



IMMIGRANTS & THE LIFE SCIENCES SECTOR

LIFE SCIENCES SECTOR IN BC

The life sciences sector is one of the fastest-growing in both B.C. and Canada. It includes small and medium-sized companies developing diagnostics, biopharmaceuticals, pharmaceuticals, and medical devices, as well as global companies with research, development, and manufacturing operations in Canada, serving both domestic and international markets. In upcoming years, there will be tens of thousands of job opportunities in B.C., and because the sector is so diverse, they will vary widely in terms of nature and qualifications required.

In addition to an array of health providers of many types, B.C. is home to more than 50 life sciences research centres and several centres of excellence. The province has some 1,100 life science companies with employees. While most are small to mid-size, B.C. is also home to Canada's largest biotech company, STEMCELL Technologies; Canada's largest medical device design, development, and contract manufacturing company, Starfish Medical; and the three largest biotech companies in Canada: AbCellera Biologics, Aurinia Pharmaceuticals, and Zymeworks Inc.

For many people, the rewards of working in the field include the satisfaction of knowing their job helps others. For health care providers, it's an obvious benefit, but the research sector has been at the forefront of global COVID-19 responses as well. BC Life Sciences Report (2021) indicated that over 500 COVID-19 related research projects were underway in the province.

Life science, along with other sub-sectors (Information and Communications Technology, Clean Technology, Interactive & Digital Media, and IT / Engineering Services), sculpts a vibrant tech economy in B.C. Between 2013 and 2018, employment per capita in B.C.'s technology sector grew by 17%, double that of Ontario and Quebec.

B.C. LIFE SCIENCE SECTOR HIGHLIGHTS (2021)

- 1,100 Active Companies
 - 58% are in the Research, Testing and Medical Laboratories industry
 - 31% are in the Medical Devices and Equipment industry
 - 12% are in the Drug and Pharmaceuticals industry
- 20,000+ Employees
- \$5.4 Billion Revenue (Annual)
- \$500 Million Exports (Annual)
- \$1.6 Billion GDP (Annual)
- Canada ranks 4th in the world in scientific publications

Source:

<https://www.boardoftrade.com/files/advocacy/2021-life-sciences/life-sciences-report-2021.pdf>



BC IS HOME TO WORLD-CLASS, INNOVATIVE RESEARCH CENTRES

- B.C. Cancer Agency
- British Columbia Centre for Excellence in HIV/AIDS
- AdMare
- TRIUMF
- Vancouver Coastal Research Institute
- Michael Smith Laboratories

Source:

https://www.britishcolumbia.ca/wp-content/uploads/RS907_2020LifeSciencesBCWeb_EN.pdf

Most of British Columbia's life sciences businesses and institutions are found in major city centres with proximity to academic institutions and research hospitals. Over 60% of employers and 70% of jobs are in the Lower Mainland / Southwest region, followed by the Vancouver Island / Coast and the Thompson-Okanagan regions with fourteen and eleven percent, respectively.

LIFE SCIENCE SECTOR IN BURNABY

The City of Burnaby recognizes the life sciences sector as one of its signature industries, with a large cluster of firms and jobs, and strong growth prospects. Burnaby has a major hospital and a cluster of biotechnology and life science firms. The city is home to Canada's largest biotech company, STEMCELL Technologies, and many other leading companies, including Symvivo, Qu Biologics, Amgen Canada, and Xenon Pharmaceuticals Inc.

The life sciences sector is supported by an exceptional research environment and talents. Burnaby is home to two leading universities: Simon Fraser University (SFU) and British Columbia Institute of Technology (BCIT). Both not only produce new graduates in the field but also act as engines for research and development.

The SFU Institute for Neuroscience and Neurotechnology (INN), based at the Burnaby campus, serves as a hub for research, training, and engagement, bringing together researchers from across SFU and supporting interdisciplinary research and collaborations across the university, and beyond.



