted in Ontario, unlocking a pipeline of skilled talent.
- The provincial government should introduce a Graduate Retention Incentive to retain top life sciences talent in Ontario. Targeted at graduates in fields such as biotechnology, biomedical engineering, pharmaceutical sciences, and regulatory affairs, this incentive can encourage talent to build their careers here. The province of Nova Scotia offers graduates with a recent university degree a tax reduction of up to \$15,000 over six years, to a maximum of \$2,500 per year.

#### **ACTION 3**

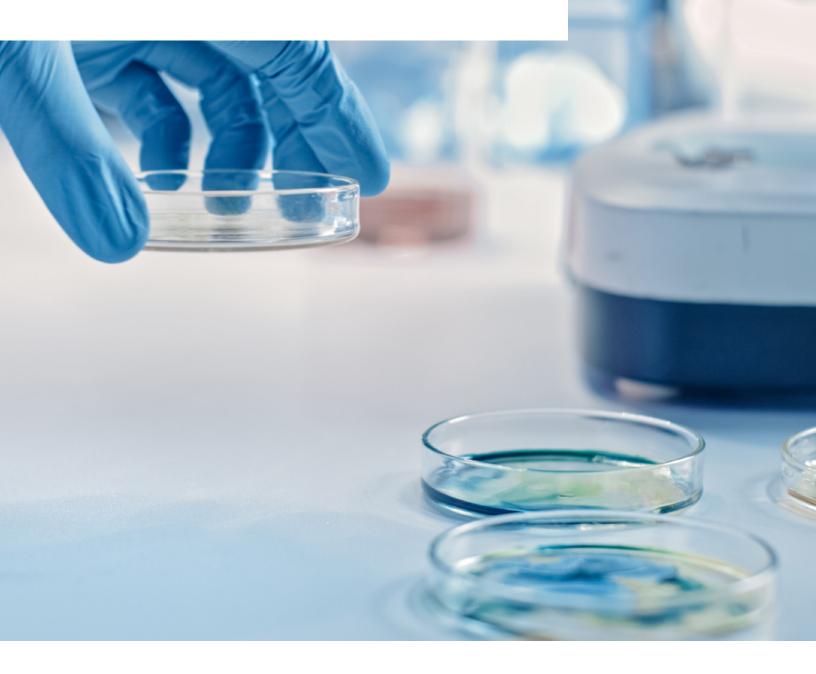
## **Encourage entrepreneurship**

- Post-secondary institutions should develop a "Bench to Business" fellowship program for life sciences postgraduates and post-doctoral researchers with promising scientific ideas. The fellowship should be designed to give emerging entrepreneurs the runway, mentorship, and ecosystem connections needed to explore the feasibility of launching a company.
- Universities should create structured commercialization
  pathways tied to graduate research. Many life sciences
  students produce research with commercial potential but
  have no structured on-ramp to explore startup creation.
  Universities could develop "Research Commercialization
  Tracks", where students can opt into a stream that includes
  market discovery, IP support, and pitch training, culminating in
  a demo day or investment-readiness program.





The success or failure of many businesses in the life sciences sector hinges on access to the right talent. While Toronto boasts an enviable talent pipeline, it falls well short of supplying businesses in the region with the skills and experience they need to build champions. By leveraging global executive expertise, building local capacity, and enabling our brightest minds to become entrepreneurs, the region can transform its nascent talent potential into long-term success.



## **Endnotes**

- 1 Statistics Canada. 2022. "The Daily: Canada leads the G7 for the most educated workforce, thanks to immigrants, young adults and strong college sector". https://www150.statcan.gc.ca/n1/daily-quotidien/221130/dq221130a-eng.htm
- 2 MaRS Discovery District. 2021. "Canada's biotech and life sciences sector needs an infusion of talent to scale." https://www.marsdd.com/our-story/canadas-biotech-and-life-sciences-sector-needs-an-infusion-of-talent-to-scale/
- 3 BioTalent Canada. 2021. Close-up on the bio-economy: Labour Market Intelligence. Regional Spotlight: Ontario. https://www.biotalent.ca/wp-content/uploads/BioTalent-Canada-LMI-Regional-Ontario-06DEC2021.pdf
- 4 Globe and Mail. 2024. "B.C. biotech boom: Vancouver looks to join the global big leagues of modern medicine". https://www.theglobeandmail.com/business/article-vancouver-biotech-startups-medicine-pharmaceuticals/
- 5 Statistics Canada. 2024. "Economic and Social Reports: The most prevalent jobs of doctoral degree graduates are described in a detailed field of study by Marc Frenette and Tomasz Handler". https://www150.statcan.gc.ca/n1/pub/36-28-0001/2024009/article/00002-eng.htm
- 6 BioTalent Canada. 2021. Close-up on the bio-economy: Labour Market Intelligence. Regional Spotlight: Ontario. https://www.biotalent.ca/wp-content/uploads/BioTalent-Canada-LMI-Regional-Ontario-06DEC2021.pdf



The Toronto Region Board of Trade is one of the largest and most influential chambers of commerce in North America and is a catalyst for the region's economic growth agenda. Backed by more than 11,500 members, we pursue policy change to drive the growth and competitiveness of the Toronto region, and facilitate market opportunities with programs, partnerships and connections to help our members succeed – domestically and internationally.

This series was written by Laura Hernandez and edited by Saad Usmani, Avi D'Souza, Azana Hyder, with design provided by LDD Studio. The report was kindly reviewed by Giles Gherson, Roselle Martino, Jennifer van der Valk and Jeff Lang-Weir.

For more on making Toronto one of the most competitive and sought-after business regions in the world, visit **bot.com** and follow us at @TorontoRBOT.