Perspective™

ONTARIO

LIFE SCIENCES SECTOR

HAMILTON IS HOME TO OMNIABIO'S NEW MANUFACTURING FACILITY AT MCMASTER INNOVATION PARK

ONTARIO'S CELL & GENE COMMERCIAL SCALE-UP

HEALTHCARE & EDUCATIONAL INSTITUTIONS SPEARHEAD CUTTING-EDGE RESEARCH

GLOBAL BIOMANUFACTURING & LIFE SCIENCES HUB EMERGES IN ONTARIO

TODAY'S IDEAS ARE BECOMING TOMORROW'S MEDICAL BREAKTHROUGHS

UNIVERSITIES & COLLEGES FOSTER A THRIVING RESEARCH ECOSYSTEM

RESEARCH-ORIENTED BUSINESS PARTNERSHIPS PROSPER IN ONTARIO

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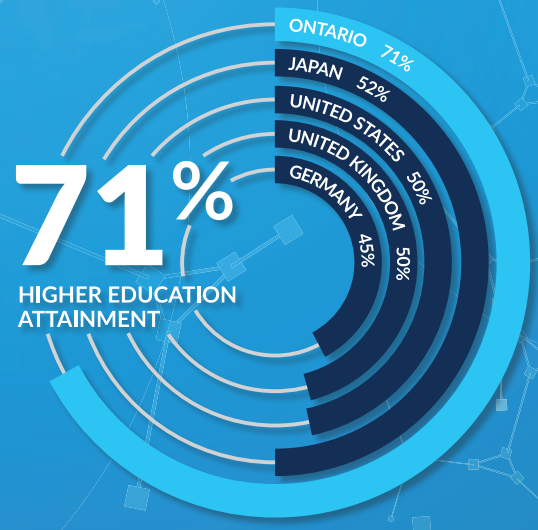
Source: https://www.investontario.ca/why-ontario



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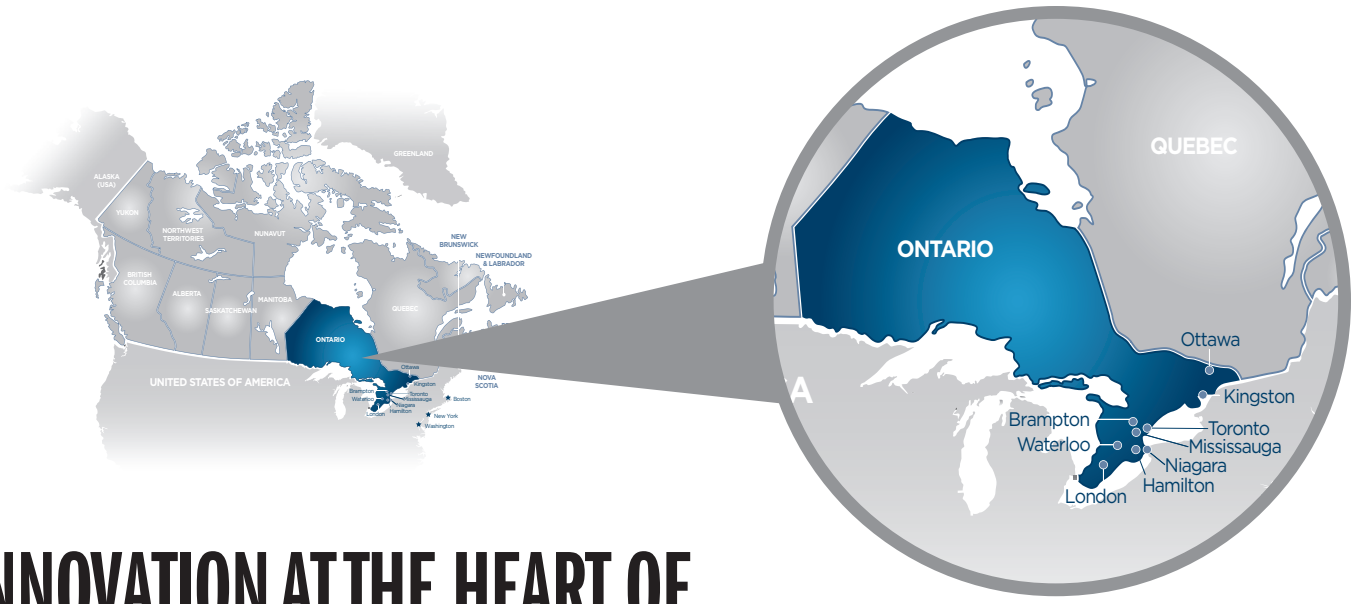

INNOVATION AT THE HEART OF ONTARIO'S HEALTH PRODUCTS AND SERVICES

Ontario has become an important global hub for biomanufacturing and life sciences, positioning itself as a leader in the development, commercialization and early adoption of innovative health products and services.

