

Canadian Life Sciences Industry Forecast 2007

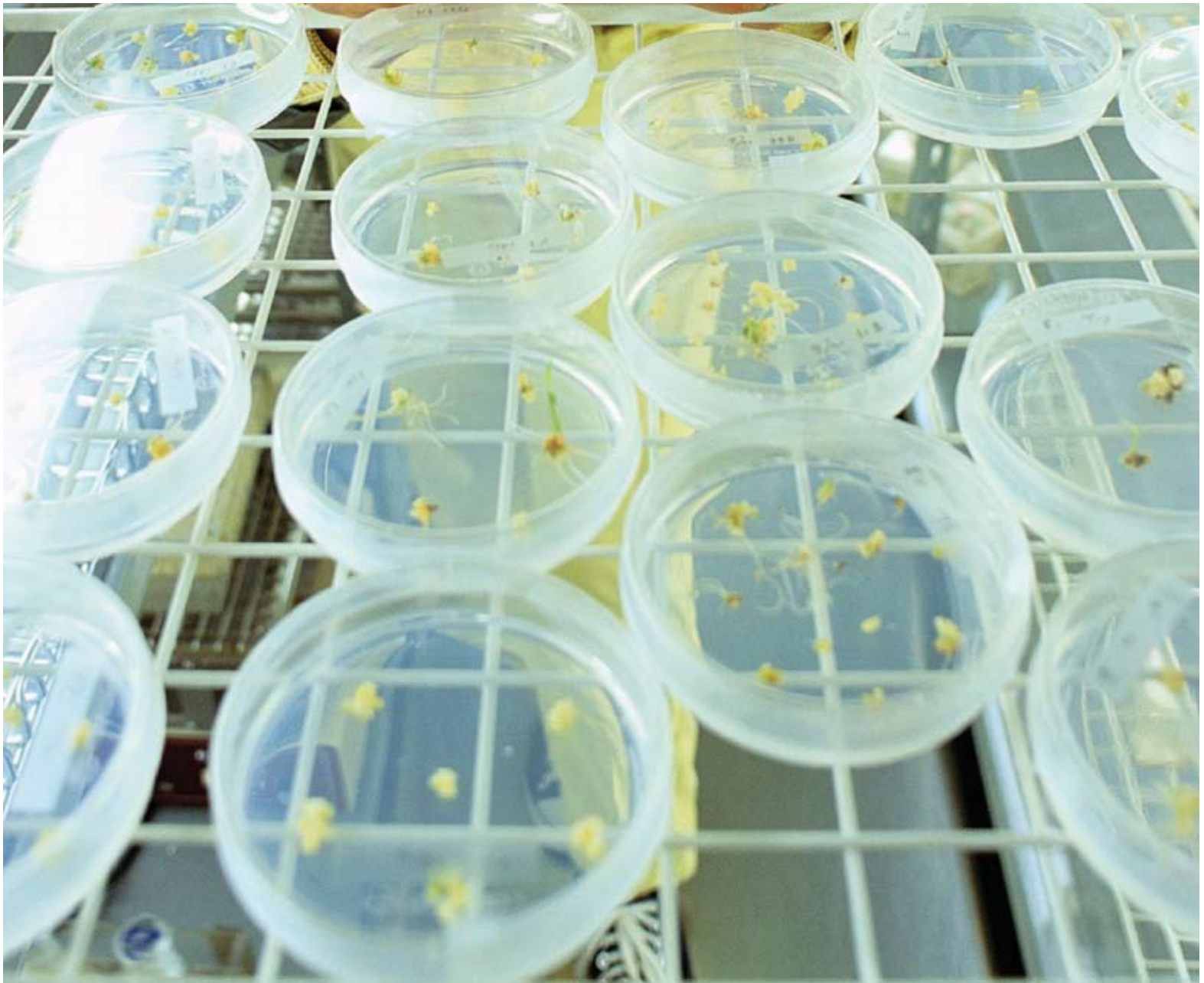


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Introduction

The achievements of Canadian life sciences and biotechnology companies on an international platform are well known, with Canadian companies leading the way in many breakthrough innovations. The 2007 findings showcase the industry's maturity, however, the industry still faces significant challenges in its pursuit of commercialization of intellectual property, the battle for capital and the need to recruit industry-savvy people.

