

Québec, a Global Hub in Life Sciences and Health Technology

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Why invest in Québec's life sciences and health technology (LSHT) sector?



650+ companies
and **45,000+ workers**



A global AI hub, with many
healthcare projects



Cutting-edge health infrastructure and an **ethical framework** to access data



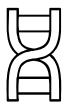
30,000 university and college students enrolled in LSHT-related programs



300+ research organizations to drive innovation



Strong government support and **attractive tax credits and incentives** for R&D



Areas of excellence:
oncology, precision medicine,
neurology, cardiology,
infectiology, immunology, etc.



A collaborative ecosystem
with many public-private
partnership projects



A 24% average cost advantage over key U.S. states and other Canadian provinces

Québec, a driving force of the Canadian economy



Population

- **8.5 million residents**
(23% of Canada's population)
- **14% of population is foreign-born**



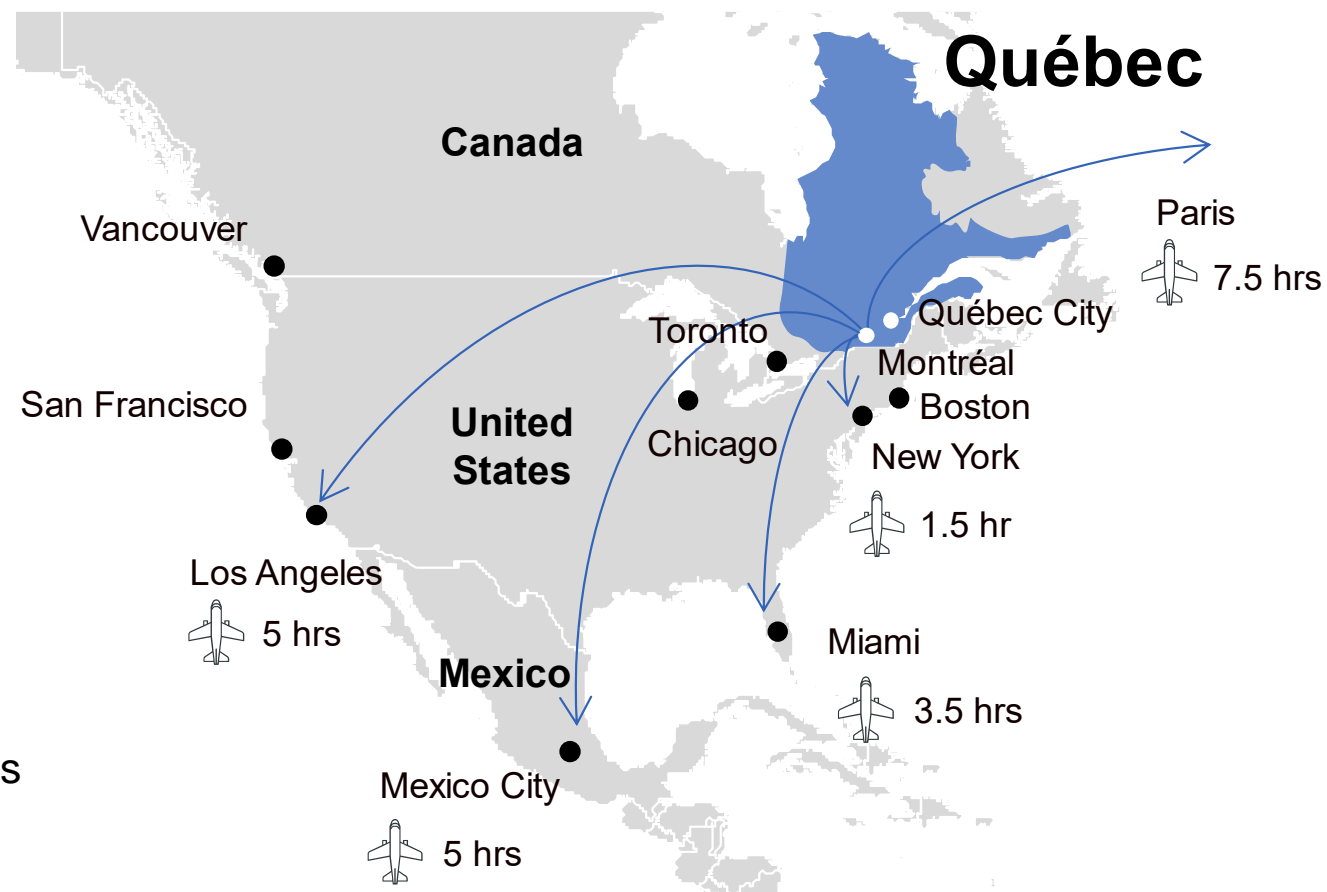
Economy

- **\$442 billion of the GDP** in 2020
- **\$3.7 billion in foreign direct investment** in 2020, supported by Investissement Québec International



Strategic location

- **17 economic regions and 6 metropolitan areas**
- **Sharing a 813-km border** with the United States
- **Commercial gateway** between America and Europe



Source: Statistics Canada, Table 36-10-0402-01, Table 17-10-0134-01, 2016 Census; Investissement Québec International, "2020-2021 Annual Report", 2021; Gouvernement du Québec, "Budget Plan 2021-2022", 2021.



01

A Diversified Industry Built on a Solid Foundation

Québec, a recognized LSHT hub in North America

Canada, a LSHT leader:

- **4th in the world** for scientific publications (2019)
- **Presence of the 10 largest biopharmaceutical companies in the world**; 6 of which are established in Québec*

The LSHT industry, a major contributor to Québec's economy

- Québec accounts for nearly **30% of LSHT jobs in Canada**
- Montréal ranks **6th for highest concentration of LSHT jobs in North America**



* Novartis, Roche, Pfizer, Sanofi, Merck, GlaxoSmithKline.

Source: World Economic Forum, "Global Competitiveness Report", 2019; Pharmaceutical Tech, "Top Ten Pharma Companies", 2019; Statistics Canada, Special compilation based on Labour Force Survey, 2019; U.S. Bureau of Labor Statistics, 2019; Statistics Canada, 2019.