As one of the world's largest economies and producers of goods, having a presence in Ontario is essential for business owners looking to participate and thrive within the global marketplace. But while this province houses countless leading companies in fields ranging from finance to technology, it's also an increasingly important hub for the biomanufacturing and life sciences sectors which are predicted to play a critical role in driving industry dynamics into the future.

As such, understanding Ontario's unique opportunities and offerings in this arena can lead to considerable business growth for those who choose to invest their time strategically here. In this publication, we'll be exploring why Ontario has become an important global center for biomanufacturing and life sciences as well as what benefits you could gain from investing here.

Different Sectors within Ontario's Life Science Industry

The life science industry in Ontario, Canada is vast and includes several different sectors. These can range from biotechnology and bioinformatics to medical device design and pharmaceuticals. This incredible ecosystem of innovation combines niche industries with global leaders who are tackling research and development challenges that ultimately drive economic growth.

The sector provides thousands of jobs for scientists, engineers, technologists, and a wide variety of support staff. This strength in numbers not only helps ensure the health of the sector now but also creates a foundation that will foster continued growth in the future. It's an exciting time to be part of the life science industry in Ontario and the growth potential is virtually limitless.

Ontario is an Important Global Hub for the Life Science Sector

Ontario is one of the most developed regions in Canada, providing a strong foundation for various industries, including life sciences.

The province offers access to an abundance of talented personnel and financial support for innovative ideas. Hosting some of the world's top hospitals, research institutes, educational institutions and biopharma companies,

Ontario is the hub for life sciences innovation in Canada. This includes advanced digitization capabilities to develop transformative treatments and technologies from concept to real-world commercialization. With its unique advantages such as an established network of public-private partnerships, modern infrastructure and excellent funding opportunities, Ontario stands out amongst other global hubs and continues to be attractive to life science players around the world.

Ontario's Life Science Sector has seen Exceptional Growth over the Past Decade

Over the past several years, Ontario's life sciences sector has developed into a global powerhouse. Its size has grown exponentially, with now over 400 organizations contributing to the province's emergence as a hub for life sciences innovation and research.

In addition, the provincial government has invested heavily in this sector to ensure that its cutting-edge developments are put to maximum utilization. From artificial intelligence (AI) and robotics to pharmaceuticals and healthcare IT solutions, Ontario's life sciences space is now populated with world-class businesses dedicated to driving ongoing advancements in medical research and treatments. As such, there is no doubt that Ontario's life sciences sector will continue to grow and make an extraordinary impact on people's lives worldwide in the years ahead.

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START, GROW, PARTNER IN KINGSTON

FRANK B. EDWARDS

The city of Kingston is Ontario's new hotbed for biotech, med-tech, health informatics and medical science innovation.

Driven by advanced technology, a highly educated work force and access to world markets, Kingston is alive with cutting-edge companies that are shaping the local economy – and changing the world of health care and health sciences.

Theia Markerless, a revolutionary motion capture company launched in 2019, grew out of the work of a former Queen's University graduate student who convinced his employer that he could develop a system for tracking human movement outside of complex laboratories.

Novari's game-changing software for hospitals — capable of dramatically improving Canada's waitlist times — is rooted in a modest 2003 research grant to computerize Kingston General Hospital's (KGH) doctor referral system.

Neuractus, a brand-new start up driven by one of Queen's University resident physicians, is developing revolutionary neurological drugs for international markets.

Whether a company is launching, growing, or looking for partners, Kingston provides the resources, location and work force that moves them forward.

"I live in Kingston because I like it here," explains Theia Markerless' CEO and chief evangelist Scott Selbie of his move to Kingston from Maryland's sprawling institutional landscape. He jokes that his house is walking distance from the R&D facilities at Queen's University whose collaboration has helped facilitate his companies' success.

