



# Building a World Leading Bio-economy

Cate McCreedy, BIOTECanada  
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**BIOTEC**Canada is the national association representing the broad spectrum of biotech constituents including emerging and established companies in health, agriculture and industrial sectors, as well as academic and research institutions and other related organizations including investors and financial institutions.

- BIOTECCanada is fully industry funded
- 250+ company members



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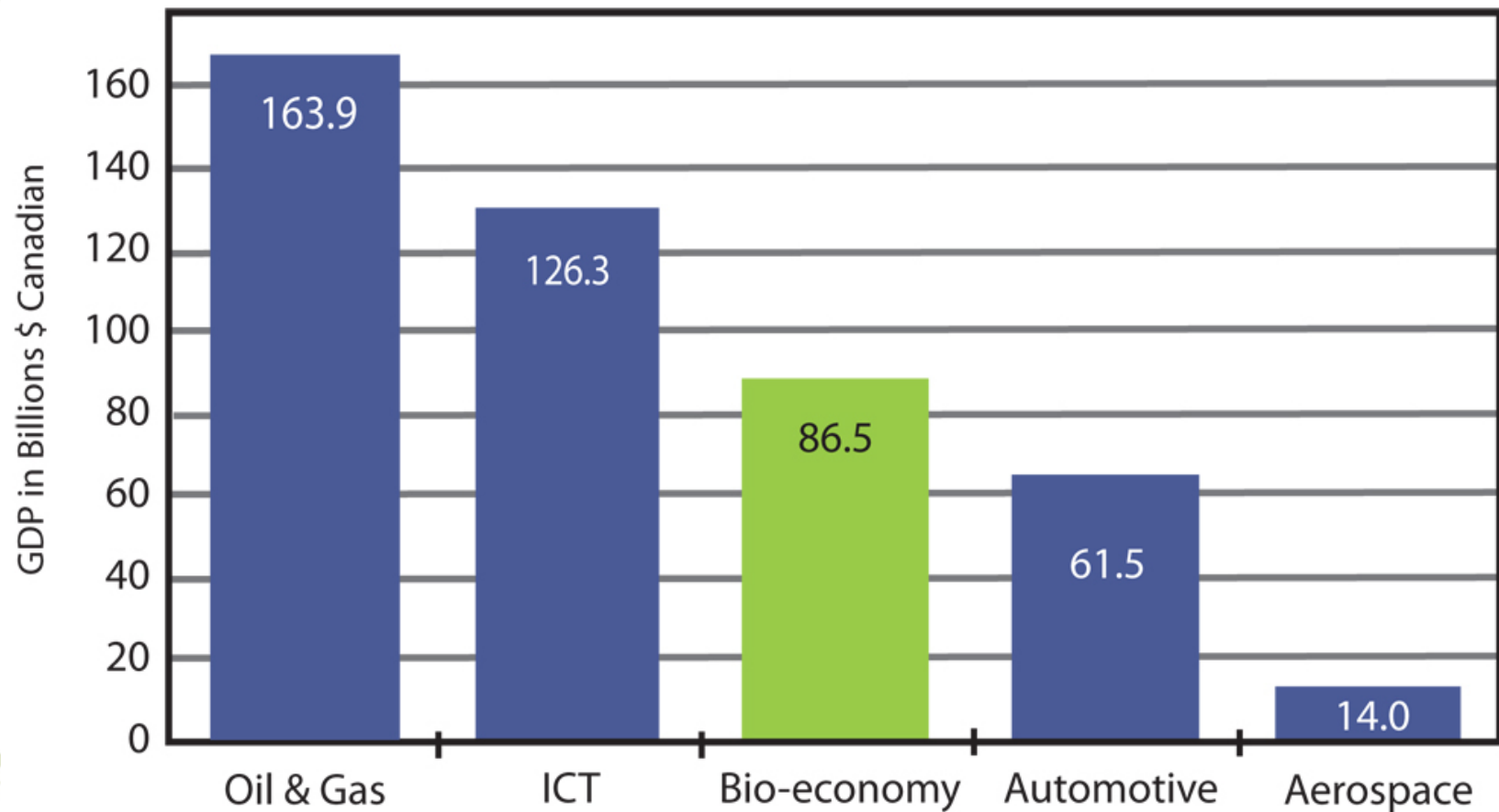