Completed in 2022, BCIT Health Sciences Centre (completed in 2022) is an integrated and comprehensive centre which provides a state-of-the-art home for progressive clinical education through sophisticated simulation, modern classroom technology, and inter-professional practice. It is a critical hub for providing transformative, applied education to current and future generations of healthcare students in BC.

The City of Burnaby sets up strategies looking for opportunities to encourage and assist SFU and BCIT in tapping a share of the provincial funds that have been allocated to establishing B.C. Leadership Chairs at post-secondary institutions in areas including medical, environmental, social, and technological research.

Notable Life Sciences Employers in Burnaby	
Organization	Permits
Amgen Canada	https://www.amgen.ca/career
Artron Bioresearch Inc	https://artronbio.com/index.php/index_english.html
Alectos Therapeutics	https://alectos.com/
Fraser Health Authority - Burnaby Hospital	https://careers.fraserhealth.ca/
Cytiva	https://www.cytivalifesciences.com/en/ca
Corcym Canada Corp.	https://corcym.com/
iProgen Biotech Inc.	https://www.iprogen.com/
Kardium Inc.	https://kardium.com/careers/
Life Labs	https://www.lifelabs.com/careers/?myProvince=on
Qu Biologics Inc.	https://www.qubiologics.com/careers/is-qu-for-you/
Symvivo Corporation	https://www.symvivo.com/#careers
Stemcell Technology	https://www.stemcell.com/
Medipure Pharmaceuticals Inc.	http://medipurepharmaceuticals.com/
Xenon Pharmaceuticals Inc.	https://www.xenon-pharma.com/careers/
Vitacore Industries Inc.	https://www.vitacore.com/
Verathon Inc.	https://www.verathon.com/
Willow Biosciences Inc.	https://willowbio.com/
Xenon Pharmaceuticals Inc.	https://www.xenon-pharma.com/



LABOUR FORCE IN THE LIFE SCIENCES SECTOR

Precise employment numbers in the sector are difficult to ascertain because classification systems pertaining to health care and the life sciences are complicated and overlapping, but the importance of three sectors provides some guidance.

In 2020, 30% of Mainland / Southwest region's total workforce was employed in three sectors with a significant life sciences component: 12% in Health Care and Social Assistance; 11% in Professional, Scientific and Technical Services; and 7% in Manufacturing.



The demand for life sciences-related talents continues to grow and will place competitive pressure on employers. Between 2021 and 2031, the Mainland/Southwest region will see about 107,100 job openings in the Professional, Scientific, Technical Services Sector, 85,300 in Health Care and Social Assistance, and 34,000 in Manufacturing. Combined, the three sectors make up 30% of the total job openings in the region.

In 2021, 17,000 Burnaby residents worked in the Professional, Scientific, Technical Services Sector, 14,725 in Health Care and Social Assistance and 7,330 in Manufacturing.

	Total labour force population aged 15 years and over	A: Health Care and Social Assistance	B: Manufacturing Industry	C: Professional, scientific and technical services	Subtotal (A+B+C)	% municipal share of Metro Vancouver's labour force
Metro Vancouver	1,435,305	163,115	83,255	160,590	406,960	100%
Vancouver	386,760	45,910	16,305	58,070	120,285	30%
Surrey	300,730	34,785	23,535	21,005	79,325	19%
Burnaby	133,720	14,725	7,330	17,000	39,055	10%
Richmond	105,145	10,790	6,060	11,250	28,100	7%
Coquitlam	79,140	8,740	4,625	9,155	22,520	6%



SKILLED IMMIGRANTS ARE KEY SOURCE OF TALENT FOR THE LIFE SCIENCES SECTOR

BioTalent Canada estimates that Canada's bio-economy is likely to require 65,000 additional workers by 2029. Companies will be challenged to fill positions due to a highly competitive labour market.