As research director of C-Motion in 1997, Selbie helped convert U.S. government research into commercial "movement analysis" software that is used by doctors and coaches to assess the motion of a patient/athlete's bones and joints.

[Continued on next page...]

Kingston, Ontario Canada

[Continued from the previous page]

Until recently, C-Motion analysis relied on short video clips that required tedious set ups using expensive cameras and the placement of marker balls on bare skin or specialized clothing in laboratories — not ideal for studying "natural movement."

The situation changed in 2017 when Marcus Brown, a recent Queen's engineering grad student (now Theia's president) convinced Selbie that he was capable of exploiting artificial intelligence to convert "markerless" video of people into 3-D skeletal motion. Queen's grad Chris Saliba, (now Theia's senior lead developer) was the third co-founder.

Today, half of Theia's 18 Kingston staffers (recruited locally) work with a database of five million video images that establish the software's ability to recognize features of the human body from which the underlying skeleton is inferred. Currently, Theia is collaborating with Queen's on two funded projects, using Theia's technology to assess movement deficits related to neurological disorders and osteoarthritis.

In a low-rise suburban office building a few kilometres away, John Sinclair, president of Novari Health, leads a team of 90 employees building a software platform focused on shortening hospital waitlists.

"It's air traffic control for hospitals," explains Sinclair who joined Novari Health in 2009, six years after KGH began work on the first version of Novari's software. "We get the right patient to the right provider at the right time with the right data (xrays and scans)."

Without digital referral management technology, large hospital networks rely on 1980-era faxes and paper to schedule consultations, imaging and treatments resulting in long wait-times for patients.

Novari's software platform identifies specialists within a hospital network, tracks wait times, assists patient triage, and generally balances the load of incoming service requests. The original software module has grown into several different medical streams with multiple components. Cardiac, mental health and imaging have their own specific modules while other pathways use an e-referral platform that is configured for everything from cancer treatment, hip and knee replacements, diabetes, and foot care to name a few.

Since Covid threatened to overwhelm the Canadian healthcare system, Novari has undergone explosive growth in Ontario, Nova Scotia and Manitoba (which is soon implementing province-wide use of Novari's surgical waitlist module).

Meanwhile, Queen's resident physician Andrew Lingard is building Neuractas one step at a time as he develops a drug treatment for neurological diseases like epilepsy and Huntington's. While Queen's Partnership and Innovation office is helping with intellectual property issues, the university's Dunin-Deshpande Queen's Innovation Centre is offering advice and early funding. Once he secures investment, Dr. Lingard has a Queen's PhD grad in mind as his first employee.

For now, Neuractas' ambitious "chief everything officer" is first and foremost a pathologist-in-training at Queen's/Kingston Health Sciences Centre but he is so convinced that his start-up will take root in Kingston's health technology ecosystem that he has launched a second enterprise — Armistic Biotherapeutics — to develop an immunosuppressive cell therapy for organ transplant recipients.

By combining world-class institutions with entrepreneurial opportunity, Kingston continues to attract the talent that is building its future success.

Kingston Economic Development Corporation www.investkingston.ca

ONTARIO'S BIOPHARMA SECTOR POISED FOR GROWTH

The biopharma sector in Ontario has experienced considerable success and growth over the years; its impressive performance is mirrored by investments made by some of the biggest players in the healthcare industry.

From government initiatives to foreign investment, this thriving sector stands out among other business endeavors; it becomes even more exciting when these partnerships lead to groundbreaking advances that revolutionize patient care.

There are many reasons why Ontario's Biopharma sector has had so much success in so many areas.

Dedicated Work of Researchers and Scientists

Ontario has long been one of the world's leading innovation hubs in healthcare. Researchers and scientists in Ontario are working diligently to discover innovative solutions to many of our biggest ongoing health issues.

These dedicated people strive continuously to understand what new treatments and advancements have the potential of improving the lives of people around the world. Through their hard work, they contribute significantly to finding innovative ways to prevent, diagnose and treat diseases while also reducing healthcare costs. In short, the work being undertaken by researchers and scientists in Ontario is invaluable in helping humanity lead healthier lives.

Supported by a Strong Infrastucture

The importance of a strong infrastructure in any sector cannot be overstated, and Ontario is a perfect example.

