



BIONATION 2022

SEPT 28-29, 2022 | OTTAWA, CANADA

Presented by



THE MOMENTUM CREATED FOR THE
SECTOR TODAY IS UNPRECEDENTED.
THIS IS A POINT IN TIME FOR CANADA
TO CAPITALIZE ON IT, MEASURE HOW
WE ARE GROWING AND SET THE NEXT
TERMS FOR FUTURE SUCCESS.



MEET BIONATION

In 1981, Canada's first biotechnology company Allelix was formed. Two years later, a small group of Canadian researchers, businesspeople and government leaders conceived Canada's first National Biotechnology Strategy.

Building on these first small steps and bigger vision, generations of Canadians have worked together to create a world class biotechnology ecosystem.

Today, more than 900 innovative Canadian biotechnology focussed companies anchor a national discovery and development network. The network is an economic catalyst present in every Canadian region and is driving the unprecedented solutions required and opportunities ahead. The convergence of biotechnology and other technologies including artificial intelligence, advanced cell and gene therapies, big data, climate mitigating technologies, agricultural innovations and platform technologies, continue to power the Canadian economy.

CANADA HAS HIGHLY SKILLED ENTREPRENEURS, INVESTORS, GLOBAL EXECUTIVES, RESEARCH LEADERS AND CLINICIANS WHO ARE CREATING OPPORTUNITIES FOR TALENTED YOUNG PEOPLE FROM WITHIN CANADA AND ACROSS THE GLOBE.

Over the past five years Canada's biotechnology sector has been one of the top economic success stories- and momentum keeps building. The sector is attracting record- breaking levels of investment in emerging and established Canadian biotechnology companies.

The ecosystem is focussed on the solutions of today with a vision for the future-to use biotechnology to make Canada and the world a better place. From climate change, to sustainably growing more food, meeting our growing healthcare needs, capturing skilled talent and driving post-COVID economic growth, the biotechnology industry enriches every Canadian life and is helping to address Canada's most pressing challenges.



The pandemic response provided us all with a once in a lifetime lesson about the importance of vaccines and public health, the necessity for strong domestic research and manufacturing capacity and robust supply chains.

The entire ecosystem is recognized as a vital government partner aligned with Canada's environmental, health, innovation, skills and global investment strategies. Our sector continues to be Canadian leaders in R&D spending- a key building block for the knowledge economy. BIONATION is a roadmap looking to leverage the \$2.2 billion Government of Canada's Investments made in 2021-22 to support a comprehensive Biomanufacturing and Life Sciences Strategy.

The momentum created for the sector today is unprecedented. This is a point in time for Canada to capitalize on it, measure how we are growing and set the next terms for future success.

BIONATION 2022 is about aiming higher; to seize the opportunity to bring the best of Canadian innovation to the world, capture the best talent at home and from abroad, to grow the ecosystem and scale up our companies.

"As the minister responsible for innovation, science, and industry, and as the former minister for foreign affairs, I am proud to see that by supporting the long-term resilience of our domestic biomanufacturing capacity, we have also attracted the attention of the world. We have seen global firms like Moderna, Sanofi and Merck initiate new operations here. They have made these decisions because they understand the many advantages of partnering with Canada. Whether its our numerous trade deals, our preferential access to markets and global supply chains, or our highly educated and competitively skilled population, we have what's needed to attract both talent and investments to Canada."

HONOURABLE FRANÇOIS-PHILIPPE CHAMPAGNE,
MINISTER OF INNOVATION, SCIENCE AND INDUSTRY



THE ROAD AHEAD: BUILDING THE NEXT GENERATION OF SUCCESS

Canada has secured its place at the forefront of research and discovery for some of the best of what biotechnology innovation offers.

Ambition, ingenuity, collaboration, and hard work of Canadians have driven our success. We have built great companies and generated great ideas. We have continually focused on strengthening our regulatory environment, supporting our dynamic researchers, and creating conditions to build and grow business and train and attract skilled workers.

Strategic federal government investment made over decades in both university education and sponsored academic research through granting agencies like the Canadian Institute of Health Research, Genome Canada, the National Research Council forms the backbone of the Canadian life sciences.

Canada has a trusted global brand, as a place of opportunity, that promotes equality and inclusion. We have a diverse and tolerant society, and our companies are places people want to build careers located in communities where they want to live.

But we also understand that we operate in highly competitive market. Our global competitors are doing everything they can to attract skills and investment. They are leveraging tax policies and looking for any way they can improve their business climate. Standing still is not an option and we continually seek the winning conditions.

“This is a critical time for industry to come together with public policymakers, academia, and researchers to leverage our investments in basic research for improved health outcomes and sustainable economic recovery in Canada.”

GORDON C. MCCAULEY
PRESIDENT AND CEO, ADMARE BIOINNOVATIONS





DATA: MEASURE PROGRESS

- Build on the federal interdepartmental working relationships between ISED and Health Canada to capture the best lessons learned from the pandemic, to include industry and bring senior level officials from other key federal departments together regularly to set the agenda as we move forward.
- Establish a national industrial measurement process to mirror the OECD biotechnology key biotechnology indicators so Canada actually has data on who the industry is, what it is accomplishing and the products it is developing. This is key to determining the success of federal investments and international competitiveness. It is impossible to highlight Canadian capacity without the rights tools to measure operational growth. Canada is the only OECD nation to not have accurate and timely data on the sector.
- Maintain a national asset map of the sector to serve the ambitions of the biomanufacturing strategy.