A complete and diversified ecosystem



650+ companies



45,000+ jobs



10,000+ researchers

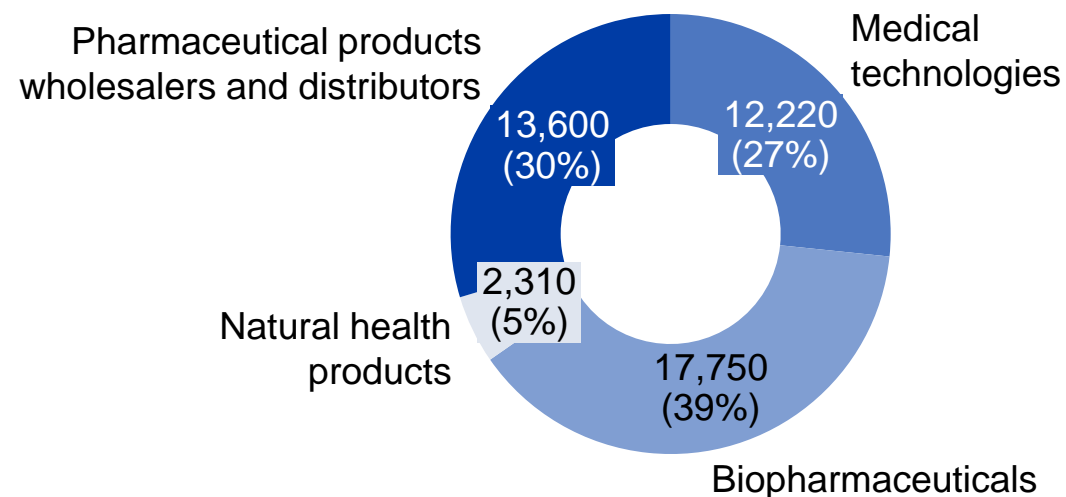


A **complete value chain** ranging from research to commercialization



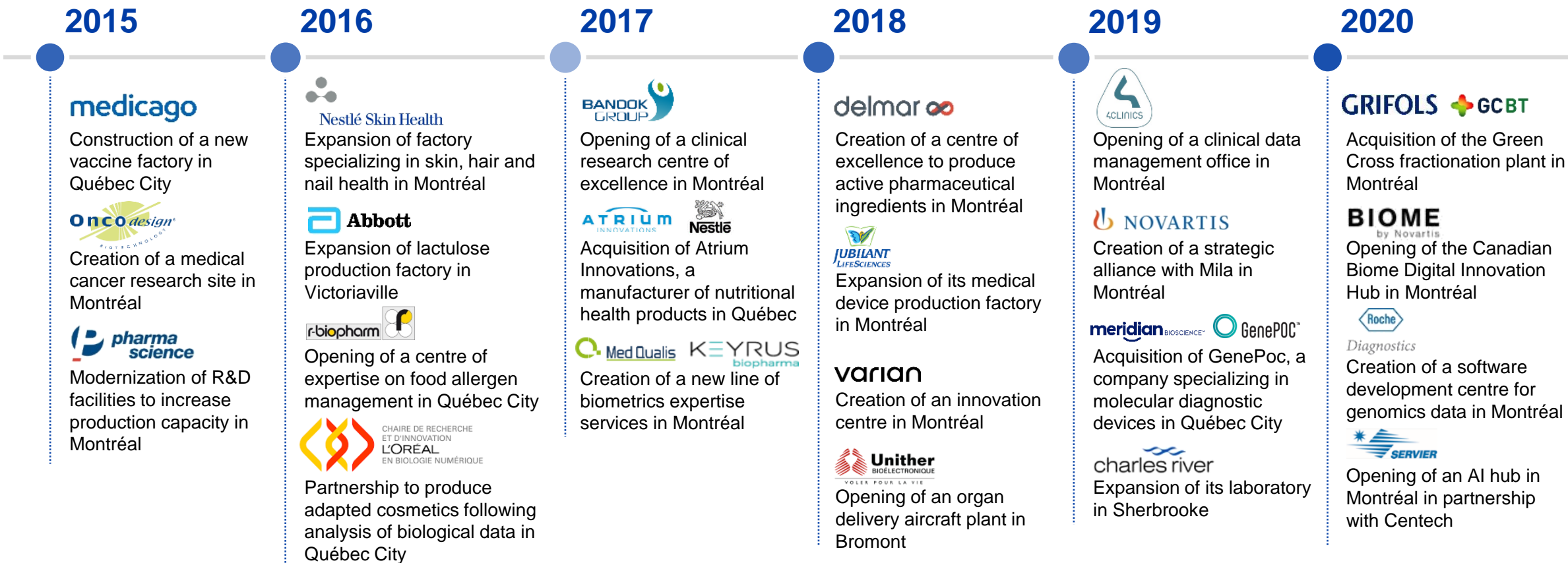
Cutting-edge expertise: pharmaceutical biomanufacturing, digital health, big data and AI, precision medicine and genomics, etc.

Distribution of jobs in the LSHT industry in Québec
2018, in number of jobs and %



Source: Statistics Canada, Special compilation based on the Labour Force Survey, 2019; Ministère de l'Économie et de l'Innovation, "Secteur des sciences de la vie et technologies de la santé, Recensement des entreprises 2018", 2020.

Many global industry leaders in Québec



Examples of other global industry leaders established in Québec



Source: fDi Markets, 2021; Investissement Québec International.

The quality of the collaborative ecosystem and skilled workforce:

Key factors for foreign companies

“By operating here, we are capitalizing on Québec’s thriving life sciences industry. The industry here is recognized for its skilled workforce, its network of world-class research centres and teaching hospitals, and the diversity of businesses in its pharmaceutical, biotechnology and health technology sectors.”

- Bertil Laley, Director, Health Systems Strategies, Québec and Atlantic, Medtronic of Canada



“Sherbrooke offers a large pool of bilingual scientific and technical labour, emerging continuously from colleges and universities [...]. Sherbrooke is also a unique ecosystem because it’s possible to complete a full research project: basic preclinical research as we do, clinical phases I to IV, through to manufacturing and marketing.”

- Nathalie Hébert, General Manager of the Sherbrooke site, Charles River Laboratories



“We will actively collaborate with local universities on research, hire local graduates and interns, and partner with Montréal-based technology experts [...]. We are excited about leveraging Montréal’s large talent base to develop new solutions and equip the world with new tools to fight cancer.”

- Dow Wilson, President and Chief Executive Officer, Varian



“Medicago chose Québec City because of its skilled employees and access to an experienced workforce, world-class research infrastructure, a dynamic business culture and support from the federal, provincial and municipal governments.”

- Andy Sheldon, former CEO, Medicago



“The Québec City region consolidates innovation in the health field and more specifically for infectious diseases [...] as well as medical devices. With the strength of Université Laval and a group of cutting-edge hospitals and research centres, manufacturers are able to find the future technological stars in Québec City as well as the necessary workforce [...].”

- Patrice Allibert, PhD, President and CEO, OxyNov



An industry benefiting from significant support from the Quebec and Canadian governments



National Assembly of Québec building

- Governments committed to **drive innovation and grow investment** in research and health networks:
 - **\$2.2B of the Government of Canada's budget** over 7 years to grow the life sciences industry (starting in 2021-2022)
 - **Over \$205M of the Government of Québec's budget** in the Québec Life Sciences Strategy (2017-2022)
- **Innovation support programs:** *Fonds d'accélération des collaborations en santé, Fonds de soutien à l'innovation, etc.*
- **Priority sectors:** precision medicine, big data in healthcare, biomanufacturing

Source: Government of Québec, "2017-2027 Québec Life Sciences Strategy"; Government of Canada, "Budget 2021—Investing in Research and Science", 2021.

