



## Life Sciences

A global hub for life sciences and biomanufacturing



**British Columbia,** *Naturally.*

[BritishColumbia.ca](http://BritishColumbia.ca)

# A leading research and development hub **at the forefront of innovation**

British Columbia (B.C.), Canada is a leading centre for scientific innovation and has a thriving life sciences industry. The province is the home to the fastest growing life sciences sector in Canada.



British Columbia offers a highly skilled workforce, a prime location and a high quality of life. While scientific innovation is taking off in B.C., more companies with valuations over \$1 billion existed in the province in 2021 than anywhere else in Canada. B.C. has an ideal environment for investment and partnership opportunities in the life sciences.

B.C.'s internationally recognized research hospitals and universities partner with world class research centers creating a dynamic and collaborative network for researchers. British Columbia has world-class scientists supported by one of the best health care systems in the world and international partners such as Glaxo Smith-Kline and Pfizer.



## **British Columbia's Competitive Advantages**

B.C.'s prime location, outstanding talent and strong business climate create an excellent environment for life sciences companies.



## Exceptional Talent

British Columbia's large, educated workforce of more than 260,000 across the broader tech ecosystem is well represented by diverse and energetic talent. This includes some of the world's top scientists, as Vancouver ranks in the top ten best markets for tech talent in North America. Vancouver also leads North America in tech talent growth, at 69% between 2017 and 2022. Additionally, because of the province's strong educational pipeline, B.C. has a growing number of STEM graduates. B.C.'s educational ecosystem is headlined by the University of British Columbia (UBC) — which consistently ranks among the top five percent of universities in the world. UBC is one of the top ten universities in Canada. UBC along with Simon Fraser University (SFU), University of Victoria (UVic) and the British Columbia Institute of Technology (BCIT), have made B.C. a hotspot for international students.

## A Prime Location

As Canada's gateway to the Pacific, British Columbia is ideally located for easy and cost-effective international business. Its business day conveniently overlaps with afternoon working hours in Europe, morning work schedules in Asia, and is synchronized for the full day with California and Washington State.



## British Columbia's life sciences sector by numbers:

- Over 2,000 life sciences companies and almost 20,000 life sciences employees
- Life sciences sector was responsible for \$650 million in goods and services exports in 2021
- Between 2018 and 2021, the life sciences sector grew faster than the overall B.C. economy in terms of number of businesses, employment levels and weekly earnings
- In 2021, B.C.'s life sciences sector recorded \$6.7 billion in revenue and generated \$2.6 billion in GDP — a 30% GDP growth between 2018 and 2021 (current dollars)

## Industry Profile

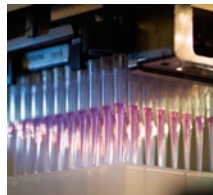
British Columbia's diverse ecosystem is a leader in the research and development of new therapies and products. The province made notable impacts in the fight against COVID-19 both locally and abroad. The province earned international recognition in the areas of precision medicine, COVID-19 therapeutics, messenger ribonucleic acid (mRNA) vaccine technology, lipid nanoparticles, antibodies and medical devices. Employment in B.C.'s life sciences sector has grown 23.3% since 2018, including a growth of 10.4% in 2021 alone, making the life sciences sector one of the fastest growing sectors in B.C. In 2021, the province exported approximately \$650 million in life sciences goods and services internationally. In 2021, B.C.'s life sciences sector achieved \$6.7 billion in revenue and contributed \$2.6 billion in GDP, marking a 30% GDP growth between 2018 and 2021.

### Research, Testing and Medical Laboratories

British Columbia's life sciences industry demonstrates a particular strength in R&D, with companies focused on innovation and the development of new technologies. The research, testing and medical laboratories sector makes up the majority of British Columbia's life sciences sector at 68%, and this industry group experienced 26.5% growth between 2018 to 2021 — the fastest in Canada over that time period. This industry group accounts for the majority of B.C.'s life sciences employment, with 10,231 jobs or 54% of the total employment for the sector in 2021 while its contribution to B.C.'s GDP was \$1.1 billion.

### Medical Devices and Equipment

British Columbia's medical devices and equipment industry group is launching pioneering products that benefit patients while delivering opportunity to investors. Whether it's the handheld diagnostic ultrasound imaging systems of Clarius Mobile Health, or the rapid on-site diagnostic tests, British Columbia's medical device companies have a history of successful innovation. StarFish Medical, based out of Saanich, is Canada's largest full-service medical device design, development and contract manufacturing company.

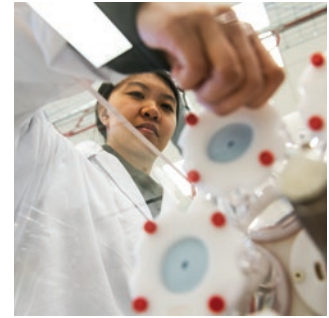


### Drugs and Pharmaceuticals

Job growth was the fastest in the drugs and pharmaceuticals industry group, adding 33% or 1,244 jobs between 2018 and 2021. Most revenue for the life science sector is attributed to the drugs and pharmaceuticals industry group (\$4.4 billion), and more specifically to wholesalers (\$3.3 billion or 46%) of the life sciences sector revenue.

