



Life Sciences

A global hub for life sciences and biomanufacturing



British Columbia, *Naturally.*

BritishColumbia.ca

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

British Columbia, 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 with respect to the number of businesses (+26.5% from 2018 to 2021).



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 have come out of the province in the past year 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 institutions and research centers creating a dynamic, collaborative network for researchers. British Columbia has world-class scientists supported by one of the best health care systems in the world and international investors such as Glaxo Smith-Kline and Pfizer.



British Columbia's life sciences advantages

British Columbia'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 250,000 across the broader tech ecosystem is well represented by young, 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. 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 — a top ten university in Canada — 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.



B.C. LIFE SCIENCES SECTOR BY NUMBERS

- Over **1,300 life sciences companies** (with employees) and almost **20,000 life sciences employees** in B.C.
- Life sciences sector was responsible for **\$650 million in goods and services exports** in 2021.
- In 2021, B.C.'s life sciences sector recorded **\$6.7 billion in revenue and generated \$2.6 billion in GDP** — a **30% growth since 2018**.

Industry Profile

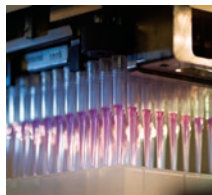
British Columbia's diverse ecosystem is a leader in the research and development of new therapies and products. Key areas where British Columbia is producing world-leading products and services include HIV-AIDS, oncology, antibodies, precision medicine, nano-medicine, messenger ribonucleic acid (mRNA) vaccine technologies, lipid nanoparticles and genomics. Employment in the 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 to international destinations.

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.

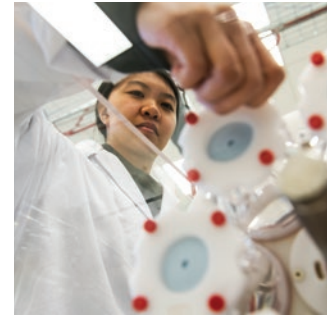


DRUG AND PHARMACEUTICALS

Job growth was the fastest in the drugs and pharmaceuticals industry group, adding 33% or 1,244 jobs from 2018 to 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. Meanwhile, Precision NanoSystems Inc. is a global leader in technologies, solutions and services for the development of lipid nanoparticle-delivered genomic medicines, including mRNA vaccines and therapies. British Columbia's medical technology sector is developing advanced mobile digital solutions including big data platforms, health applications and other solutions for a more connected health care ecosystem. For example, RxPx designed a platform to improve health outcomes and improve the patient experience; while PHEMI developed big data technologies which help organizations in health care sectors extract the most value possible from their data.



World-Class, Innovative Research Centres

Institution	Areas of Focus
BC Cancer Agency	Conducts epidemiological and clinical research on cancer prevention, early diagnosis, molecular characteristics of the cancer process and new treatments using drugs and radiotherapy.
British Columbia Centre for Excellence in HIV/AIDS	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.
adMare BioInnovations	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.
TRIUMF – Canada’s particle accelerator	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.
Vancouver Coastal Health Research Institute	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.
The Life Sciences Institute (UBC)	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.
Michael Smith Laboratories	Leads biotechnology research with applications to health, agriculture, forestry, land and food systems to address society’s most important problems.

Provincial Research Funding

Genome British Columbia	Funds research for genomics innovation on Canada’s West Coast and facilitates the integration of genomics in the life sciences into society.
Michael Smith Health Research BC	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.
BC Knowledge Development Fund	Funds research infrastructure and equipment, including for life science. This includes equipment for drug discovery, genomics and medical imaging.

Enjoy 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 investment 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.



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 and Life Sciences BC, which represents the sector and works to enhance links among partners.

Life Sciences BC supports linkages between global industry and local organizations, facilitates investment and global partnership opportunities and promotes British Columbia's world-class science and industry.

Visit 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%.
- B.C. has the **lowest provincial personal income tax rate in Canada** for single individuals earning up to \$125,000.



British Columbia's Competitive Advantages

- Highly collaborative life sciences ecosystem
- Highly educated and skilled workforce
- High quality of life
- Prime location
- Established federal and provincial funding programs
- Excellent public infrastructure
- Strong life sciences innovation in pharmaceuticals, medical devices, genomics, research and testing platforms
- Excellent world-class research organizations
- Strong startup ecosystem ranked number one in Canada for life sciences in 2021



Join this global hub for life sciences with over 1,300 life sciences companies (with employees), including:

- AbCellera ■ Aurinia Pharmaceuticals ■ PHEMI
- Precision NanoSystems Inc. ■ RxPx
- STEMCELL Technologies Inc. ■ Zymeworks

British Columbia, *Naturally.*



Trade and Invest British Columbia

999 Canada Place, Suite 730
Vancouver, British Columbia
Canada, V6C 3E1
Phone: +1 604 775-2100
international@gov.bc.ca

Published in May 2023. Every effort has been made to ensure the accuracy of this publication at the time of writing; however, the programs referred to, and data cited, are subject to change. All figures are in Canadian dollars.



[BritishColumbia.ca](https://www.BritishColumbia.ca)