This sector is very fortunate to have world-class universities and hospitals, two fundamental components for any successful industry. Investing in both universities and hospitals guarantees that the highest level of education, as well as medical service, will be available, making Ontario an attractive location for all industries.

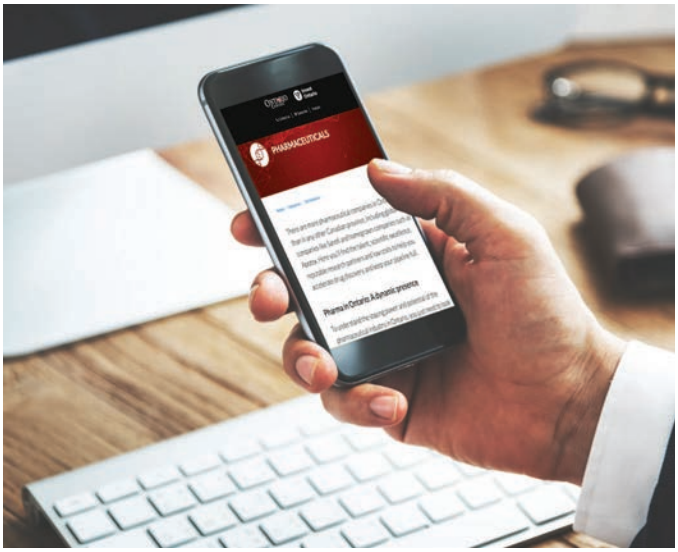
If you want innovation, knowledge and cutting-edge technology, this sector has it all. With a future so bright and secure, the biopharma/ life sciences sector is ready to continue leading the way in development.

Opportunities for Businesses in the Biopharma Sector to Grow and Succeed

Ontario's biopharma sector is booming and has become a hub for leading innovation, creating world-class research, and producing quality products.

Ontario, in particular, has emerged as a thriving location for businesses seeking to succeed in this sector. Companies operating in the province enjoy one of the lowest business costs compared to other regions in Canada as well as access to a highly skilled and educated workforce of over 14 million people.

Furthermore, Ontario offers attractive tax incentives that encourage international entrepreneurs to expand and set up in the province. Overall, there are ample opportunities within the biopharma sector for businesses to drive their profits higher while benefiting the lives of all Canadians.



The Ontario Government is Committed to Supporting Growth in the Biopharma Sector

The government of Ontario is dedicated to encouraging and promoting the biopharma sector. By investing in research, development, and commercialization opportunities, they are contributing to the growth of this highly innovative industry.

This investment is paying off; biopharmaceuticals have become important players in cutting-edge treatments for many diseases. In addition, new job opportunities are being created in this field due to the advancements in technology and resources that the government has made available for companies.

With a solid foundation already established, it is clear that Ontario's biopharma sector will continue its growth trajectory well into the future.

Future Success: More Jobs & Start-ups

The biopharma sector in Ontario has seen much success in recent years, and there are encouraging signs that this booming industry will continue to flourish with great potential for the future.

A range of new initiatives from both public and private interests have been helping to foster greater opportunities. In particular, partnerships and collaborations between organizations have enabled a greater level of investment which has provided room for growth as well as welcomed a diverse set of innovative ideas.

Subsequently, more jobs are being created, new businesses are launching, and the outlook continues to be very positive as we look toward what is still to come. It's without a doubt an exciting time in the biopharma sector in Ontario - one that calls for great optimism and enthusiasm.

The biopharma sector in Ontario has been enjoying considerable success and growth. Its impressive performance mirrors the investments made by some of the biggest players in the healthcare industry, including government initiatives and foreign investment. This thriving sector becomes even more exciting when these partnerships lead to advances that revolutionize patient care.

ONTARIO'S PHARMACEUTICAL INDUSTRY BY THE NUMBERS

$43B IN REVENUE

$7.88B IN EXPORTS

340 FIRMS

63.9% OF CANADIAN PHARMACEUTICAL GOODS

31,000 PHARMA EMPLOYEES

65,000 ANNUAL STEM GRADS

54.4% OF CANADIAN PHARMACEUTICAL EMPLOYMENT

Source https://www.investontario.ca/pharmaceuticals#by-the-numbers

OMNIABIO: POSITIONING ONTARIO TO LEAD IN A GLOBAL BIOMANUFACTURING BOOM

The science of cell and gene therapy (CGT) is advancing rapidly and Toronto-based CCRM, a leader in developing and commercializing regenerative medicine-based technologies and cell and gene therapies, has been working on the challenge of bringing the manufacturing capabilities these therapies will need to reach patients. In March 2022, CCRM announced the launch of its subsidiary OmniaBio Inc., a preclinical to commercial-scale contract development and manufacturing organization (CDMO) focused on CGT, already in operation.