Following on the success of the inaugural Canadian Life Sciences Industry Forecast 2006, BIOTECanada in partnership with PricewaterhouseCoopers LLP (PwC) undertook a second survey to understand these challenges better.

Through an online survey, stakeholders from corporate, academic, government and other organizations along the life sciences and biotechnology value chain were asked a series of questions intended to capture their thoughts on a variety of issues impacting the industry today and in the future.

The data gathered provides important information on where efforts should be placed to improve Canadian competitiveness.

We trust you will find the information valuable for broadening the dialogue on these issues.

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Key Findings

There are a number of key findings from the Forecast that can be used by industry and government to shape the future for the Canadian life sciences and biotechnology industry. One year following our initial Forecast, we can see signs of a more mature industry, one that is more optimistic about financial success and better able to raise more significant levels of funding.

1. Securing financing continues to be critical to the success of Canadian companies.
 - a. More than 40% of respondents intend to seek more than \$20 million compared to only 30% in our 2006 survey. The majority of 2007 respondents say they will be seeking more than \$10 million in their next round of financing.
 - b. Most respondents expect to receive their funding from strategic partners in addition to venture capital sources.
2. Raising capital from US sources continues to represent a challenge.
3. The trend in financial results is positive relative to our 2006 survey. The majority of companies are now generating revenues and anticipating profits within a 3 to 5 year timeframe, sooner than previously reported.
4. Access to experienced senior management continues to be a significant concern.
5. The operating environment in Canada is strong. Overall, Canadian businesses are seeking to expand operations into other countries rather than leave Canada.
6. Opportunities exist for government to continue to support the industry.
 - a. Tax incentives continue to be the most popular form of recommended government support.
 - b. Provide research grants to companies.

1. Financing continues to be the most critical success factor

The need for capital is a recurring theme throughout the Forecast results. Over 60% of the respondents believe more Canadian venture capital is the most critical success factor currently for the Canadian life sciences and biotechnology industry and more than half rank accessing venture or other capital as the most challenging issue for their organization. When asked to identify the main barriers to successful commercialization of intellectual property, 78% ranked access to capital as number one. Furthermore, almost half of respondents are currently trying to raise capital and another 32% expect to raise capital in the next two years.

Funding is a theme that reemerges from the 2006 survey. There are significant amounts of capital required to successfully take good ideas through the development and regulatory process and turn them into commercial products. The importance of funding has been and likely will continue to be a key ingredient to a successful Canadian industry.

This year's Forecast suggests that the Canadian industry is now seeking more funding in their next round than they were in the previous year. While more than \$10 million continues to be the most popular response, more than 40% of respondents intend to seek more than \$20 million compared to only 30% in 2006.

An interesting development is the rising expectation that strategic partners will provide more funding for the industry than venture capital sources. More than 30% of respondents expect their next source of funding to come from strategic partners while 27% expect it to come from venture capital. In the 2006 survey 18% of respondents ranked strategic partners as their top three sources of expected new funding and 26% for venture capital.

Figure 1. Which of the following issues do you feel will be the most challenging for your organization over the next two years? Choose top 3.

