

Setting the Stage for Next Generation Expansion of the Bio-economy

BIOTECanada hosted the 3rd annual National Bio-economy Roundtable in Washington D.C in June where Canadian Premiers, Ministers and politicians from across the country were taking part in the 2011 BIO International Convention, where more than 15,000 global biotechnology industry leaders and public officials gathered for networking, deal-making and high-level sessions.

From all regions of the country, 80 Canadian biotech leaders, with federal and provincial ministers, officials, and municipal leaders participated in the third annual BIOTECanada Roundtable on the Bio-economy at the Canadian Embassy.



Minister Goodyear speaks at the Bio-economy Roundtable in Washington D.C.

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Who attended the National Bio-economy Roundtable:

Honourable Gary Goodyear, P.C., M.P.
Minister of State for Science and Technology

Honourable Darrell Dexter, MLA
Premier of Nova Scotia, MLA

Honourable Yves Bolduc, MNA
Quebec Minister of Health and Social Services

Honourable Rob Norris, MLA
Saskatchewan Minister Responsible for Innovation

Honourable Glen Murray, MPP
Ontario Minister of Research and Innovation

Honourable Greg Weadick, MLA
Alberta Minister of Advanced Education and Technology

Honourable Dave Chomiak, MLA
Manitoba Minister of Innovation

Honourable Dr. Moira Stillwell, MLA
British Columbia Parliamentary Secretary for Industry, Research and Innovation

BIOTECanada President Peter Brenders kicked off the Roundtable by describing the pillars of Canada's bio-economy: the entrepreneurship of our scientists and industry, and supportive public policies.

Brenders noted that the bio-economy contributions to Canada's GDP represents over 7% of the total wealth of the country. How to grow this sector will depend on two factors: how we build on our current success stories, and how we chart a clear path to achieve Canada's biotechnology potential. He called on participants to identify what is working – Canadian success stories – and then to paint a picture of what success looks like.

Dr. Pierre Meulien, President of Genome Canada, set the stage by noting biotechnological ingenuity will play a major role in addressing the biggest issues facing Canada and the world: population, food, climate, and energy.

Biotechnology injects over \$86 billion every year into the Canadian economy, more than the automotive and aerospace industries combined. And the potential is massive: by 2030, biotechnology is expected to contribute over \$1 trillion to OECD economies.

Financing for the Future & Grow the Canadian Bio-economy

Flow-through shares drive investment

Canada's biotech industry requires \$1 to 1.5 billion in new capital to sustain the current level of products in the development pipeline. Similar to junior mining companies, Canada's junior biotechnology companies require a tremendous amount of time and capital to reach profitability.

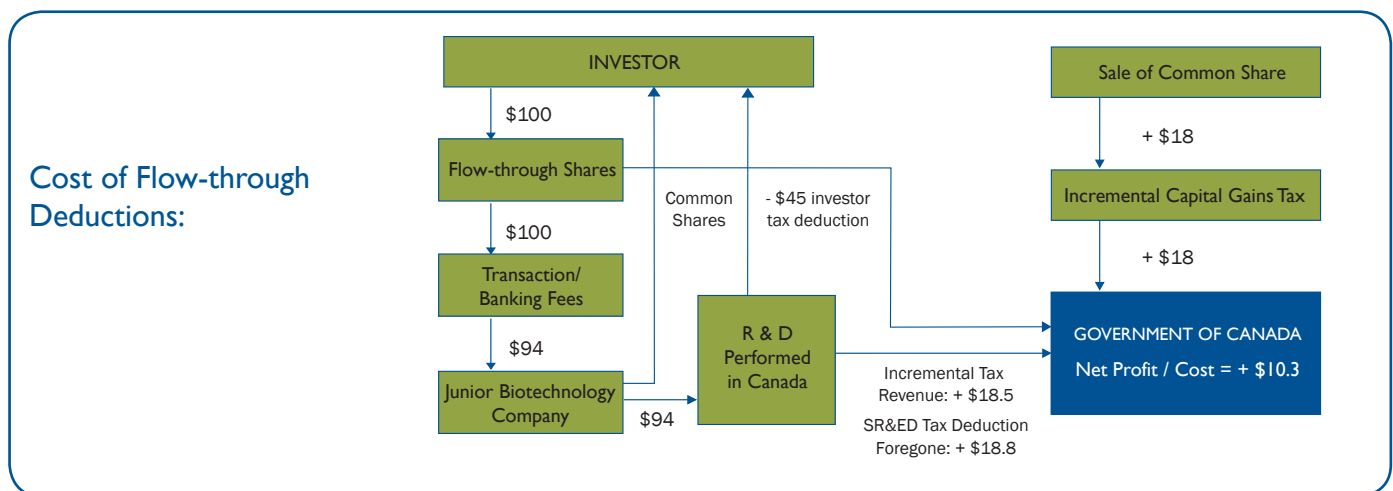
Combined with length of development time, the high level of risk involved with scientific discovery, and the better incentives to invest in other areas like resources, traditional investors shy away from this industry. Fully realizing the promise of biotechnology requires a competitive national environment to attract investment to allow our companies to grow their operations here. Extending the current flow-through shares program is one tool the industry is continuing to promote. The Flow-through Shares program has a proven track record for creating new risk capital; over the last 25 years, the program has created more than \$10 billion in new capital for the mining sector alone. This model of success can be replicated in growing Canada's bio-economy.