### Home Grown Successes

British Columbia's biopharmaceutical and biomanufacturing companies are global leaders in developing solutions for patients worldwide. For example, STEMCELL Technologies is Canada's largest biotech company which develops cell culture media, cell separation systems, instruments and other reagents for use in life sciences research across basic and translational research continuums.



## World-Class, Innovative Research Centres

Institution	Areas of Focus
<b>adMare BioInnovations</b>	Provides specialized expertise and infrastructure to identify and de-risk promising discoveries generated by health-related research and transform them into commercially viable investment opportunities, leading to therapies for patients.
<b>BC Cancer Agency</b>	Conducts epidemiological and clinical research on cancer prevention, early diagnosis, molecular characteristics of the cancer process and new treatments using drugs and radiotherapy.
<b>British Columbia Centre for Excellence in HIV/AIDS</b>	Leads research to ensure that people living with HIV/AIDS receive a continually evolving standard of evidence-based care, distributes antiretroviral therapy to the province of B.C. and monitors HIV-related outcomes.
<b>Michael Smith Laboratories</b>	Leads biotechnology research with applications to health, agriculture, forestry, land and food systems to address society's most important problems.
<b>The Life Sciences Institute (UBC)</b>	The Life Sciences Institute's translational research and innovative interdisciplinary sciences is improving health care practices and identifying more sustainable methods to harvest natural resources while minimizing environmental costs.
<b>TRIUMF – Canada's particle accelerator</b>	Pushes the boundaries of research in isotope science and innovation, particle and nuclear physics, and life sciences. Ultimately, their research and consequent commercialization will result in improved health and economic opportunity for all.
<b>Vancouver Coastal Health Research Institute</b>	Research at the Vancouver Coastal Health Research Institute (VCHRI) focusses on an assortment of health conditions, diseases and specialties. VCHRI's overall goals are to improve quality of life and deliver high-quality medical care.

### Provincial Research Funding

<b>BC Knowledge Development Fund</b>	Funds research infrastructure and equipment, including for life science. This includes equipment for drug discovery, genomics and medical imaging.
<b>Genome British Columbia</b>	Funds research for genomics innovation on Canada's West Coast and facilitates the integration of genomics in the life sciences into society.
<b>Michael Smith Health Research BC</b>	Funded by the Government of British Columbia, Michael Smith Health Research BC aims to build research talent for B.C.'s future, create a stronger health research system and mobilize communities for research impact. These goals are being pursued through providing funding, convening diverse groups, promoting the understanding of science and leveraging partnerships.

## Benefits from strong government and industry support

British Columbia is committed to providing a competitive environment for the life sciences sector. Industry-led associations work with government to encourage investment, promote collaboration among organizations and grow the knowledge-based economy. With our business-friendly environment and abundant trade opportunities, B.C. attracts investments from all over the world.

### Supportive Government

- The small business venture capital tax credit encourages investors to make equity capital investments in B.C. small businesses. This gives B.C. entrepreneurs access to early-stage venture capital that will help them expand and develop their businesses.
- As part of the StrongerBC Economic Plan, the new B.C. Life Sciences and Biomanufacturing Strategy outlines five pillars to position B.C. as a leading global hub for life sciences and biomanufacturing, and to develop commercial-scale biopharmaceutical and medical manufacturing. To support these goals, the Government of B.C. has made a significant investment of \$737 million in the life sciences sector.



Close links between industry, academia and government offer opportunities for robust public-private partnerships. The life sciences sector also benefits from access to the province's world-class centres of excellence — along with industry association Life Sciences BC, which supports and represents the ecosystem through numerous initiatives at the local, national and international level.

Life Sciences BC is a not-for-profit, non-government sector association that advocates for and catalyzes the growth of the life sciences community in B.C.

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



British Columbia's **general corporate income tax rate is 12%.**

When combined with the federal rate, businesses pay an overall rate of 27%. Small businesses with an income of less than \$500,000 qualify for the provincial lower rate at 2%.



## British Columbia's Life Sciences Advantages

- Highly collaborative life sciences ecosystem
- Excellent world-class research organizations
- Strong life sciences innovation in pharmaceuticals, medical devices, genomics, research and testing platforms
- Highly educated and skilled workforce
- Established federal and provincial funding programs
- Excellent public infrastructure
- High quality of life
- Prime location



**Join this global hub with over 2,000 life sciences companies, including:**

- AbCellera
- Acuitas
- Aspect Biosystems
- Clarius Mobile Health
- StarFish Medical
- STEMCELL Technologies
- Xenon Pharmaceuticals
- Zymeworks

# British Columbia, *Naturally.*



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