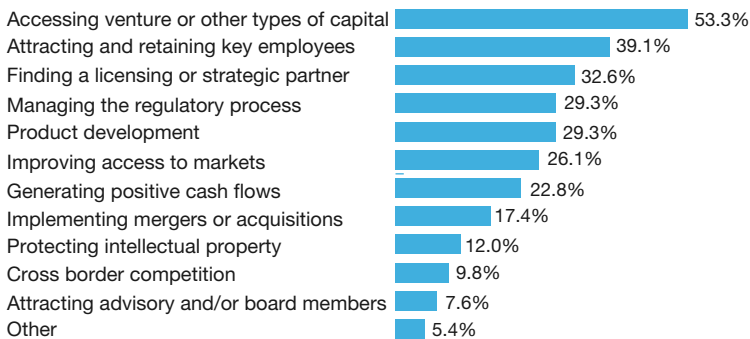
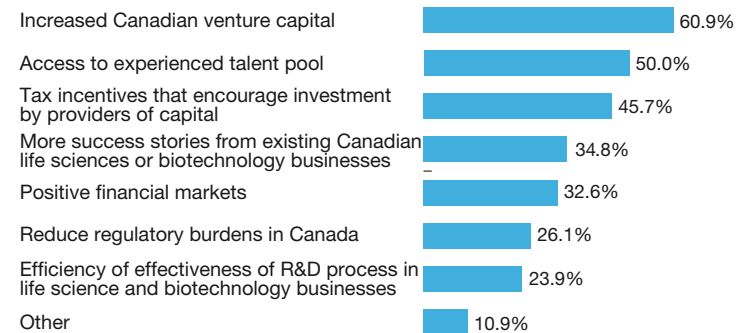


Figure 2. How would you rank the following as critical success factors for the Canadian life sciences and biotechnology industry now? Choose top 3.

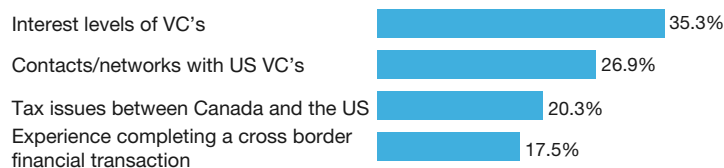


2. Raising funds in the US is a challenge

Respondents who are raising funds from the US were most concerned about the interest level of US venture capitalists followed by a lack of contacts or networks (Figure 3). Given the number of recent financings with US-led or participating investors, this result is interesting. Clearly US investors are active within Canada but perhaps not to the extent that is desired by respondents. In a similar question in the 2006 Forecast the most popular response for lack of US funding was the lack of familiarity with Canadian companies. These results confirm that continuing to build bridges with US venture capital remains an important priority for the industry.

Notably, in the March 2007 Federal budget there was welcome relief with respect to a tax barrier flagged by survey respondents. According to Minister of Finance Jim Flaherty, the new Canada-US Income Tax Treaty will provide treaty relief for US entities structured as limited liability companies from existing withholding tax and reporting rules. These changes will hopefully lead to more US investment in the Canadian life sciences and biotechnology sector.

Figure 3. **If you are planning on raising funds from the US, please rank the following barriers in order of importance.**



Key Findings

“I believe if properly funded there is great technology and people to commercialize Canadian developed R&D.”

2007 Canadian Life Sciences Industry Forecast respondent



3. Revenue and profitability in the industry are improving

The financial results of Forecast respondents indicate the gradual maturation of the Canadian life sciences and biotechnology industry, as an increasing number of respondents are generating revenues (Figure 4). These revenues are generated primarily in Canada and the US. Europe and Asia account for relatively little revenue. As Figure 6 demonstrates, over two-thirds of

respondents anticipate profitability within five years. Forty percent of respondents have products currently available for sale and 59% (2006: 62%) will have products for sale in the next two years. The majority of respondents expect to have one to five products for sale either directly or via a partner in the next two years.

Figure 4. Does your company generate revenues?



Figure 6. Does your organization generate profits?



Figure 5. If not generating revenues, when do you expect your organization to do so?

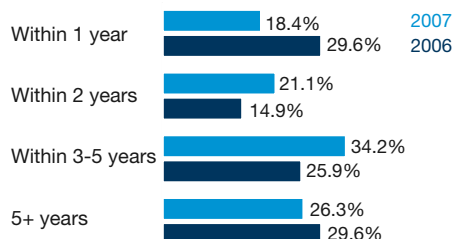
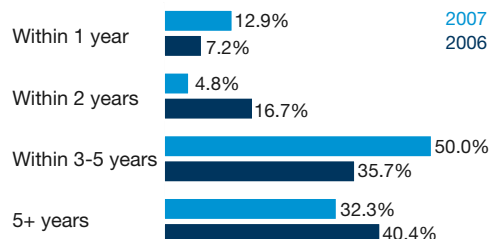


Figure 7. If not generating profits, when do you expect to do so?