By the year 2020, Canada will  
become the world's leading  
bio-based economy



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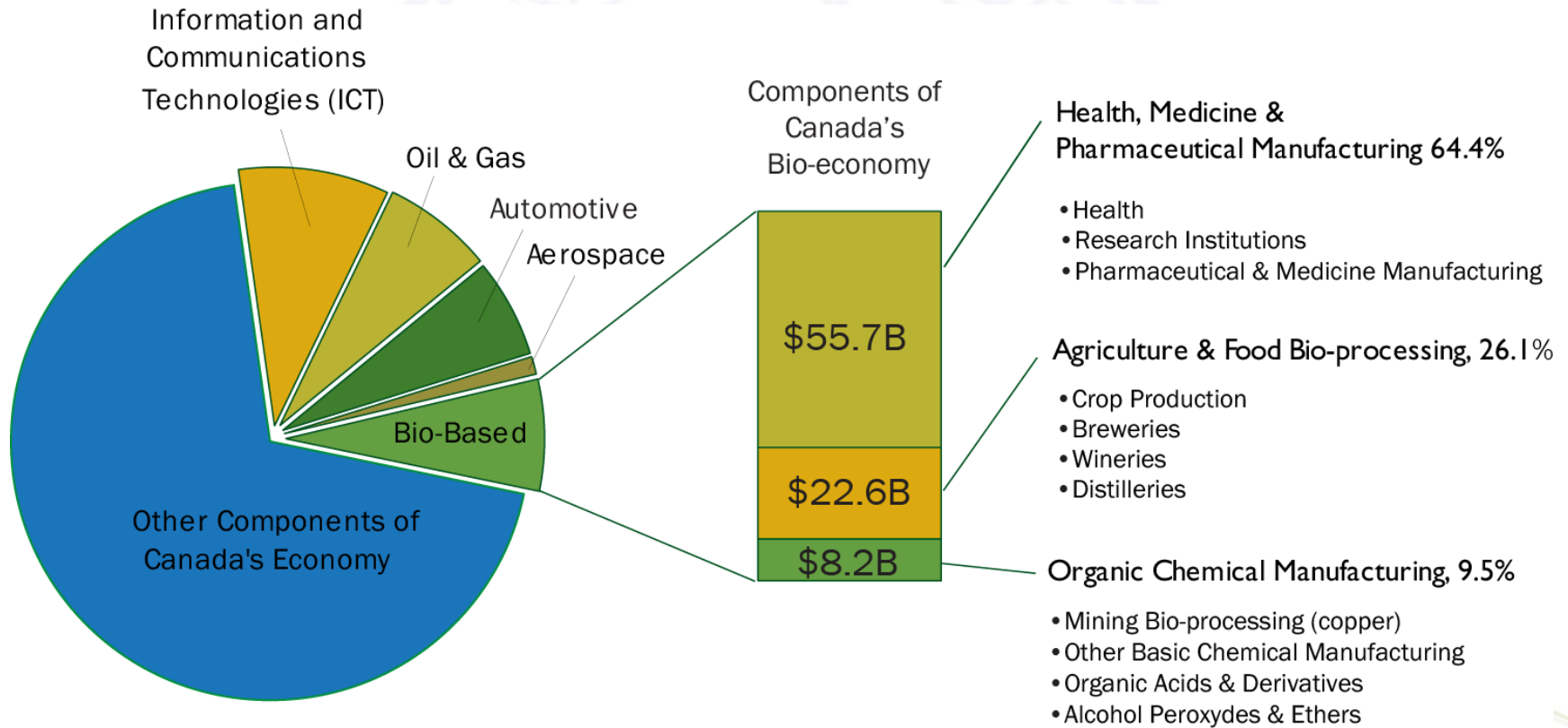
# GDP Industry Comparisons



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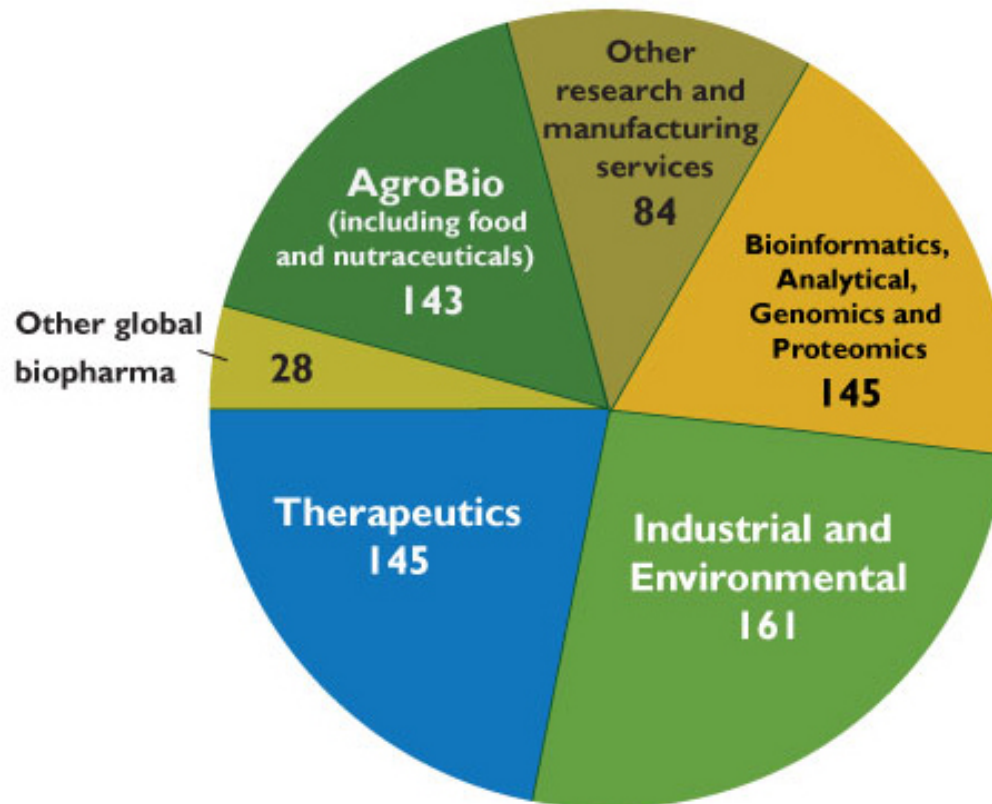
# Canadian bio-economy



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# Biotech by sector



**Total biotech development companies 583**

NOTE: Fields do not add as some companies work in multiple fields.

Source: Canadian Life Sciences Database. Last Accessed January 1, 2011.

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# What does this mean for us?