What are flow-through shares?

Participating companies can incentivize prospective investors by issuing a special type of share arrangement - called a flow-through share, which 'flows' certain exploration and development expenditures from the company to the investor. The investor can subsequently claim these expenditures as tax deductions.

In the United States, there is a similar initiative to stimulate private capital for biotechnology. Named the R&D Partnership Structures, this would allow a biotech company's investors to offset their income with the company's tax assets which would significantly stimulate much needed private investment in biotechnology.

Parliament has historically provided tax incentives to high-risk endeavors (such as resource and renewable energy) as a means for encouraging new investment. Similar to biotechnology the junior resource space is built on the premise of discovery, development and commercialization.



Valuing Research and Development in Canada

Keep SR&ED Tax Credit competitive

Canadian biotechnology companies require a minimum of \$1 to \$1.5 billion of investment annually, according to global industry experts. Access to capital remains the number one challenge this industry faces as it seeks to bring new technologies into the global marketplace. The unique length and depth of the development process for biotechnology products stands out amongst dozens of other innovative technologies. On average, our technologies take 7-10 years to develop and work through initial regulatory paths.

The Scientific Research and Experimental Development (SR&ED) tax credit remains the sole tax incentive for companies in our sector to keep building their operations here. Combined with the provincial equivalents, this program serves to provide much needed incentives for small, medium and larger established

enterprises to grow their operations here. Most companies are pre-commercial or not earning profits. Refundable credits provide the important financing to sustain research operations and help companies grow in Canada. These refundable credits need to be available to all SME's irrespective of ownership to keep research in Canada.

Specifically, removing the Canadian-controlled private company (CCPC) restriction to stop penalizing companies based here that have attracted international private investment into their operations. In today's competitive global technology market, small biotech companies are not only seeking their next round of financing from domestic private markets, but also from public markets and foreign investors. However, the CCPC restriction on SR&ED refundable tax credits discourages small companies in our industry from seeking capital from these two vital sources of capital and, subsequently, creates a distinct competitive disadvantage for innovative companies operating in Canada.

National Week of Celebration for Homegrown Success

National Biotechnology Week (September 16 - 23) directly engaged over 5,000 people in every region of the country in a national program informing Canadians and sharing our biotechnology excellence. Participants took advantage of educational forums, career fairs, toured biotech companies, and shared with others the value biotechnology offers to our health, our economy, and our future. Congratulations to all who organized events in their local community. Tremendous thanks go to our national organization partners, AMGEN, Janssen and Sanofi.

National Biotechnology Week was launched at the grand opening of the Vaccine and Infectious Disease Organization's new International Vaccine Centre (InterVac) in Saskatoon. The facility is a leading example of how research and development continues to captivate imaginations and showcase Canada's advantage. The Right Honourable Stephen Harper, Prime Minister of Canada, along with Honourable Brad Wall, Premier of Saskatchewan, industry leaders and the broader science community were on hand for the official opening of InterVac.



From Left to Right: Andrew Potter, CEO & Director, VIDO-InterVac, University of Saskatchewan, Prime Minister Stephen Harper and Peter Brenders

Helix on the Hill Reception

Thank you to all who joined us at Helix on the Hill. We drew a significant crowd with numerous Ministers, and MPs of all stripes. Groups of *Let's Talk Science* researchers presented lab to market experiments showcasing the reality - biotechnology abounds, and offers hope for the future. Parliamentarians were able to meet the Canadians bringing biotechnology to life in ridings across Canada. Adam Bly, founder of *Seed Magazine* spoke to the crowd by challenging elected officials to continue encouraging entrepreneurs with research and development investments. With powers such as China and India capitalizing on biotechnology, it is important the federal government take a serious look at the competitiveness of current incentive programs long cited as the world's best.