Many organizations offer industry-specific support across Québec and Canada



BIOQUÉBEC



THE
COOLEST
HOTSPOT



MONTREAL
INVIVO



- And many more!



View of downtown Montréal from Mount Royal Park
© Mathieu Dupuis - Tourisme Montréal

A development model based on strong collaboration between business community and health network



Examples of recent collaborative projects



Global research hub in
cardiometabolic diseases



THE TERRY FOX RESEARCH INSTITUTE
L'INSTITUT DE RECHERCHE TERRY FOX



Digital Health and Discovery
Platform (DHDP): consortium of
97 members in Canada



Partnership for the **development**
of new drugs against cancer



**Personalized Medicine
Partnership for Cancer** to
develop and validate new
biomarkers



- And many more!

Montréal, a strong concentration of actors to build scientific and industrial partnerships

Many world-class institutes, including:

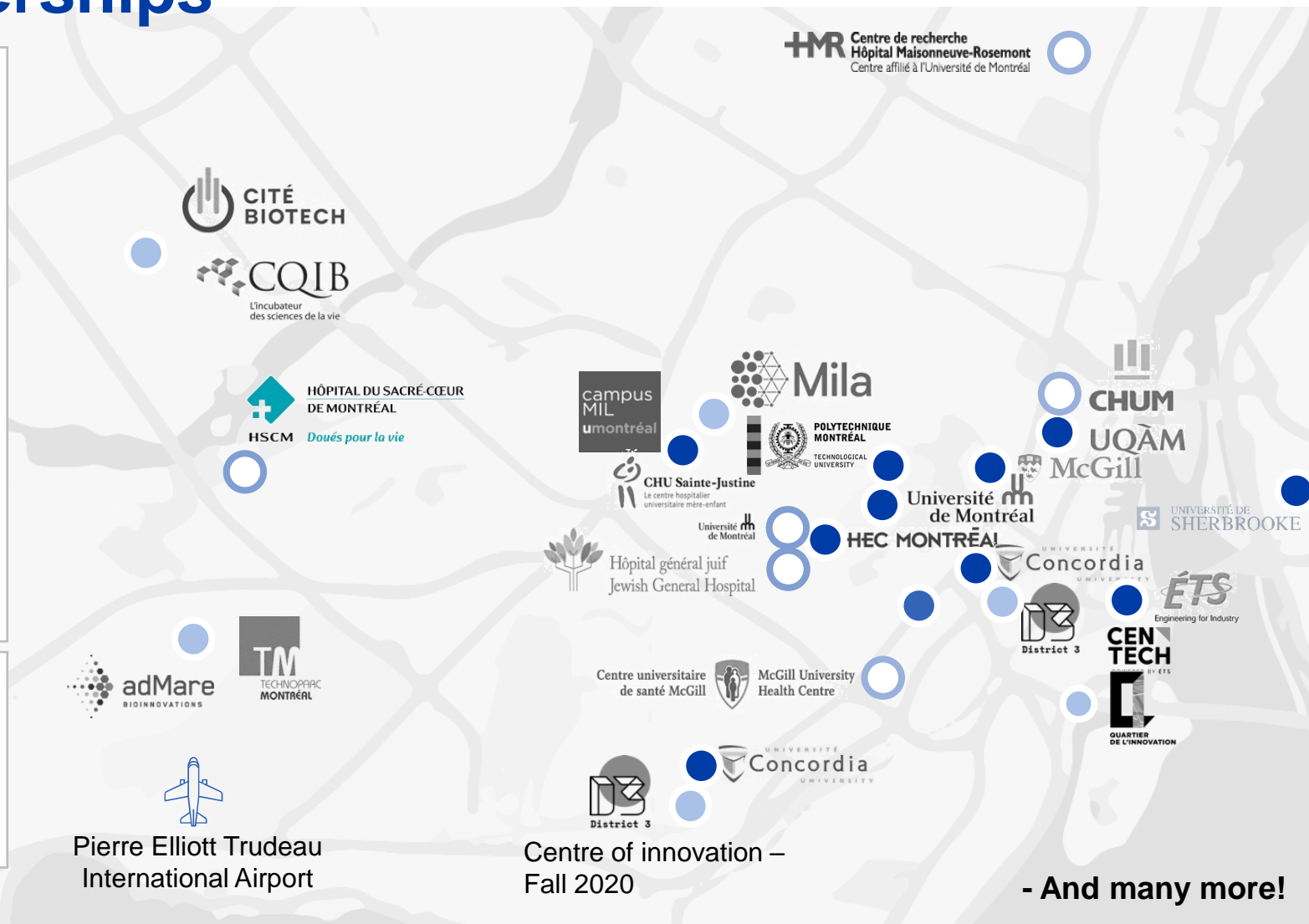


Innovation hubs and growing industrial parks

- **Launch of Phase 2 of Biotech City:** 100,000+ m² to attract companies, particularly biopharmaceuticals

Legend

- Industrial park/innovation hub
- University-affiliated hospital
- University



Source: Biotech City, Press releases, 2021; Montréal International analysis, 2021.

A LSHT sector supported by a thriving IT industry

- **Over 230,000 IT professionals**
- Nearly **10,000 companies** in Québec
- **Some of the lowest operating costs in North America** for 4 key sectors in IT industry*
- A diversified industry in support of LSHT:



Artificial intelligence

Over **\$3B** in AI investment in Montréal since 2016

Headquarters of **Scale AI**, the AI supercluster dedicated to Canada's supply chain



Optics-photonics

World-renowned centres in Québec City: INO, COPL, etc.



Video games

World's 5th largest global video game development hub

Examples of major companies located in Québec








* Data centres, software development, AI and video game production.

Source: Statistics Canada, Tables 36-10-0402-01 and 33-10-0267-01, Special compilation based on data from Labour Force Survey, 2019–2020; fDi Benchmark, 2021; Montréal International, “A hub for the digital creativity sector”, 2020.