- New jobs, new knowledge-based industries, new long-term prosperity
- New global competitiveness for traditional industries
- Canadian bio-based solutions actively sought and contributing to global needs in health, energy and environment
- Canada leading in development and adoption of new bio-based technologies
- Canada will be the most competitive business jurisdiction for bio-based industries



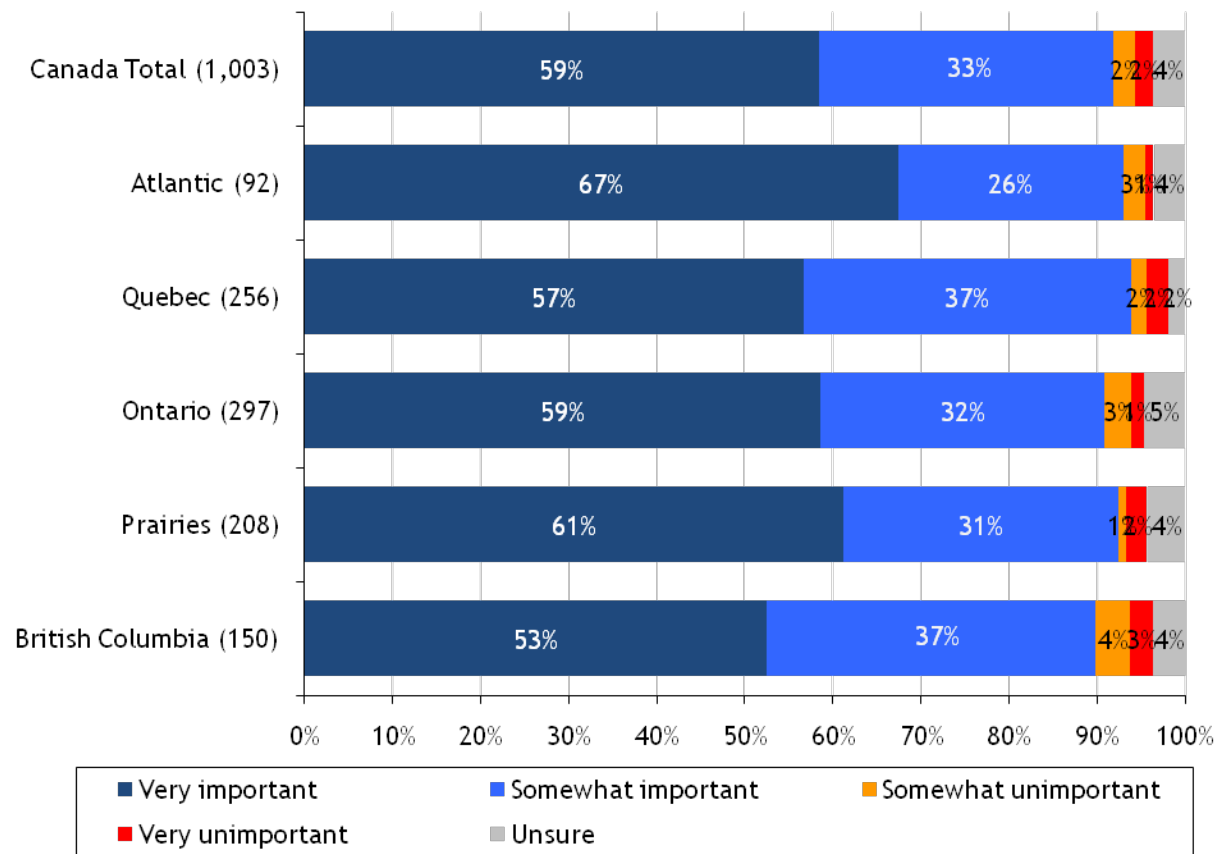
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# Canadians view biotechnology as important to Canada's future economic prosperity

Source: BIOTECCanada commissioned **Nanos Research**, to conduct a random telephone survey of 1,003 Canadians from August 28<sup>th</sup> to September 2<sup>nd</sup>, 2009. The margin of accuracy for a sample of 1,003 is  $\pm 3.1\%$ , 19 times out of 20.