Current estimates indicate there will not be enough workers to meet labour needs by the end of the decade, with significant pressure starting within the next three years and job-opening-to-candidate ratios reaching 4:1 in some areas. Some of the most severe shortages are expected in bio-manufacturing and processing. The shortage is expected to intensify as Canada seeks to expand its manufacturing sector due to the glaring lack of capacity highlighted by COVID-19.

BioTalent Canada estimates that by the end of the decade, this sector will employ nearly 55,000 people in western Canada, a large proportion of those in B.C. The western Canadian bio-economy has a tremendous opportunity to seek talent from under-represented groups, including immigrants and visible minorities. The number of immigrants arriving with post-secondary degrees has grown steadily since 2003 and is expected to continue its rise. About 30% of immigrants with degrees have bio-economy-related degrees.

In 2020, immigrants made up only 16% of the regional bio-economy workforce, with recent immigrants accounting for only 9%. Rapid growth in these numbers is necessary and likely.

BioTalent Canada defines Canada's bio-economy as largely divided into four subsectors Bio-health, Bio-energy, Bio-industrial and Agri-biotech.

B.C. Labour Market Outlook estimated that immigrants will fill about 34% of B.C.'s job openings between 2021 and 2031. Burnaby is one of the most diverse cities in Canada and will be a talent pool for the life sciences industry. Census 2021 reported that immigrants comprised 50% of Burnaby's population, compared to 42% for the Greater Vancouver region. 38% of Burnaby's labour force has a bachelor's degree or higher, compared to 35% for Greater Vancouver's regional level.