LSHT, a priority for investors and local incubators in a booming startup ecosystem

- Canada is the most attractive country in the world for entrepreneurs, according to OECD
- **Six of Canada's ten most active VCs in 2020** are based in Greater Montréal
- **\$6.8+ billion** in venture capital (VC) investments in Quebec between 2015 and 2020, with **28% in LSHT**
- Examples of recent funding in the LSHT sector:

	US\$82.5M (2019)
	US\$80M (2018)
	US\$85M (2020)
	US\$37M (2020)
	US\$30M (2020)

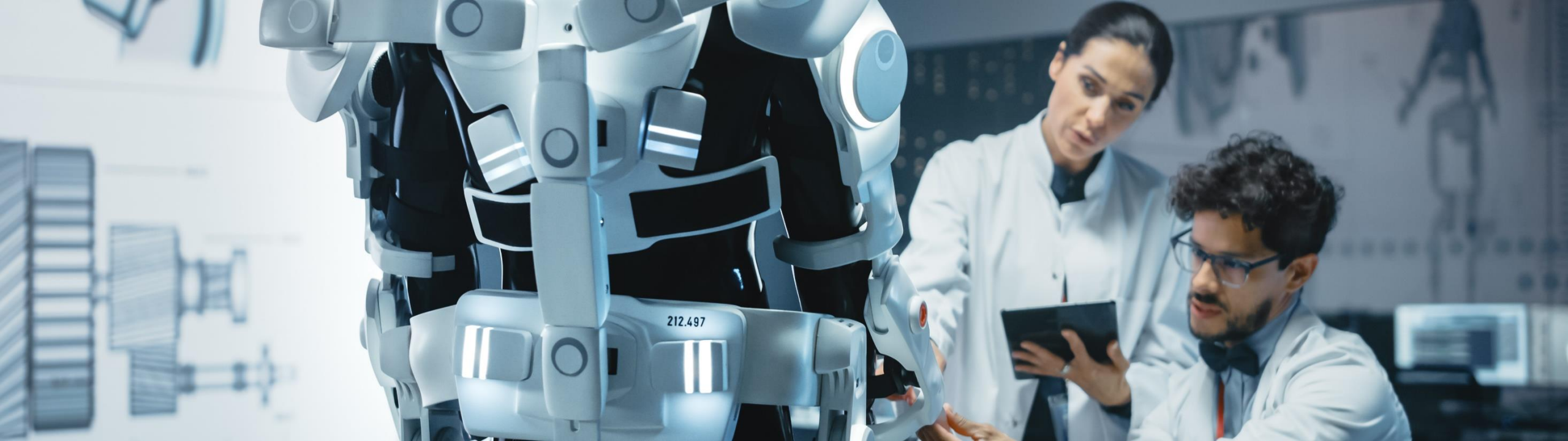
Examples of active funds in LSHT



Examples of incubators for LSHT startups



Source: OECD, "Indicators of Talent Attractiveness", 2019; PwC Canada and CB Insights, "MoneyTree Canada Report", 2019; Réseau capital, "Venture Capital and Private Equity Québec Market Overview", 2015 to T3 2020.



02

High Value-Added Cutting-Edge Expertise in Health and Life Sciences

Hub for artificial intelligence applied to health and life sciences

- **\$3+ billion in AI investment** in Québec since 2016
- **Specialized training**, particularly with the CHUM **School of Artificial Intelligence in Healthcare (SAIH)**
- Headquarters of **Scale AI**, the AI supercluster dedicated to Canada's supply chain, based in Québec
- Mila brings together a community of 600+ researchers and graduate students: the **world's largest academic research center** in machine learning
- **Global industry leaders** are involved in AI research applied to health, such as:

intel

AMGEN

NOVARTIS

Roche



Mila's office in Montréal's Mile-Ex neighbourhood © Maryse Boyce

Source: Mila, 2020; CHUM, 2021.

A strong expertise in precision medicine through genomics



- **Major public investment in genetics research**, particularly with the *Fonds de recherche du Québec – Santé (FRQS)*
- Presence of **a range of cutting-edge genomic research infrastructure and vast biobanks**, such as:



- **An ethical framework for research**, through the establishment of standards and committees
- **Many global industry leaders** in precision medicine in Québec:



Source: Interviews with stakeholders; Génome Québec, 2021.

Many digital health and precision medicine innovations developed in Québec



Development of radiomic biomarkers and clinical decision support systems



Acceleration of genomics research with AI and bioinformatics



Valence Tools to predict a drug's likelihood of toxicity in the early stages of development



AI-powered solution to measure ocular biomarkers and analyze the resulting data to accelerate prescription time



LABORATOIRES

Personalized skin care products through an AI-based diagnosis



AI solution in psychiatry facilitating individual treatment and reducing patient recovery time by leveraging clinical data



ARTIFICIAL INTELLIGENCE FOR HEALTH

AI-powered preventive healthcare platform to improve decision making of health professionals



dialogue

Telemedicine platform using AI to provide convenient, fast access to care



MUUTAA

AI solution to improve the efficiency of the drug development and distribution chain



OPTEL™

AI-powered traceability solutions to optimize the pharmaceutical supply chain

Source: Company websites.

Biomanufacturing, a growing sector supported by many recent investments



- **A major hub in medical biotechnology** with expertise in cell culture, cellular therapy, biomanufacturing procedures, etc.
- Examples of recent projects:

medicago

\$173M (2020): support to develop a COVID-19 vaccine and build a large-scale biomanufacturing plant in Québec City

KABS
PHARMACEUTICAL SERVICES

\$54M (2021): expansion of facilities in Saint-Hubert and inauguration of a new facility in Val-des-Sources

IMMUNE
BIOSOLUTIONS

\$13M (2021): support for its COVID-19 experimental therapy and increase of the clinical-scale biomanufacturing capacity

Source: Government of Canada, "Biomanufacturing: Projects underway", 2021; Government of Canada, "COVID-19 related vaccines, therapies and biomanufacturing projects", 2021.

National Research Council (NRC), a biomanufacturing leader in Canada

- NRC, Canada's **largest R&D team in human health with 340+ researchers**
- Montréal, NRC's biomanufacturing hub through investment in cutting-edge facilities:
 - **\$126M (2020)**: construction of dedicated biomanufacturing facilities
 - **\$44M (2020)**: construction of a clinical trial materials facility compliant with good manufacturing practices (GMP)
- **Advanced expertise**: cell bioprocesses and lines, development of biological products and vaccines, etc.
- Provides **technical training and funding for industrial R&D partnerships** to help commercialize innovations



Biotechnology Research Institute (BRI) on Royalmount Ave. in Montréal, home to human health therapy research facilities © CNRC

Source: Government of Canada, "NRC facilities - Biologics Manufacturing Centre", 2021; Government of Canada, "NRC facilities - Human health therapeutics research facility – Montreal: Royalmount", 2021; Government of Canada, "Biomanufacturing: Projects underway", 2021; NRC, "Strategic Plan, 2019–2024".

Québec City, biomanufacturing and vaccine expertise:

Medicago success story

medicago

A growing company

- 2011: Construction of a GMP plant in Durham, North Carolina (US)
- 2013: Acquisition by Mitsubishi Tanabe Pharma (Japan)
- 2015: Contracts with the Public Health Agency of Canada (PHAC) and the U.S. Department of Health and Human Services (HHS) to produce Ebola vaccines

Plant-derived vaccine development

- Innovative technology using vegetables to produce vaccines
- Ability to respond to pandemics through rapid production (e.g. H1N1 [2009] and H7N9 [2013] in 19 days)



\$245M for a new production site in Québec City

- 44,000 m² complex for the production of 40 to 50 million doses per year
- Financial support from all levels of government

Canada

Québec

VILLE DE
QUÉBEC

Source: Investissement Québec International, 2015; Médicago press releases, 2015 and 2020.