## Nine out of ten Canadians see biotech as important to Canada's future economic prosperity

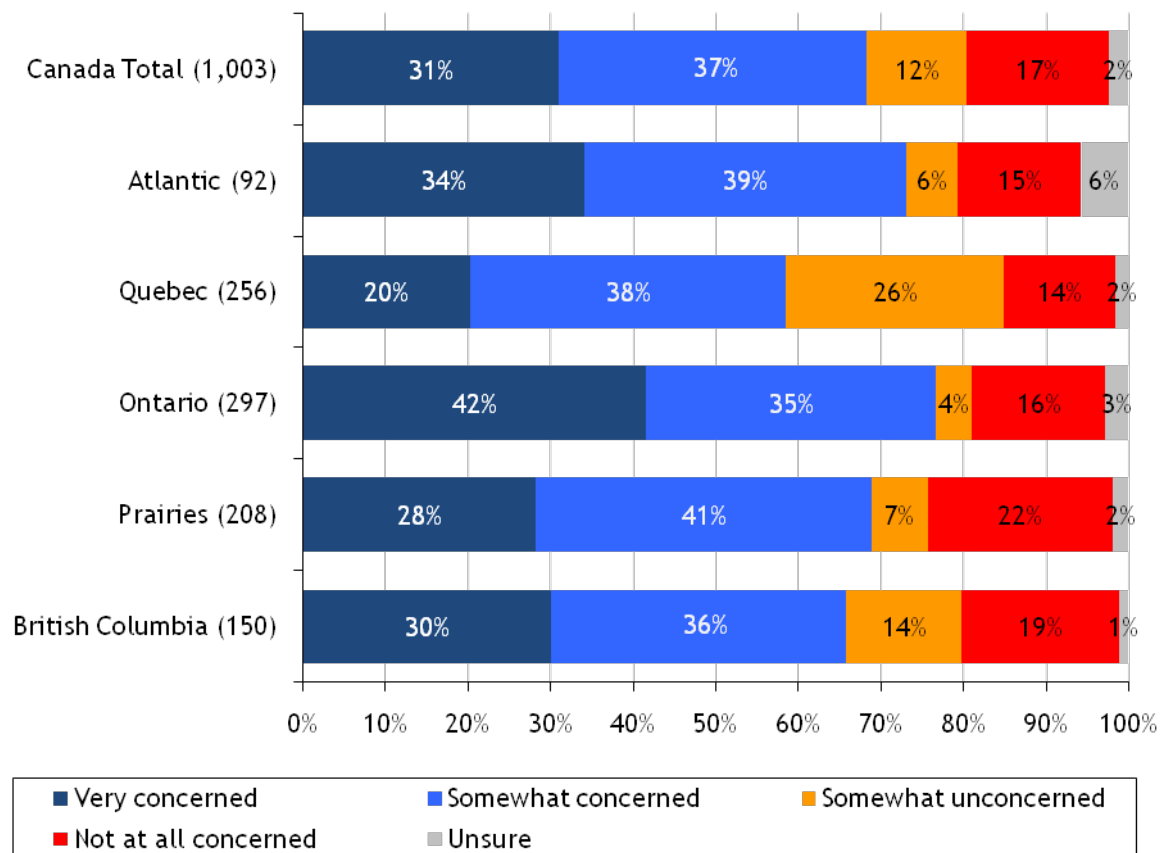


As you may know, biotechnology is a term that describes the controlled use of biological substances to make a wide variety of products in our everyday lives. Biotechnology innovations can create special drugs or vaccines, healthier crops that do not need pesticides, can turn waste into energy, can find new ways to make foods or can even convert plant matter into new products like car parts.

Do you believe that the biotechnology industry is a very important, somewhat important, somewhat unimportant or very unimportant part of Canada's future economic prosperity?

Source: **Nanos Research**, Random Telephone Survey of 1,003 Canadians from August 28<sup>th</sup> to September 2<sup>nd</sup>, 2009. The margin of accuracy for a sample of 1,003 is  $\pm 3.1\%$ , 19 times out of 20.

## Canadians are concerned about Canada's global competitiveness in science and technology



Are you very concerned, somewhat concerned, somewhat unconcerned or not at all concerned about Canada's global competitiveness in the field of science and technology?

Source: Nanos Research, Random Telephone Survey of 1,003 Canadians from August 28<sup>th</sup> to September 2<sup>nd</sup>, 2009. The margin of accuracy for a sample of 1,003 is  $\pm 3.1\%$ , 19 times out of 20.



# Why Canada?



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# Why not?

- Rich in knowledge
- Rich in natural resources
- Established early biotech leadership
- Effective and respected international partner



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- 
- 
- Leader in
    - Science and innovation
    - Learning and growth
    - Development and technology
  - Capitalize on our resources -  
Biotechnology and bio-based  
economy will be the catalysts for the  
next wave of innovation and Cdn  
prosperity

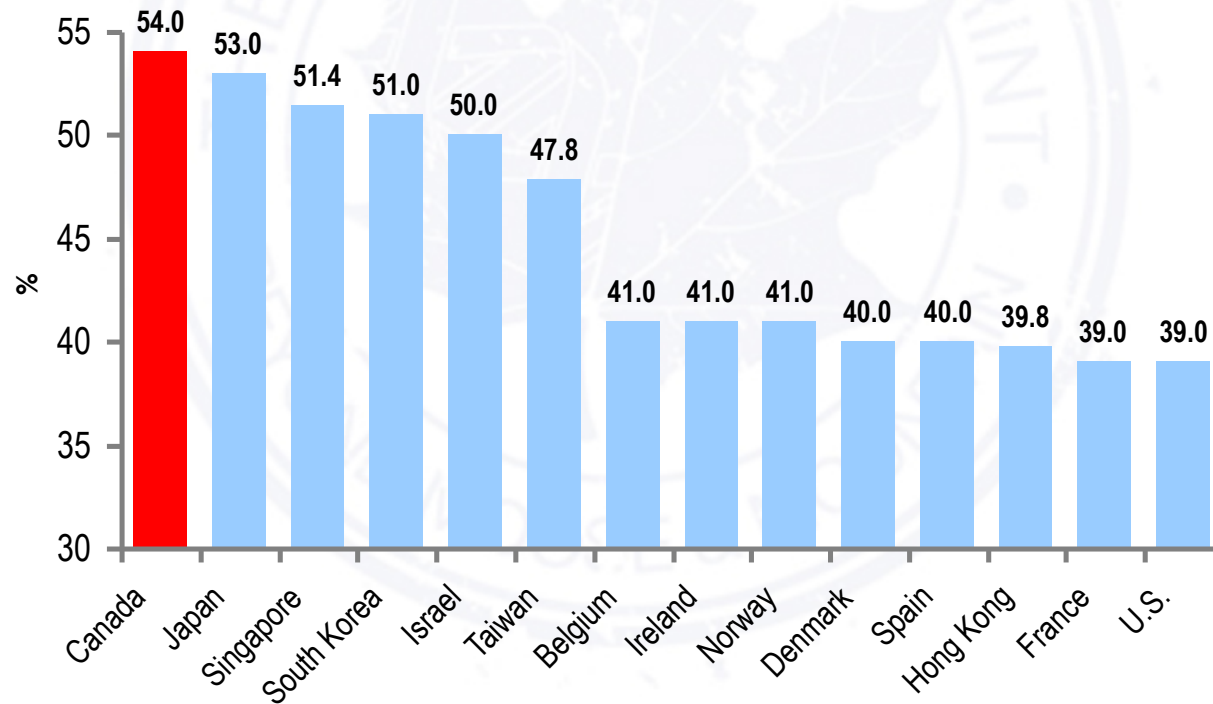


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- Canada has the highest percentage of individuals achieving at least college or university education, among OECD member countries.