“Biosciences will revolutionize the 21st century as digital technologies revolutionized the 20th century... If you think the past two decades have been exciting for biosciences research, just wait to see what the next 20 years has in store for Canada.”

DR. ROB ANNAN
PRESIDENT AND CEO, GENOME CANADA





INVESTMENT: ATTRACT AND LEVERAGE

- Expand the venture capital fund dedicated to life sciences to build on the momentum and financial success already generated and propel the next generation of biotechnology innovations in Canada. With co-investment from the government, institutional investors, and international sources, the Life Sciences Capital Catalyst Initiative (LS-VCCI) will provide the capital required to support the full Canadian life sciences innovation continuum. The Venture Capital Action Plan (VCAP) and Venture Capital Catalyst Initiative (VCCI) were proven tools that attracted investment into life sciences that otherwise would not have gone into the sector. These funds were successfully leveraged to grow existing Canadian companies with a goal to create emerging anchor companies. We envision a similar outcome for LS-VCCI.
- Ensure that cleantech VC funds include investments that target industrial biotechnology companies in Canada.
- Improve the competitiveness of SR&ED to benefit SMEs. Canada has established itself as a competitive place to invest and drive R&D. This is in part due to the SR&ED Tax Credit program that competes against a multitude of global competitors modeling public policy after what Canada has established. Ensuring the SR&ED remains at the forefront of attracting investment is integral to the goals of long-term economic growth.

“Entrepreneurs, capital, and innovation are the hat trick of creating a business. The work being done by university researchers is an infinite source of innovation that can serve as a foundation for developing new companies. The Fonds is proud to help create innovative businesses, build a strong economy, and improve patient care. We welcome new ideas and original initiatives which will support entrepreneurs’ ingenuity, leadership and “chutzpah” as they develop their companies.”

GENEVIÈVE GUERTIN
VICE-PRESIDENT PRIVATE EQUITY AND IMPACT
INVESTING LIFE SCIENCES, FONDS DE SOLIDARITÉ FTQ



TALENT: ATTRACT & RETAIN

Now cited on a par with the need for access to capital, the need for talented people now ranks at the top of the list when it comes to barriers for success. Not unlike many other economic sectors in the economy, biotechnology is in dire need of the highly skilled labour force who can drive economic outputs for the sector. The difference in this sector lies in the solutions it is bringing to the world. From addressing the impacts of climate change, securing food security and sustainability, to protecting and improving human health—this sector inspires the potential at hand today.

What can we do to increase the diversity of skills within the biotechnology ecosystem?

- Maintain stock option capital exemption to attract and retain top talent in Canada. Stock options are one of the most important tools for early-stage companies to attract and retain top talent.
- Work together to mentor and develop C-Suite talent to drive next-generation innovation towards commercialization.
- Leverage our universities' strong communities and align with the Government of Canada's objective to attract the best talent from around the world.

"If there is one topic on everybody's mind it is talent: where to find it, how to attract it, and how to meet the bio-economy's growing need for it. While there's no single magic solution to solving the shortage, increasing inclusion, diversity, equity and accessibility — IDEA — is critical. Diversifying the bio-economy workforce will do more than meet labour needs. It will also help companies in the sector become more creative and successful. Research shows that diverse companies with inclusive leaders are better able to attract and retain top talent, making them more innovative and profitable."

ROB HENDERSON
PRESIDENT AND CEO, BIOTALENT CANADA





REGULATORY OVERSIGHT: AGILE AND MODERN

An effective regulatory environment ensures safety while encouraging the development and adoption of innovative new products and services. The speed at which our governments responded to the COVID-19 pandemic, whether to create and launch relief programs, simplify and shorten procurement processes or expedite clinical trials, shows us that we can and must aim higher. A high performing regulatory system should be predictable, efficient, consistent and transparent, so as not to present barriers to business investment, innovation and ultimately, economic growth and values improved outcomes that benefit Canadians.

- Implement modernized regulatory processes that are aligned globally and harmonized to attract technology to Canada in order to ensure Canada has the regulatory capacity to draw the next generation of technologies into use for and by Canadians.
- Deliver on the implementation of a rare disease strategy. Enable the commitment of \$500 million annually to expand care to patients with rare disease. The arrival of genetic based therapies, along with improved international data sharing are just two examples of how the underserved rare disease patients can benefit from the best of new technologies. The federal commitment to help fill the existing gap in access to life changing medicines can help to align the best of regulatory and evaluation practices found in Canada and other jurisdictions to serve existing patient needs.
- Measure the performance of regulatory process on commercializing new biotechnologies with metrics of how fast Canadians gain access to these new technologies relative to other jurisdictions.

“I believe that Canada has all of the right ingredients to ensure strong and sustainable healthcare into the future. The external environment in Canada has so much going for itself – smart people; diversity in our population; high education levels; strong innovation mindset; open culture of collaboration; good healthcare. Now, it is a matter of being clear on its ambition for healthcare and working with all stakeholders to help make it a reality.”

BRIGITTE NOLET
PRESIDENT & CEO, ROCHE CANADA PHARMA





BIOTECANADA GRATEFULLY ACKNOWLEDGES THE SUPPORT OF ITS BIONATION PARTNERS



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