A niche of excellence in natural health products



- Several **areas of expertise in the natural health sector**: nutritional supplements, nutraceuticals, cosmeceuticals, etc.
- International research networks, such as:
 - **Food4BrainHealth**: Québec-France partnership dedicated to nutrition and brain health
 - **Nutribiota**: Québec-France-Belgium consortium to develop products for metabolic health and intestinal microbiota

Institute of Nutrition and Functional Foods (INAF) in Québec City:

- The **largest team of researchers in Canada (110 researchers)** dedicated entirely to foods and the complex interactions between food components, nutrition and health

Source: INAF, 2020.

Saint-Hyacinthe's City of Agri-Food, Veterinary and Agri-Environmental Biotechnology:

A centre of excellence in animal health

An ecosystem that fosters cooperation and creates synergy

- Nearly 3,000 workers and 200+ researchers specializing in veterinary, agri-food and agri-environmental biotechnologies
- Brings together stakeholders from educational, research and manufacturing fields



Varied expertise in animal health

- Many specializations: vaccines, additives, diagnostic kits, bovine genetics, etc.
- Examples of companies specializing in animal health:



Training and research institutions in animal health

- Faculty of Veterinary Medicine: 400+ students and 20+ chairs and research units
 - The Veterinary Diagnostic and Disease Surveillance Complex of Québec
 - Cintech Agroalimentaire
 - Veterinary and food hygiene laboratory
- And many more!**

Source: Saint-Hyacinthe Technopole, 2020.



03

A Collaborative Ecosystem Focused on Innovation

A fertile ground for innovation and R&D in LSHT

- **Québec, 1st in Canada for R&D investments** in % of GDP
- **\$9.7B in R&D spending***, including \$5.7B spent by companies and \$3.6B by universities
- **3 universities among Top 10** major Canadian research universities:



Examples of companies investing in R&D in Québec:



Medtronic



NOVARTIS



charles river










SANOFI



* Including \$9.3B spent by businesses and universities and \$0.4B spent in the public sector (Canada and Québec level).
Source: Statistics Canada, Table 27-10-0359-01, 2016, and Table 27-10-0273-01, 2017.

More than 300 LSHT research organizations in Québec

Examples of research organizations in each of Québec's cutting-edge expertise

<h3>Oncology</h3> 	<h3>Cardio-vascular and metabolic diseases</h3> 	<h3>Neuroscience and mental health</h3> 	<h3>Infectious diseases</h3> 	<h3>Geriatrics</h3> 
<h3>Cellular therapy and regenerative medicine</h3> 	<h3>Medical imaging and cytometry</h3> 	<h3>Precision medicine (genetics, genomics and proteomics)</h3> 	<h3>Big data and artificial intelligence</h3> 	

World-class research organizations



© CRCHUS

Centre de recherche du CHU de Sherbrooke

1,000+ researchers, students and interns

1,000+ active research projects, including **30+ projects with industry**

Specialities: cancer, diabetes, obesity and cardiovascular complications, medical imaging, pain treatment, mother/child relationship and health



© Audiovisual Department IUCPQ - UL

Quebec Heart and Lung Institute in Québec City

16 research chairs

700+ clinician researchers, students and interns

670+ active clinical research projects

Specialities: cardiology, pulmonary, obesity, Type 2 diabetes and metabolism



© Université de Montréal

IRIC Université de Montréal

Nearly 500 researchers, students and employees

50+ research projects with industry

Largest drug discovery unit in an academic setting in Canada

Specialities: immunology and oncology



© ICM

Montréal Heart Institute

12 research chairs and 10+ clinical and fundamental laboratories

80+ researchers and clinicians

Clinical trial coordination centre working with **2,500 clinical sites** in 20 countries

Speciality: cardiology



Source: Institute for Research in Immunology and Cancer "2019-2020 Activity Report", 2021; Montréal Heart Institute; 2021; Québec Heart and Lung Institute, "Annual Report 2019-2020", 2021; Centre de recherche CHUS, "Annual Report 2019-2020", 2021.

Cutting-edge healthcare and research infrastructures

- **\$7.4+ billion in investment in ongoing projects for cutting-edge healthcare infrastructure** in Québec
- **More than \$785M in research spending** in hospitals in Québec in 2019
- **4 university-affiliated hospital networks*** unite institutions around collaborative projects

Integration of innovation in the healthcare system

- Creation of the *Bureau de l'innovation* by the Government of Québec
- Objective: Identify needs of network, accelerate adoption and promote integration of selected innovations

* Integrated health and social services university networks (RUISSS).

Source: Research Infosource, "Canada's Top 40 Research Hospitals 2020", 2021; Commission de la construction du Québec, "Liste des chantiers importants", 2020; CHUM, "2019-2020 Annual Report", 2021; MUHC, 2021; CHU de Québec, 2021; CHUS, 2021.

The 4 university-affiliated hospital networks in Québec



Centre hospitalier universitaire de Sherbrooke (CHUS)

1,300+ physicians and pharmacists
1,900+ researchers and students
9 local service networks



Centre hospitalier de l'Université de Montréal (CHUM)

5,000+ physicians and nurses
2,200+ researchers and students
12 clinical departments



McGill University Health Centre (MUHC)

6,600+ physicians and nurses
3,700+ students and researchers
14 clinical departments



CHU de Québec – Université Laval

1,500+ physicians and nurses
1,350+ researchers and students
Brings together 5 Québec City hospitals

Funding programs to support development and integration of innovations



NRC: Finances industrial research (\$10M per year)



MEDTEQ +: Supports innovation in medical technology with financing and industrial partnerships



TransMedTech: Finances and supports innovative medical technology



IRICoR: Fosters knowledge transfer in drug discovery



C3i: Accelerates the discovery, commercialization and access to cancer immunotherapy treatments



AdMare Bioinnovations: Development of industrial partnerships and financing



Fonds de recherche Santé: Finances research projects in healthcare



Prompt: Supports university-industry R&D partnerships with financing up to \$1.5M



Mitacs: Finances public-private research (contribution up to 1:1.22)



Génomique Québec: Finances genomics research projects and supports integration of solutions



CQDM: Finances innovative technology to accelerate the discovery and development of drugs

- And many more!

Sherbrooke Science Park:

High science concentration



The junction between university research and industry

Presence of world-renowned educational and research institutions:



Faculté de médecine et des sciences de la santé

CENTRE DE RECHERCHE



Institut de pharmacologie de Sherbrooke

- And many more!