### Higher Education Achievement



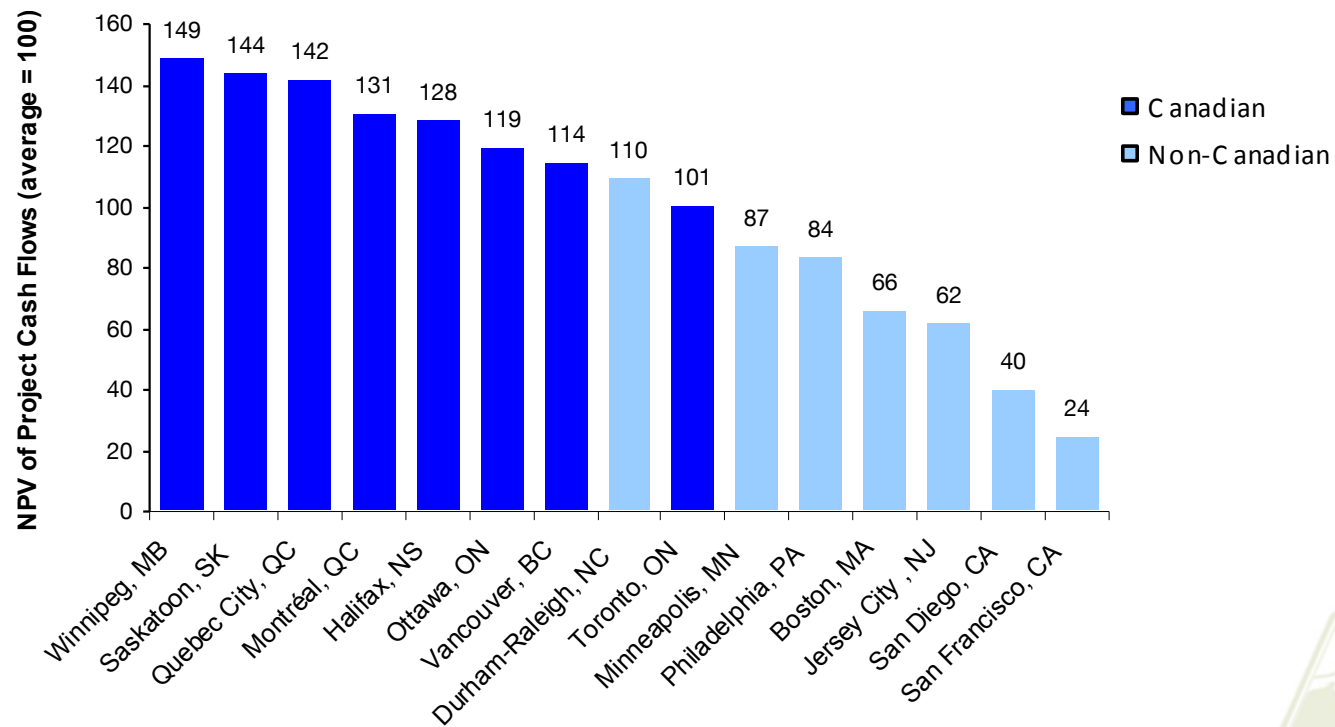
Source: IMD, World Competitiveness Yearbook 2008

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Canadian cities are at the top of the benchmark for high-quality, cost-effective R&D