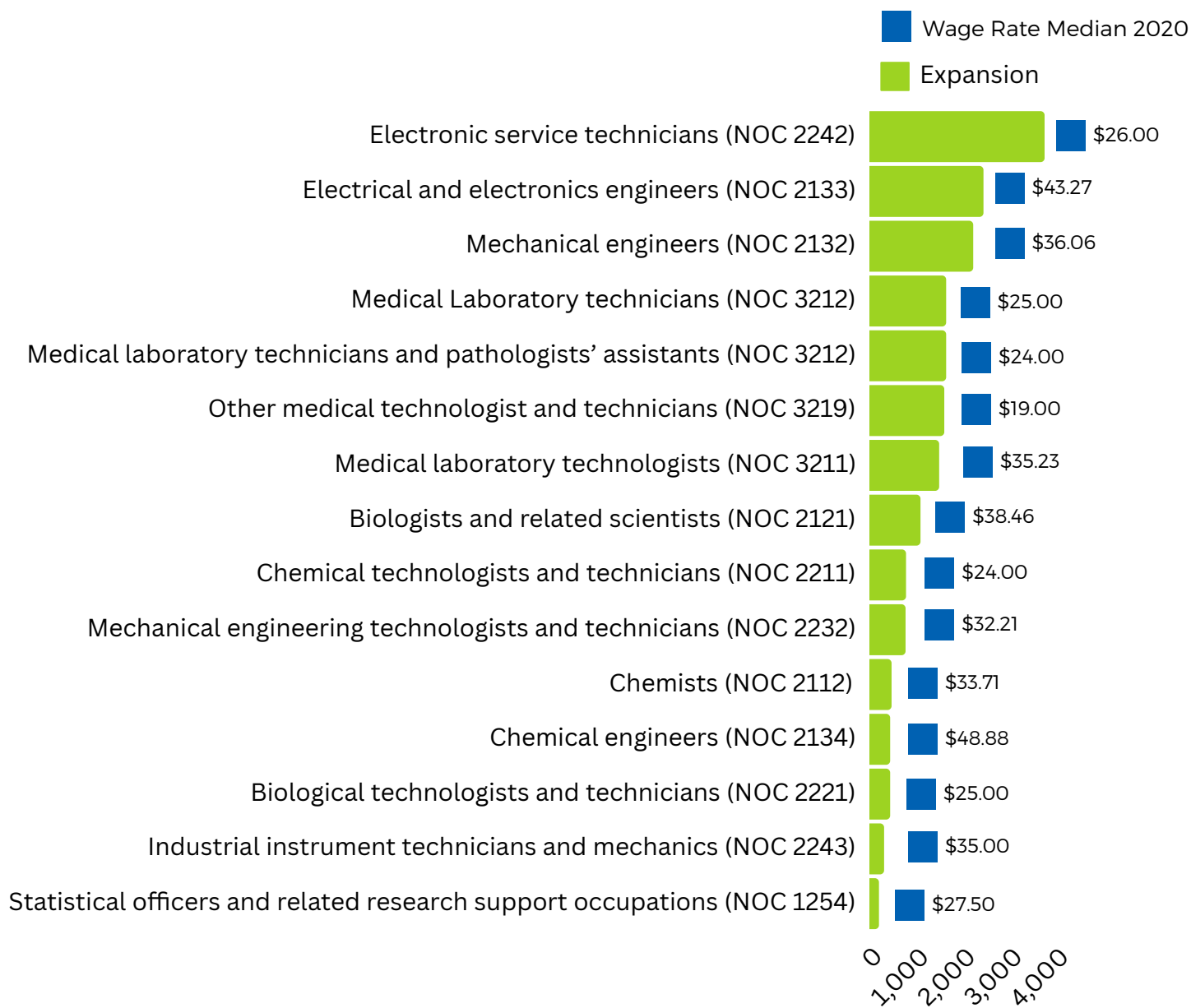




B.C. LABOUR MARKET OUTLOOK

2021-2031

The British Columbia Labour Market Outlook (2021 Edition) provides a list of high-opportunity occupations for the Mainland / Southwest region, as shown in the table below.



[Click here](https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx) to explore more career profiles in this sector, from job duties and wages to projected demand in your region. (<https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>)



EMPLOYMENT PROGRAMS AND SERVICES

WorkBC Employment Service Centres

- Burnaby – Edmonds <https://www.workbc.ca/WorkBC-Centres/Mainland-Southwest/Burnaby-7297-Kingsway.aspx>
- Burnaby – Metrotown <https://www.workbc.ca/WorkBC-Centres/Mainland-Southwest/Burnaby-4211-Kingsway.aspx>

Career Paths for Skilled Immigrants – Health (A)

<https://www.douglascollege.ca/programs-courses/training-group/employment-services-career-development/internationally-trained-health>

Career Paths for Skilled Immigrants – Health (B) <https://careerpaths.ca/>

FAST (Facilitating Access to Skilled Talent) <https://fastbc.org/working-biotechnology-sciences/>

Burnaby has numerous employment programs and services for immigrants and refugees. A complete listing of currently available and free programs and services can be found on this site's Immigrant Programs and Services (<https://newtobc.ca/settlement-information-for-newcomers/immigrant-and-refugee-programs-and-services/>). Select **Burnaby** under communities and **Employment** under categories and browse through the various programs to find one that meets your needs.

OCCUPATIONAL GUIDES AND PROFILES

The following websites provide a searchable selection of occupational guides.

- WelcomeBC – Work in BC <https://www.welcomebc.ca/Work-in-B-C>
- WorkBC Explore Careers <https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>
- Skilled Immigrants InfoCentre – Vancouver Public Library <http://pwp.vpl.ca/siic/>
- National Occupational Classification 2021 - <https://noc.esdc.gc.ca/>

RELATED REGULATORY BODIES AND PROFESSIONAL ASSOCIATIONS

Professional associations provide information about credentials and industry conditions.

- BC Tech Association <http://www.wearebctech.com/>
- BIOTECCanada <https://www.biotech.ca/>
- Canadian Alliance for Skills and Training in Life Sciences (CASTL) <https://castlcanada.ca/>
- Innovate BC <https://www.innovatebc.ca/>
- Life Sciences BC <https://lifesciencesbc.ca/>
- Vancouver Bioinformatics User Group <https://www.vanbug.org/>