Aerial view of the Sherbrooke Science Park
© Université de Sherbrooke - Michel Caron

Sectoral diversity for collaborative projects

- Fields represented: pharmaceutical, medical technology, dermaceutic, etc.
- Examples of established companies:

IMMUNE BIOSOLUTIONS



charles river



Espace Labz in Sherbrooke © Sherbrooke Innopole

A multi-tenant science space: Espace LAB^z

- 20,000 sq. ft. multi-tenant centre
- 20 private laboratories and one fully equipped shared laboratory
- 18 office spaces and conference rooms



Source: Sherbrooke Innopole, 2021.

Many innovations developed in Québec



Cardiac ultrasound simulators that allow students and surgeons to practice in realistic conditions



Radiopharmaceuticals for diagnosis, treatment and monitoring of diseases



Catheters used for cryoablation in the treatment of heart diseases



Fibre laser technology with multifunctional capacities to move from image mode to diagnosis or treatment mode



CardioStat technology, an innovative solution to perform long-duration electrocardiogram recordings



ZIMMER BIOMET

Computerized technologies designed to assist orthopaedic surgeons (joints and spinal cord)



Non-invasive 3D technology to diagnose joints in movement



GenePOC™

Germ and virus rapid detection devices using genetic fingerprint



Innovative medical devices in the field of oxygen therapy and respiratory assistance



Peptide-based technology that enables the delivery of various therapeutic components inside cells (Feldan Shuttle)

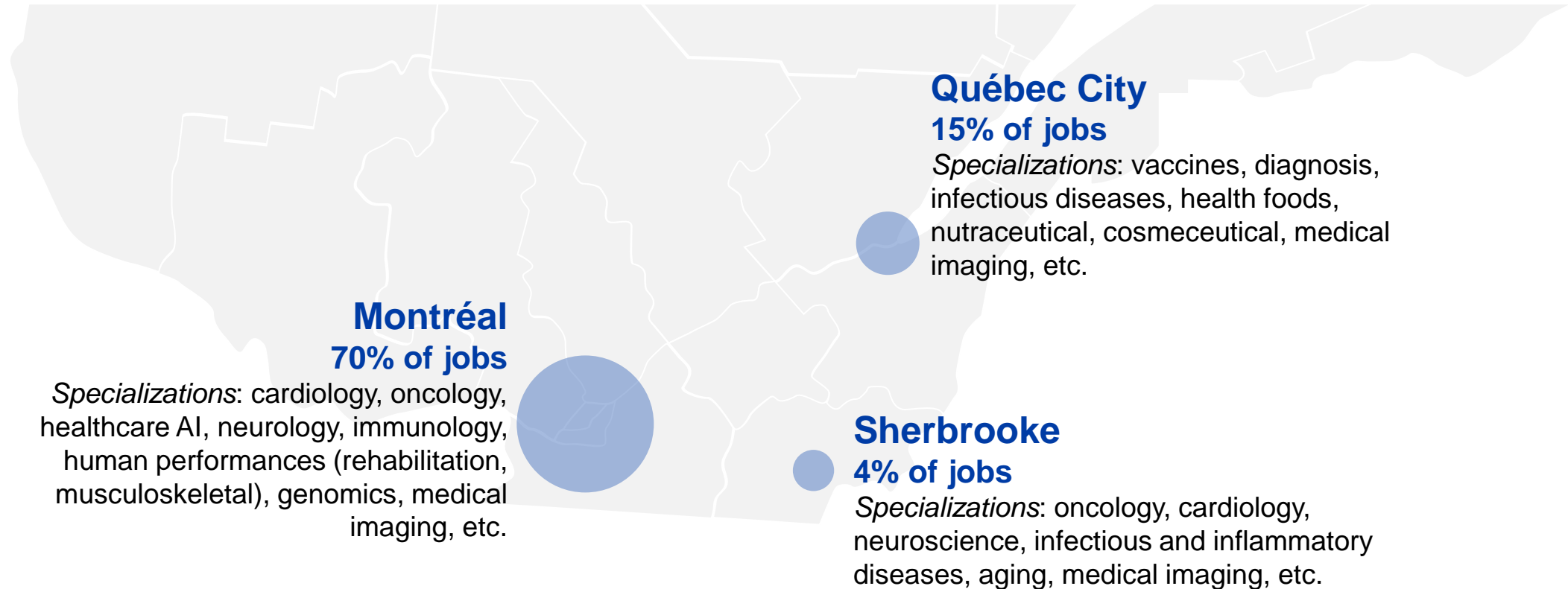
Source: Company websites.



04 Access to a Highly Skilled Talent Pool

Close to 90% of Québec's LSHT jobs spread across 3 main regional hubs

Distribution of LSHT jobs in Québec
% of total jobs in Québec*, 2019



* Includes the following industries: Pharmaceuticals and Medicines Manufacturing (NAICS 3254), Medical Equipment and Supplies Manufacturing (NAICS 3391), Pharmaceuticals, Toiletries, Cosmetics and Sundries Merchant Wholesalers (NAICS 4145), Scientific Research and Development Services (NAICS 5417), and Medical and Diagnostic Laboratories (NAICS 6215).

Source: Statistics Canada, special compilation based on Labour Force Survey, 2019.

A large pool of highly skilled workers in LSHT

Examples of sector-related occupations (all industries combined)	Number of jobs in Québec, 2019
Health sciences technologists and technicians*	42,600
Technical sales specialists – Wholesale	23,000
Chemists, chemical technologists and technicians	12,400
Biologists, biological technologists and technicians	11,100
Pharmacists	8,300
Healthcare managers	8,100
Other diagnostic and health treatment professionals	3,100
Dietitians and nutritionists	2,500

- And many more!



* Includes: medical laboratory, medical radiation, ultrasound, cardiology and electrophysiology, diagnosis, etc. Excludes dental care, animal health and veterinarians.
Source: National Occupational Classification (NOC), 2019; Statistics Canada, data compiled from the Labour Force Survey, 2019.

World-class educational and research institutions

- **18 universities and nearly 140 colleges**, with campuses spread out over Québec
- **Over 500,000 post-secondary students**, including over **300,000 university students** and over **87,000 international students**
- **More than 90,000 university graduates each year**



**Best Student City
in the Americas**
QS Best Student
Cities ranking, 2019

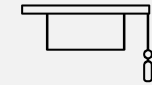
1	Montréal
2	Toronto
3	Boston
4	Vancouver
5	New York

Source: Canadian Bureau for International Education, "Facts and Figures", 2020; QS Best Student Cities, 2019; Ministère de l'Éducation et de l'Enseignement supérieur, 2021.

