



Biotechnology

Canada is a significant player on the global biotechnology scene, and its presence is steadily growing thanks to leading edge research programs taking place in Canada and strong financing and venture capital programs available to Canadian-based biotech enterprises.

With more than 500 biotechnology firms and 15,000 highly skilled employees, Canada ranks second, behind the United States, in terms of the number of companies engaged in biotechnology research, third in revenues, and fifth in biotechnology invention.³² According to the 2007 Ernst & Young *Global Biotechnology Report*, capital raised by the Canadian biotech industry increased 79 percent in 2006, the biggest single-year increase ever.³³ Similarly, revenue growth in the sector has been substantial, growing from \$813 million in 1997 to \$4.12 billion in 2005.³⁴

The tremendous growth in Canada's biotechnology sector can be attributed in part to government assistance at all levels. The number of firms that use biotechnology for the purpose of developing new products or processes increased in Canada from 282 in 1997 to 532 in 2005. More than 70 percent of such firms in Canada were located in Ontario, British Columbia and Quebec.³⁵ These three provinces together receive more than 90 percent of the total biotechnology revenues. Montréal, in particular, is an international hub for genomics development with research institutions such as Genome Quebec Innovation Centre and McGill University.

R&D taking place in several biotechnology verticals

Although the industry's backbone is in the area of human health (52 percent of revenues), Canada's biotechnology companies have demonstrated expertise in a broad array of disciplines, including agriculture, aquatic and marine biosciences, bioinformatics, and the environment.³⁶ Canadian firms are also recognized as world leaders in the fields of genomics, proteomics, immunotherapy, protein engineering, and new drug delivery systems.

It is worth noting that Canada's diverse geography has spawned biotechnology clusters across the country specializing in a broad range of disciplines. For example, companies specializing in augmenting food production are located in the agricultural Prairie provinces—Alberta, Saskatchewan and Manitoba. Similarly, companies specializing in aquaculture and marine sciences are located in provinces that border the Atlantic and Pacific seabords.

³² Foreign Affairs and International Trade Canada. *Canada's Biotechnology Sector—Pre-Posting Sectoral Briefing*. May 2006. pp. 2-3

³³ Foreign Affairs and International Trade Canada. *Canadian Biotechnology Sector*. p. 15.

³⁴ *Ibid.* p. 3

³⁵ *Ibid.* p. 3

³⁶ *Ibid.* p. 3