### Biotech R&D Cost-Comparison - North America\*

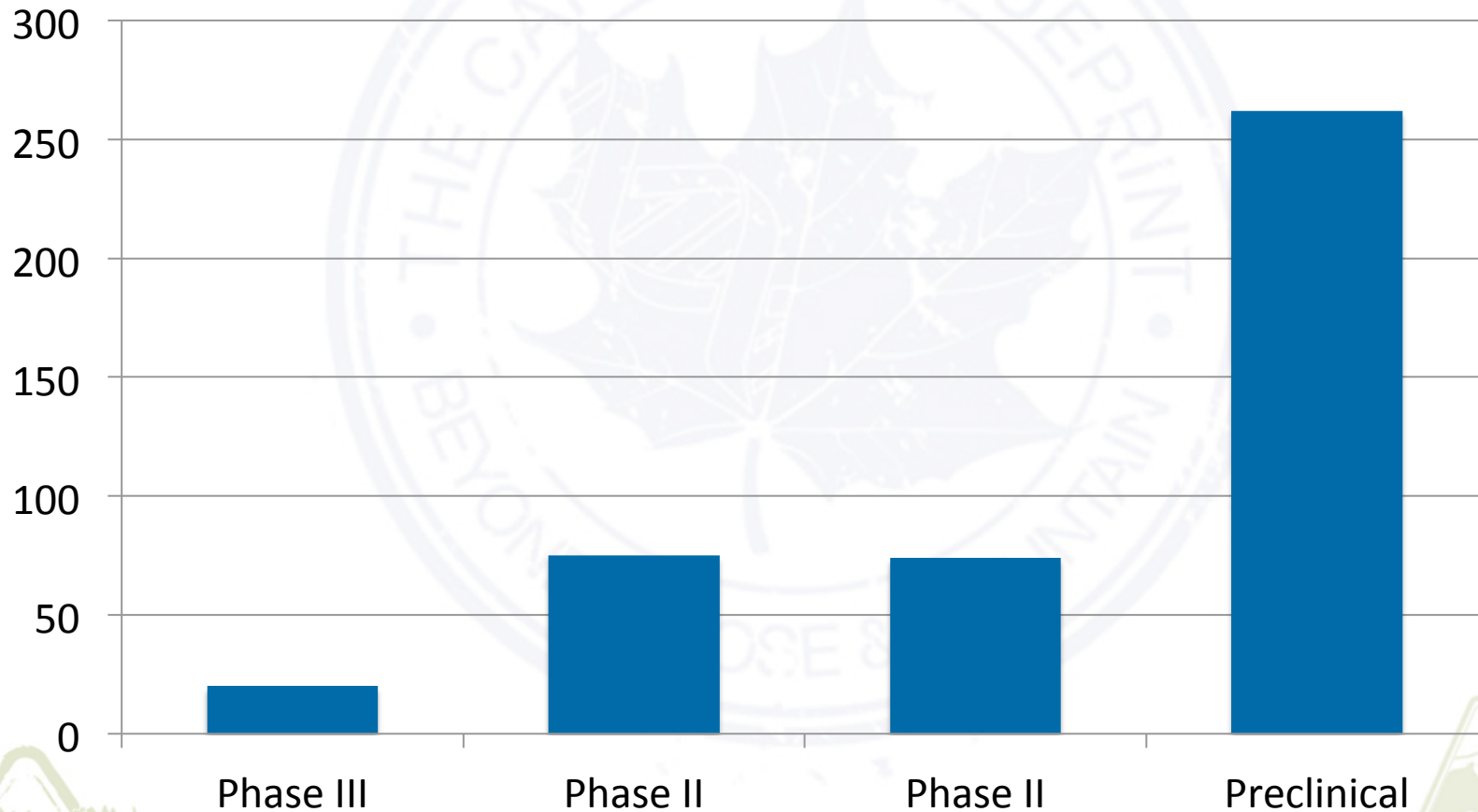


\* Analysis of the comparative costs of installing and running a representative R&D facility – Source: IBM-PLI Benchmark 2009

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# Products Under Development (Canadian Biotech Companies)



Source: Canadian Life Sciences Database. Last Accessed March 28, 2011.

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# Top 10 Canadian Biotech Deals 2010

	Company	Date	Type of Deal	Total Value of Deal
1	Biovail & Valeant	September 27, 2010	Merger	\$3.3B
2	Alectos Therapeutics & Merck	August 11, 2010	Licensing Agreement	\$298.7M
3	Transition Therapeutics & Eli Lilly	March 3, 2010	Licensing Agreement	\$260.1M
4	Tekmira & U.S. Department of Defence	July 15, 2010	Development Contract	\$144.5M
5	Thallion Pharmaceuticals & LFB Biotechnologies	February 16, 2010	Licensing Agreement	\$137.7M
6	Transition Therapeutics & Elan Pharmaceuticals	December 27, 2010	Licensing Agreement	\$113.9M
7	Labopharm & Angelini	April 29, 2010	Licensing Agreement	\$93.2M
8	Protox Therapeutics & Kissei Pharmaceuticals	April 29, 2010	Licensing Agreement	\$75.9M
9	ProMetic Life Sciences & Allist Pharmaceuticals	October 18, 2010	Licensing Agreement	\$59.6M
10	Enerkem	February 24, 2010	Venture Capital Round	\$53.8M

NOTES: Licensing agreements include both upfront and milestone payments. All deal values are in Canadian dollars. Deal values quoted in U.S. dollars converted to Canadian dollars on date of announcement.

Source: Company press releases, websites

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# Challenges

- Maintaining our leadership needs:
  - Attract investment
  - Meeting the skill challenge
  - Modernizing regulatory practices
  - Protecting intellectual property
  - Recognizing the changing business model
  - Bragging



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# Global Competition

	Support Program	Value of Program
<b>Australia</b>	<ul style="list-style-type: none"> <li>-Venture Capital Limited Partnerships Program (VCLP)</li> <li>-Biotech Venture Fund</li> </ul>	<ul style="list-style-type: none"> <li>• Flow-through taxation treatment on investments. Foreign investors in the fund are exempt from capital gains tax on their share of any profits made.</li> <li>• \$250 million fund intended to help commercialise technologies of emerging biotech companies.</li> </ul>
<b>China</b>	Emerging Technologies Fund	<ul style="list-style-type: none"> <li>• \$9.2B investment over 2 years specifically earmarked for emerging technologies including biotechnology.</li> </ul>
<b>France</b>	<ul style="list-style-type: none"> <li>-Research Tax Credit</li> <li>-National Biotechnology Fund</li> </ul>	<ul style="list-style-type: none"> <li>• Research tax credit equal to 30% for expenses less than \$159M a year. No research tax credit ceiling.</li> <li>• Establishment of a \$206.5M biotechnology fund to support domestic biotech research and development.</li> </ul>
<b>Israel</b>	<ul style="list-style-type: none"> <li>-Capital gains tax exemption</li> <li>-National Biotech Fund</li> </ul>	<ul style="list-style-type: none"> <li>• Capital gains tax exemption on investments in research-intensive companies.</li> <li>• \$80 million life sciences venture capital fund.</li> </ul>