Large pool of university students ready to take over

Examples of LSHT-related university programs	Students enrolled, 2019–2020	Graduates, 2019
Mechanical engineering	6,845	1,773
Biological sciences	4,495	1,141
Pharmaceutical sciences	2,883	805
Biochemistry and biophysics	1,772	372
Chemistry	1,575	457
Chemical engineering	1,354	372
Microbiology	1,216	317
Dietetics and nutrition	1,172	337
Biological and biomedical engineering	972	158

- And many more!



22,000+

university students enrolled in LSHT-related programs



6,000+

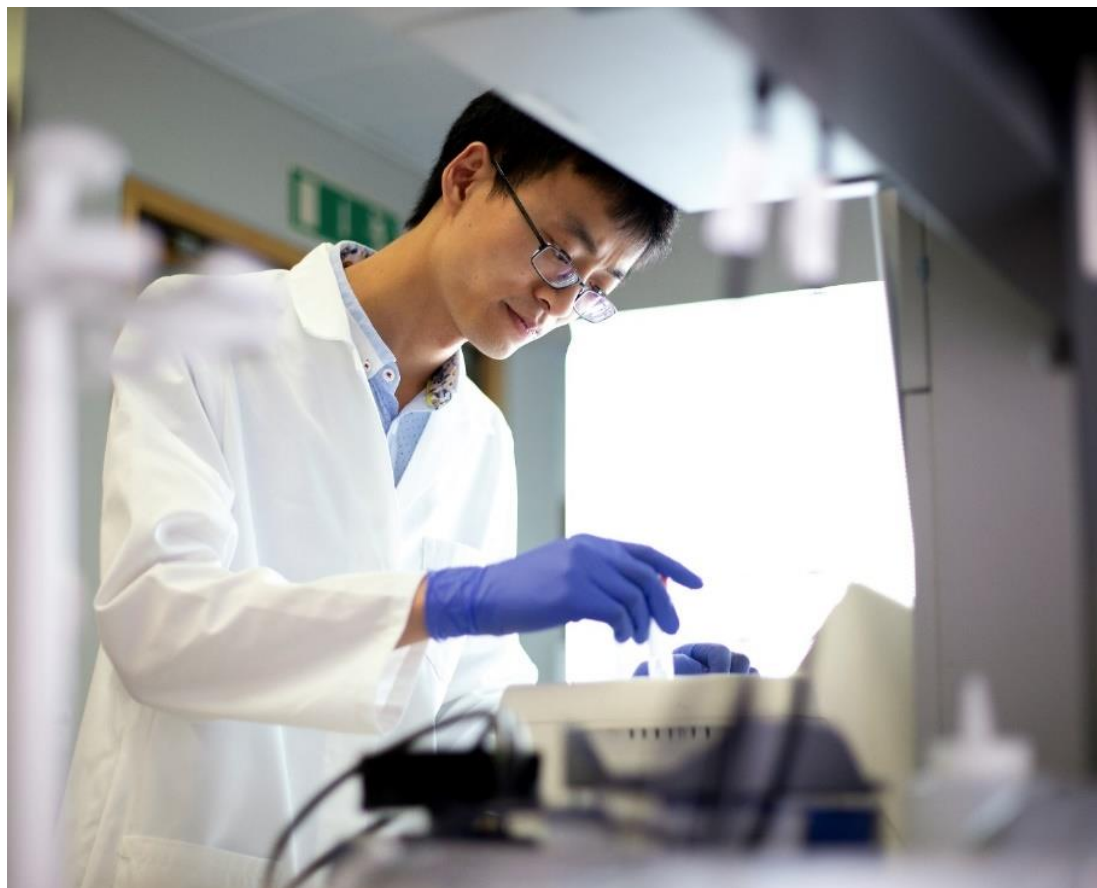
university graduates per year

The life sciences industry can also rely on a **large pool of IT students:**

- **Close to 25,000 university students**
- **6,000+ university graduates per year**

Source: Ministère de l'Éducation et de l'Enseignement supérieur (MEES), 2021.

Close to 8,000 college students are enrolled in LSHT programs



Examples of LSHT-related college programs	Students enrolled, 2019–2020	Graduates, 2018
Mechanical engineering techniques	1,945	399
Laboratory techniques	1,771	450
Medical imaging techniques	1,492	289
Medical devices	704	265
Nutrition and dietetics	704	186
Administration and management of medical data	615	171
Pharmaceutical production and procedures	323	144
Neuroscience and geriatrics	278	78

- And many more!

Source: Ministère de l'Éducation et de l'Enseignement supérieur (MEES), 2021.

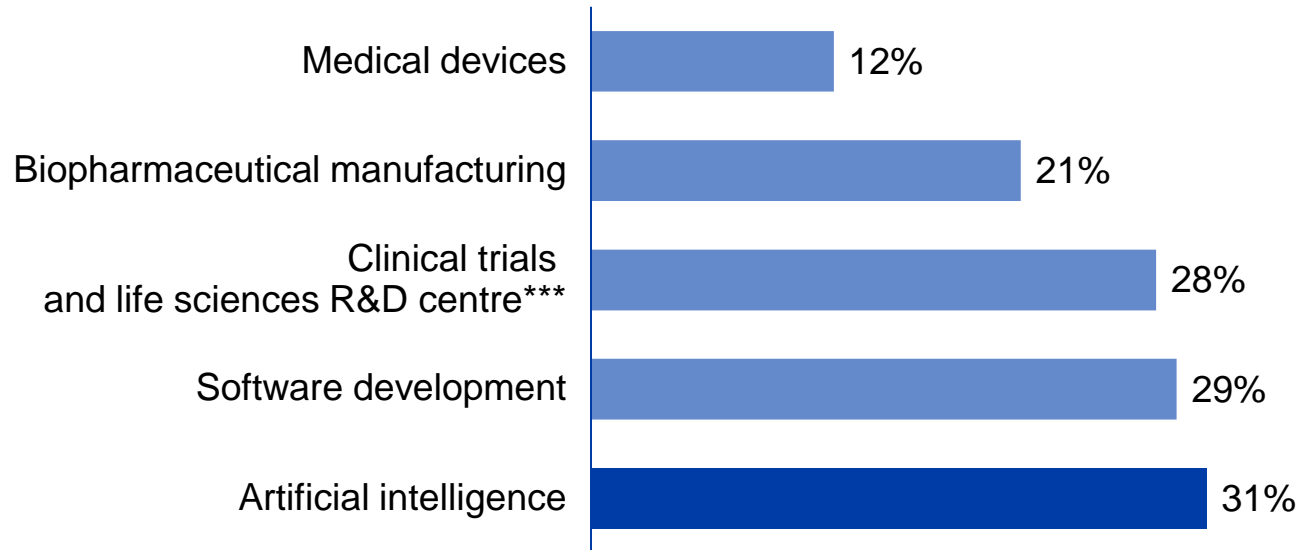


Château Frontenac in Québec City

05 Competitive Operating Costs and Attractive Incentives

Some of the lowest operating costs in Canada and the U.S.