Advocacy Day

BIOTECCanada and over 50 representatives from companies in ridings across Canada visited Parliament Hill for meetings with Ministers, MPs, and officials. Together they discussed key issues of support for Canada's growing bio-economy. We received positive encouragement on issues such as an Orphan Drug Policy and expansion of the flow-through shares program to our industry. With champions identified, and the strength of our biotech caucuses growing we are in a strong position for policy implementation moving forward.

"Canada's strong bio-economy puts Canada in the position of taking a truly global leadership role in the field of biotechnology," said **Dr. T. Nathan Yoganathan, President and CEO, KalGene**. *"In order to accomplish this lead, we require a strong federal commitment to our industry operating environment coupled with a financing strategy addressing the unique characteristics of the biotechnology industry in Canada."*

"Through our advocacy efforts we are asking the government to align public policy to maximize the opportunity to commercialize new biotechnology and pharmaceutical products here in Canada and bring them to the global marketplace," commented **Dr. Allan Mandelzys, CEO, Thallion**.

From coast to coast, Canada has a strong network of companies and individuals working to make ensure we stay among the world's best in biotechnology innovation. National Biotechnology Week is an important part of making sure we take the time to celebrate all we have achieved, knowing we have much more to accomplish in the future.



What was said at the National Bio-economy Roundtable?

Canada's Political Innovators Call for Cooperation to be Competitive

Federal Minister of State for Science and Technology, Gary Goodyear, outlined what Ottawa is doing to build the bio-economy, reverse the brain-drain, rejuvenate federal R&D policies, partner with provincial governments and the private sector, and help move research from the lab and into the world economy. Minister Goodyear also underscored the need for business investment to support Canada's long-term competitiveness and create high quality jobs, remarking "it improves quality of life when we can move these ideas out of the labs and sell to world."

Provincial representatives called for collaboration among Canadian Governments and with the private sector.

Nova Scotia Premier Darrell Dexter noted that the excellent cooperation among Canadian governments, including Ottawa, has helped build the industry in his province. Specifically, government investments in universities and research have led to the creation of new companies in his province.

Ontario Minister of Research and Innovation Glen Murray discussed the issue of climate change is a local and global threat, and identified Canada's biotechnology sector as one of our most important natural resources: deep and interconnected wells of knowledge resources and innovation platforms. Minister Murray went on to note that the economy and the health system of the future are not going to be sustained by controlling costs, but by improving productivity.

Alberta's Minister of Advanced Education and Technology, Greg Weadick, noted that we can't be good at everything, but we want to be excellent at a few things. Alberta is contributing to Canada and the world based on its particular experiences and challenges, such as the BSE issue in cattle, nanotechnology in natural resources and investments in clean and accessible water.

Manitoba Minister of Innovation, Dave Chomiak described his province's strategy to work cooperatively to be competitive. He highlighted partnerships with states to their south. Working regionally has been a trademark for Manitoba, and for the province's benefit. These collaborations in addition to their natural materials, energy and conservation are what Manitoba stands for.

The full Roundtable report will be issued this fall.

Helping Canadians with Rare Diseases

What Can Members of Parliament do?

Canada remains an international outlier when it comes to treating patients with rare or "orphan" disease. For 27 years the international community, starting with the U.S. has created policies allowing for access to medicines for patients enduring a rare or orphan disease.

An orphan product refers to biotechnology-developed drugs and treatments for rare diseases. Rare diseases affect less than 1 in 12 Canadians. The majority of these Canadians suffer from severe, life-threatening, and progressively debilitating genetic disorders such as cystic fibrosis, Fabry's, or Huntington's. The role of biotechnology is significantly higher in the field of rare diseases. To provide Canadian patients living with rare diseases the essential treatments they need, an Orphan Product Policy must be established in Canada to include an internationally recognized definition of orphan diseases, and specific market incentives for companies developing orphan products.

There are many small start-up Canadian biotechnology companies developing new medicines and treatments for these patients. With the right public policy framework we can treat patients who currently are left outside of our health system and bring new medicines to patients with rare disorders all over the world.

As an MP you can help improve the care for these patients by supporting efforts to create a public policy solution to this long-standing problem.



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