Source: BIOTECanada Research Services

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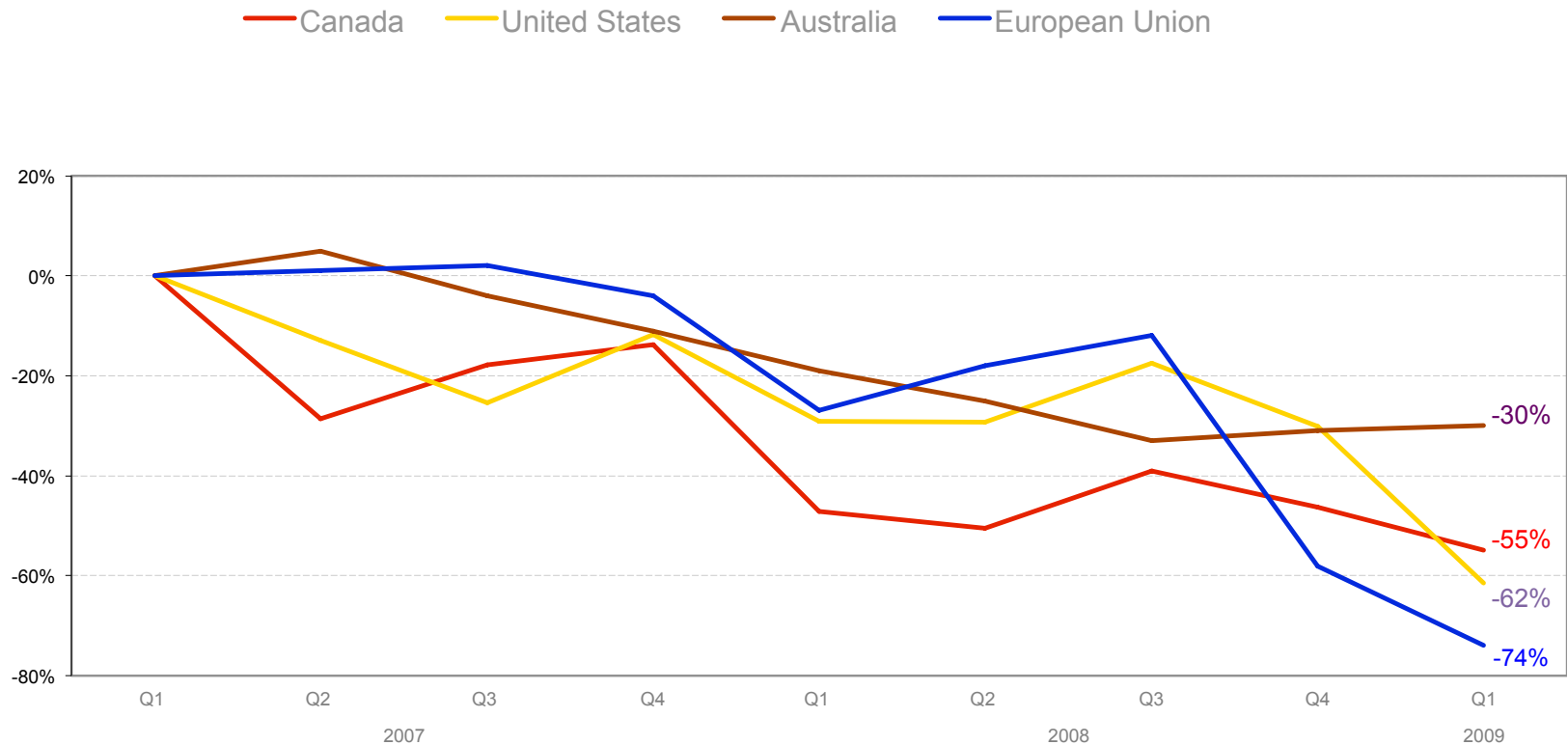
# Global Competition (2)

	Support Program	Value of program
<b>Singapore</b>	<ul style="list-style-type: none"> <li>-Relief for Capital Losses</li> <li>-Industry Alignment Fund</li> </ul>	<ul style="list-style-type: none"> <li>• Losses incurred from the sale of shares can be set against the investor's other taxable income.</li> <li>• \$1B fund directed at connecting public- and private-sector researchers and driving investment in R&amp;D.</li> </ul>
<b>Taiwan</b>	<ul style="list-style-type: none"> <li>-Shareholder Investment Tax Credit</li> <li>-National Biotechnology Fund</li> </ul>	<ul style="list-style-type: none"> <li>• 10% ITC on investments in biopharma stock. Corporations receive a 20% credit.</li> <li>• Public-private venture capital fund valued at \$315M (planned to go up to \$2.18B within 10 years).</li> </ul>
<b>UK</b>	<ul style="list-style-type: none"> <li>-Venture Capital Trust Scheme</li> <li>-Strategic Investment Fund for Advanced Technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Income tax relief, capital gains tax relief, and relief for capital losses for individual investments in venture capital trusts.</li> <li>• \$1.09B fund directed at research-intensive technologies including biotechnology.</li> </ul>
<b>United States</b>	<ul style="list-style-type: none"> <li>-Therapeutic Tax Credit</li> <li>-Small Business Innovation Research (SBIR) grants</li> </ul>	<ul style="list-style-type: none"> <li>• \$1.0B 50% refundable credit for emerging health-care SMEs.</li> <li>• Increases to grant funding programs; maximum awards increased up to \$1M.</li> </ul>

Source: BIOTECanada Research Services

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# Global Venture Capital Trends in Recession