Québec's cost advantage in 5 key LSHT sub-sectors* 18 selected U.S. states and Canadian provinces**, 2020



A 24% cost advantage

on average for a LSHT company in Québec

* Provinces and states considered: Arizona, British Columbia, California, Colorado, Florida, Georgia, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New York, Ontario, Pennsylvania, Québec, Texas, Virginia, Washington.

** Using biotechnologies, companies in this sector develop and manufacture therapeutic products and perform in vitro diagnostics.

*** Research, discovery, design, development or testing biotechnological or pharmaceutical products and/or medical devices.

Note: Annual operating costs are calculated based on labour and rent expenses, for a typical company in the sector, in US\$.

Source: fDi Benchmark, 2020.

Advantageous salaries for pharmaceutical companies

Median annual salaries* (US\$) for 7 professions in the pharmaceutical sector
Selected cities in Canada and the U.S., 2021

	Montréal	Toronto	Dallas	Minneapolis	Chicago	San Diego	Boston	San Francisco
Laboratory Technician	\$41,237	\$43,983	\$48,874	\$52,395	\$53,148	\$54,523	\$58,223	\$62,487
Laboratory Supervisor	\$62,170	\$66,213	\$84,175	\$83,333	\$86,886	\$86,490	\$91,101	\$101,341
Scientific Researcher	\$63,645	\$67,782	\$85,690	\$84,703	\$88,327	\$87,944	\$92,602	\$103,038
Pharmaceutical Representative	\$64,653	\$68,827	\$91,491	\$94,053	\$92,578	\$88,830	\$102,067	\$109,087
Laboratory Manager	\$70,616	\$75,325	\$87,769	\$89,780	\$92,823	\$96,585	\$100,258	\$117,481
Biochemist	\$78,328	\$83,369	\$106,982	\$105,567	\$113,016	\$114,663	\$117,303	\$129,997
R&D Manager (Technical)	\$101,630	\$107,859	\$152,512	\$145,843	\$148,556	\$153,395	\$161,647	\$177,758

* Salaries based on 5 years' experience in the pharmaceutical industry (NAICS 3254). Exchange rate in February 2021: US\$1.00 = CA\$1.2699.
Source: Economic Research Institute Inc., March 2021.

Advantageous salaries for medical technology companies

Annual median salaries (\$US*) for 10 professions in the medical technology sector

Selected cities in Canada and the U.S., 2021

	Montréal	Toronto	Dallas	Minneapolis	San Diego	Chicago	Boston	San Francisco
Quality Assurance Specialist	\$50,868	\$54,376	\$66,819	\$69,883	\$70,176	\$71,612	\$76,859	\$82,044
Clinical Liaison Agent	\$52,449	\$56,046	\$68,269	\$69,669	\$71,961	\$73,094	\$74,781	\$83,174
Project Management Specialist	\$53,144	\$56,982	\$67,676	\$67,283	\$69,465	\$69,859	\$76,848	\$82,382
Regulatory Affairs Specialist	\$59,960	\$64,225	\$77,887	\$76,374	\$79,198	\$80,332	\$87,771	\$94,147
Manufacturing Engineer	\$65,246	\$69,362	\$91,890	\$88,999	\$93,830	\$91,821	\$97,848	\$104,494
Field Service Manager	\$69,134	\$73,030	\$96,739	\$96,503	\$99,149	\$102,509	\$108,619	\$118,326
Mechanical Engineer	\$72,636	\$76,982	\$104,665	\$100,407	\$106,083	\$103,460	\$110,285	\$118,302
Software Developer	\$73,612	\$77,952	\$104,159	\$100,910	\$106,444	\$105,194	\$111,982	\$125,447
Project Lead	\$75,728	\$80,831	\$108,602	\$106,068	\$110,894	\$108,552	\$118,827	\$129,439
Production Manager	\$80,215	\$85,505	\$113,474	\$109,587	\$113,588	\$112,376	\$122,616	\$133,827

* Salaries based on 5 years' experience in the medical devices manufacturing field (NAICS 3391). Exchange rate in February 2021: US\$1.00 = CAN\$1.2699.
Source: Economic Research Institute Inc., March 2021.

Support for major projects and investment

Strategic Innovation Fund

- Contributes **up to 50%** of eligible expenses for a **project of at least \$20M**

ESSOR program

- Supports major projects through refundable contribution (interest-free or low-interest loan) or non-refundable contribution; investment projects with **at least \$250,000 in eligible expenses** for starting or expanding a business (including modernization)

Productivité innovation financing

- Provides financial support for technology adoption of up to **100% of eligible project costs**

Tax Credit for Investments and Innovation (C3i)

- **Tax credit from 20% to 40%** of the value of production equipment or computer equipment and software package purchases

Tax Holiday for Large Investment Projects (C2i)

- Provides a **15-year tax exemption** on earnings and contributions to the Health Services Fund contributions for **projects over \$100M (\$50M in some regions)**

Incentive Deduction for Commercialization of Innovations (IDCI)

- **Reduces the tax rate in Québec** on earnings from the commercialization of certain intellectual property (IP) assets, usually **down to 17% from 26.5%**

Incentives to promote talent attraction and labour development



Emploi-Québec grants

- Provides technical and financial assistance to meet the labor requirements of companies: **25% of eligible costs** for training after hiring, **50% of the salary** for a human resources manager

Tax Holiday for Foreign Experts and Researchers

- Tax holiday for foreign experts through a **Québec tax exemption** over a maximum of five years on a degressive scale

A range of immigration programs to attract the best foreign talent

Tax credits and grants available to LSHT companies

Tax Credit for Scientific Research and Experimental Development (SR&ED)

- Entitles company to a **15% tax credit from Canada** and a **14% refundable credit from Québec** on all wages and subcontracting fees

BioMed Propulsion

- **Equity loans up to \$10M** to help commercialize the results of LSHT research

Fonds de soutien à l'innovation en santé et en services sociaux

- **Contribution up to \$240,000** per project (24 months) for companies* with R&D or production activities in Québec

Fonds d'accélération des collaborations en santé

- Non-refundable financing of **up to \$10M**, with a **minimum of 50% partner contribution**



*Fewer than 250 employees.

Potential additional support in certain regions of Québec



Aerial view of Sherbrooke © Destination Sherbrooke

Enhanced tax credits

- **Tax Credit for Investments and Innovation (C3i):** up to 40 % depending on the region
- **Tax Holiday for Large Investment Projects (C2i):** minimum threshold of \$50M instead of \$100M

Personalized incentives and support offered by cities

- **Personalized incentives:** tax holidays, grants, free services, long-term leases, etc.
- **Support programs:** soft landing, business start-up assistance, setup support, financing strategies, legal assistance, etc.

Source: Investissement Québec, "Taxation in Québec", 2021.

Thank you

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Centre-ville de Montréal