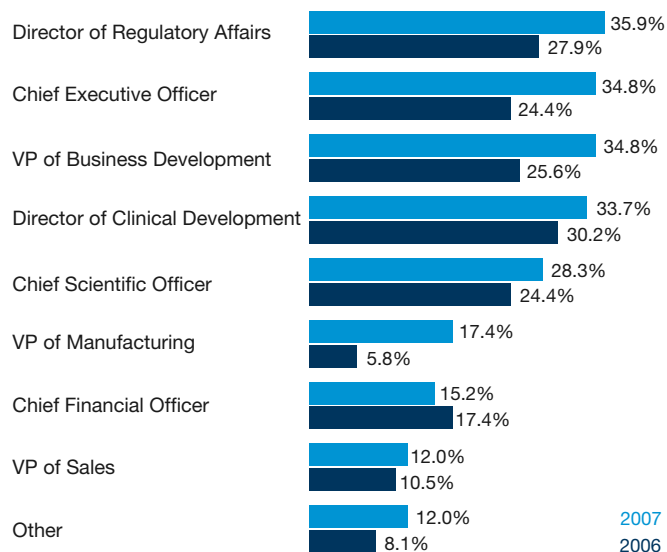
4. Experienced senior management are still needed

After access to capital, high-level human resources issues figured strongly in the Forecast results. Respondents cited the need to access an experienced talent pool as one of their critical success factors (Figure 2). They also identified attaining and attracting key employees as one of their most challenging issues (Figure 1), and the availability of experienced senior management was the second-most chosen barrier to successful commercialization of intellectual property. Furthermore, recruiting experienced senior management is seen as the most important action that industry can take to improve Canada’s ability to compete globally.

These results are similar to the 2006 Forecast and reinforce the view that people make the difference in effectively accessing capital and executing business plans. Since most respondents work in organizations with 20 or fewer people, the need for talent and experience is even more critical to accomplish as much as possible.

Senior management positions which are particularly difficult to hire include Directors of Regulatory Affairs, Chief Executive Officers, and VP’s of Business Development and Directors of Clinical Development (Figure 8). These were also the top four responses in the 2006 Forecast. One interesting development is the higher ranking of VP of Manufacturing in 2007 versus 2006—likely a further sign of a maturing Canadian industry.

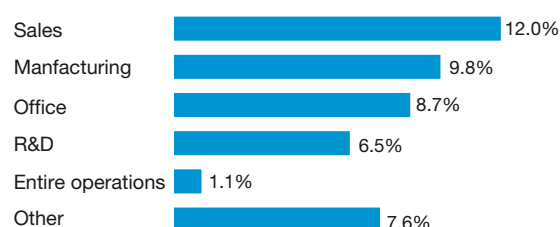
Figure 8. **When hiring management for your organization, which positions or equivalent are the most challenging to find experienced candidates for? Choose top 3.**



5. The operating environment in Canada is strong

The overall operating environment in Canada is favourable to life sciences and biotechnology companies, as demonstrated by the fact that 67% of respondents do not have plans to relocate some or all of their business outside of Canada in the next two years. Overall the responses support the view that Canadian businesses are seeking to expand operations into other countries rather than leave Canada. Of those who did indicate that a move was planned, the sales function was at the top of the list (Figure 9). The top two reasons for relocation are greater access to capital and greater access to customer markets. The US is the clear location of choice, with 75% of those planning a move selecting it as their intended destination.

Figure 9. Main functions that may be relocated outside Canada.