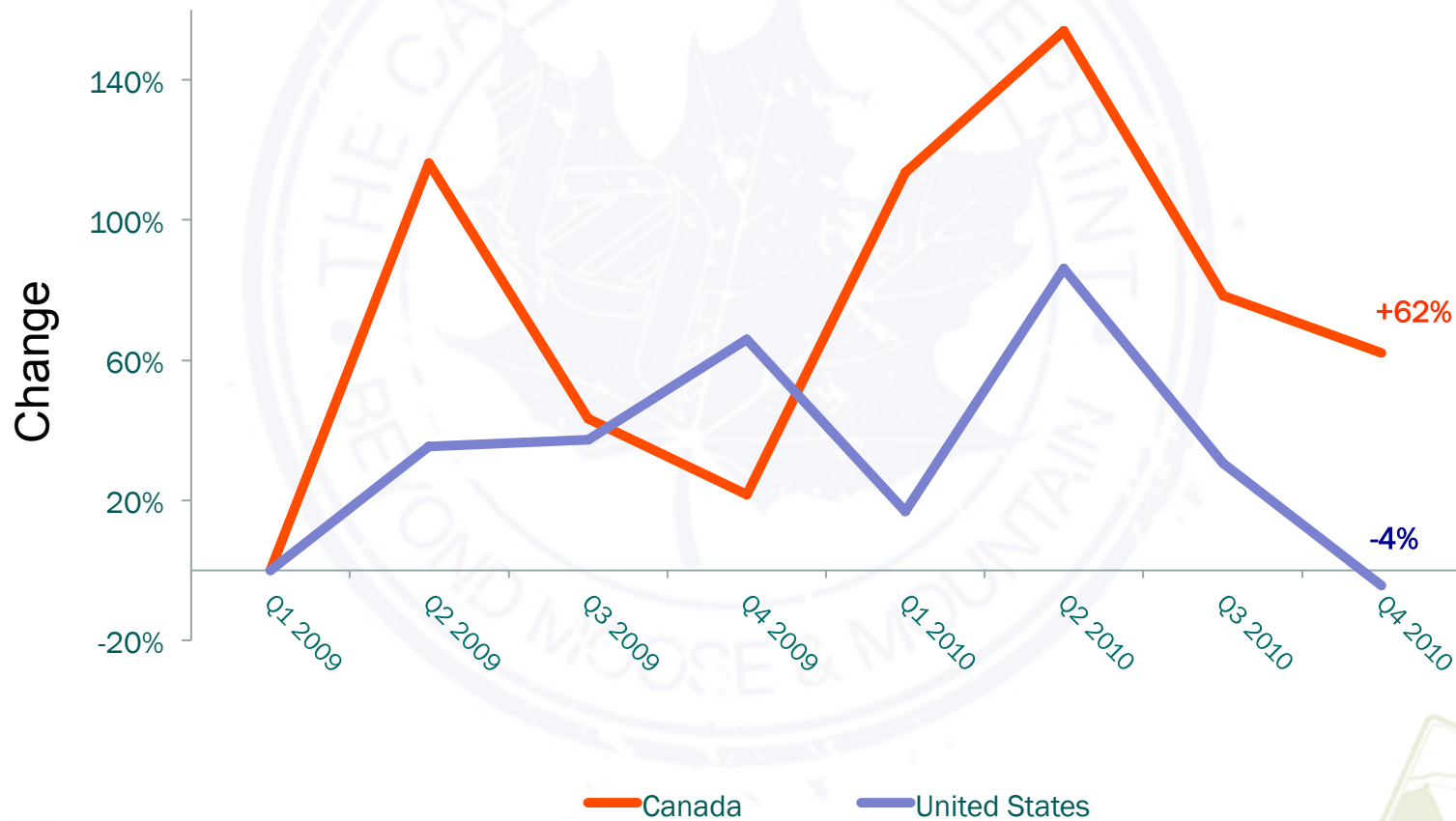


Sources: Thomson Reuters, PricewaterhouseCoopers, Ernst & Young, Australian Private Equity & Venture Capital Association Limited (AVCAL), European Private Equity & Venture Capital Association (EVCA)

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# Venture Capital Life Sciences

Venture capital funding in Canada is recovering:



Sources: Thomson Financial VC Reporter, PricewaterhouseCoopers MoneyTree Report

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# Industry Transition

- New ways of doing business
  - Licensing & Partnering
  - M & A
- Pharmaceutical pipelines being rebuilt
- Ongoing challenge to secure long term funding
- Emerging markets chasing technology



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# People make the difference

- Convergence of technology calls for broader expertise levels
  - Manufacturing
  - Natural Resource Management
  - Agriculture and environment
  - Regulatory expertise
  - Business management



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# What we are doing

- An enabling operational environment aligning government policies, regulations for research & commercialization
- Develop, attract and retain world-class talent in both research and commercialization
- New capital formation, world-leading efficiency in the use of capital, and the most bio-friendly tax regime in the world



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www.canadianlifesciences.com



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This portal is a part of **BIOTECH GATE** COMPANY DATABASE

Company Database with

- 20'179 Companies
- 20'731 Biotech / Medtech Products
- 2'646 Financing rounds
- 228 Company valuations
- 24'926 Management details
- 3'467 Licensing opportunities

Licensing Deals Database with

- 1'263 Deals each with financial information

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**Global Events**

- Mar 2011 - Lausanne: **MTI - The 12th MedTech Investing Europe Conference**
- Mar 2011 - Milan: **Pharma-Biotech Product & Company Valuation**
- Mar 2011 - Milan: **BIO-Europe Spring 2011**

**Add Event**

Canadian Life Sciences Forecast 2011

Canadian Life Sciences Industry Forecast 2011

Read the Full Report **pwc** BIOTECCanada

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**CANADIAN LIFE SCIENCES DATABASE**

On this site you have free access to a very comprehensive directory and information platform comprising data of Life Sciences and Biotechnology companies and institutes in Canada including company description, additional information and categorization.

This database is sponsored by **BIOTECCanada**, the national industry association representing Canada's biotechnology industry. Through its national network of partner organizations, BIOTECCanada aims to inspire the domestic and international community to recognize the value of biotechnology and to provide solutions to the challenges faced by biotech firms today. Visit BIOTECCanada's **Business Solutions** page to learn about how your organization can benefit from the cost-savings programs offered.

**Recognising Canada's best in biotechnology!**

The 2011 Gold Leaf Award nomination period is now open. Visit [www.goldleafawards.ca](http://www.goldleafawards.ca) and nominate your choice for this year's awards until March 15, 2011.

**2011 Gold Leaf Awards**  
Les feuilles d'or 2011  
[www.goldleafawards.ca](http://www.goldleafawards.ca)

**CANADIAN LIFESCIENCES DATABASE ON TWITTER**

The Canadian Lifesciences Database is now on Twitter. Follow "CanadianLifesciences" (@CLSD) for important updates on Canada's community of companies, investors and partners in the lifesciences.

**Map search for Canada >>**

Search within BIOTECCanada members only.

**Company name**

**Free text**

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**SEARCH BY CATEGORY**

**State / province**

- Alberta
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- Manitoba
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**Main sector / Subsector**

- Biotechnology - Therapeutics (incl. all subsectors)
- Anti-infectives
- Antibodies
- Biosimilars
- Cell therapy
- Drug delivery
- Gene therapy
- Generics
- Nucleic acid drugs
- Peptides
- Proteins
- Small molecules
- Stem cells
- Vaccines

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[Cate.McCready@biotech.ca](mailto:Cate.McCready@biotech.ca)

+1-613-230-5585

[www.biotech.ca](http://www.biotech.ca)

[www.beyondmooseandmountains.ca](http://www.beyondmooseandmountains.ca)

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