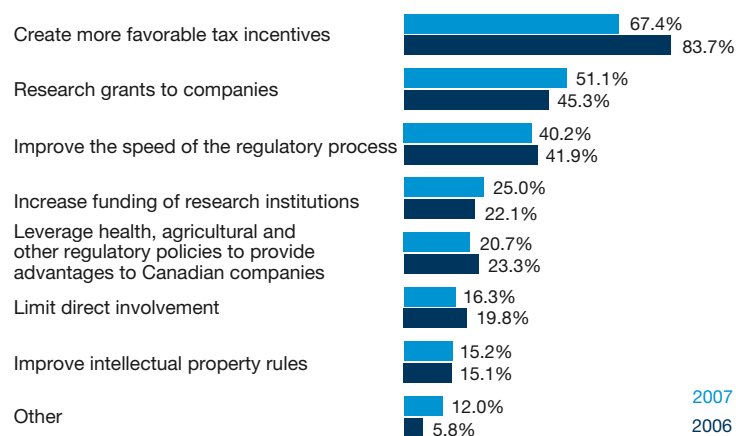
6. Opportunities exist for Government to continue to support the industry

Although a majority of respondents indicate the most important way the government currently contributes to their success at present is through R&D and other tax incentives, they are still eager for more support of this kind. Over two-thirds of respondents identified the creation of favourable tax incentives as the most important action that the Canadian government can take to improve the industry's standing in the global market (Figure 10). This view echoes respondent's view of critical success factors for the industry, where tax incentives that encourage investment by providers of capital figure prominently (Figure 2).

Providing research grants to companies and improving the speed of the regulatory process were identified as other important ways in which the government can help make the Canadian industry more globally competitive.

Similar to our 2006 reports, the majority of respondents feel it is not necessary for the federal and provincial governments to focus their support on specific subsectors within the life science and biotechnology industry.

Figure 10. What do you believe are the most important actions that government can take to improve Canada's ability to compete globally in the life sciences and biotechnology industry? Choose top 3.



“Federal and provincial governments need to see this sector as an investment in the future of our economy.”

- 2007 Canadian Life Sciences Industry Forecast respondent



Methodology

The Canadian Life Sciences Industry Forecast was developed by a team of life sciences professionals at PricewaterhouseCoopers and staff at BIOTECanada through a process that included validation of relevance by the industry. The questions were intended to explore the perceptions of industry stakeholders as they look at the future challenges and issues faced by the Canadian industry. The questions included in the Forecast survey were divided into two sections:

- Your organization
- Business challenges

A distribution list of potential participants was developed using publicly available lists, data from PricewaterhouseCoopers' internal sources and lists available through BIOTECanada. The list represented a national cross-section of public and private emerging life sciences companies, senior management of providers of capital to the industry as well as senior public officials involved with research institutes and government. The survey was available online, and promoted through links from both the PricewaterhouseCoopers and BIOTECanada websites, at various industry events, and through email and telephone campaigns that directed respondents to the online questionnaire. Some surveys were also conducted in interview form with PricewaterhouseCoopers staff. Data was collected from September 2006 through the end of March 2007. The results are based on responses from 92 individuals who completed the Forecast survey.

Although the Forecast is not statistically significant, the aim of the research is not to conclude on the opinions of all stakeholders across the life sciences and biotechnology industry in Canada, but rather to provide insight into areas that merit further investigation in separate initiatives as identified by a cross-section of leaders in the industry.

Acknowledgements

We would like to acknowledge and thank the strong support given to this project by various stakeholders in the Canadian industry and the Biotechnology Accord member associations including Ag-West Bio, BIO Alberta, BIO Atlantech, Biotechnology Council of Ontario, Bio Nova, Bio Products Canada, BIO Quebec, Biotechnology Human Resource Council, Life Sciences British Columbia, Health Care Products Association of Manitoba, Nati, Ontario Agri-Food Technologies, Ottawa Life Sciences Council, Prince Edward Island Bio Alliance, and Toronto Biotechnology Initiative.

We would also like to thank the people and organizations that took part in the Forecast.



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About BIOTECCanada

BIOTECCanada is the national industry-funded association representing the broad spectrum of biotech constituents including emerging, established and related service companies in the health, agricultural, and industrial sectors.

2007 marks the 20th year of the national association dedicated to the promotion and awareness of biotechnology and its public policy issues. Incorporated in 1987 as the Industrial Biotechnology Association of Canada, our national association continues to serve as the voice for industry leadership to build a sustainable environment for our community of researchers and innovators.

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An electronic version of the Forecast and related Appendices can be viewed on the websites of PricewaterhouseCoopers (www.pwc.com/ca) and BIOTECCanada (www.biotech.ca).

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