"OmniaBio is filling a gap for Canadian cell and gene therapy companies," explains Mitchel Sivilotti, CEO of OmniaBio Inc. "In addition to offering Canadian developers commercial CGT manufacturing, which is missing in Canada, OmniaBio has been a great option for international developers looking for a CDMO with process development expertise and a laser focus on manufacturing cell and gene therapies."

Dozens of life-saving therapies will soon graduate from development pipelines and require commercial-scale manufacturing to reach patients. According to the Alliance for Regenerative Medicine, the year ahead is set to herald regulatory decisions on as many as 13 new cell or gene therapies for use in the U.S., Europe, or both. This brings the industry closer to the FDA's oft-cited 2019 prediction that by 2025, 10-20 new cell and gene therapies will be approved each year.

In searching for a place to nurture and launch CGTs onto the global market, international therapeutics developers will be looking for two key things: manufacturing capacity and the extensive expertise required to keep projects on time and at the quality they need.

Built upon platform leadership in induced pluripotent stem cells (iPSCs), lentiviral vectors (LVV) and immunotherapy, OmniaBio has both. The company's extensive expertise builds on CCRM's established reputation in process development and manufacturing for CGTs.

The Hamilton, Ontario, location of OmniaBio's Phase III and commercial facilities ticks many boxes. It ensures easy access to Toronto's biotechnology cluster that includes world-leading research hospitals and the globally-ranked University of Toronto, provides proximity to the U.S. border – less than a one-hour drive away – and builds on Hamilton's proud manufacturing history and skilled workforce, with graduates from McMaster University and Mohawk College to provide talent. Hamilton is also home to an international airport that is Canada's largest for air cargo – a big advantage when shipping fragile medical products to the global market.

The new facility will open in a phased launch between 2024 and 2026, and was enabled by a CAD$40 million loan from the Government of Ontario via the Invest Ontario fund. OmniaBio also has $60 million in private investment from strategic partner Medipost, a South Korean player in cell therapy.

OmniaBio has also attracted funding from Next Generation Manufacturing Canada (NGen). In September 2022, the industry-led organization behind Canada's Global Innovation Cluster for Advanced Manufacturing announced it had made a $10.5 million contribution to a $34.8 million project led by OmniaBio, with partners Aspect Biosystems, ExCellThera, Morphocell Technologies and the Canadian Advanced Therapies Training Institute. The project will deliver against three core objectives, one being a mandate to train Canada's future biomanufacturing workforce.

OmniaBio will be the anchor tenant of a new biomanufacturing campus at Hamilton's McMaster Innovation Park (MIP). MIP will bolster Ontario's life sciences cluster, creating a campus that brings together biotech firms, suppliers and the specialized support and logistics services they will need to reach international markets. Everything that international therapeutics developers could conceivably need will be in place, right here in Ontario, enabling developers to nurture, produce-at-scale, and distribute a new CGT to health systems – and ultimately patients – around the world.

Learn how OmniaBio can support therapeutics developers at omniabio.com.

McMASTER INNOVATION PARK HELPING COMPANIES START, SCALE AND THRIVE

Cell and gene therapy (CGT) is transforming medicine and McMaster Innovation Park (MIP) in Hamilton, Ontario is fast becoming a leader in the spinout, incubation, and scale-up of companies gaining a global foothold in this bursting field of biotechnology.

"MIP is more than a business park. We bring together an ecosystem that connects companies and delivers the elements that support their growth and expansion in our nascent CGT cluster. Our vision is to grow the CGT cluster in Hamilton into like what we see in Cambridge, San Francisco, Philadelphia and the United Kingdom." Says Scott Rasmussen Vice President of Leasing and Business Development at MIP.

Those elements include research and manufacturing spaces, innovation supports, links to investors and service providers, access to regional talent and connections to supply chains.

"Companies cannot exist in isolation. Clusters create cohesive relationships that fuel long-term growth and success."

Hamilton's innovation ecosystem includes McMaster University and Mohawk College, both research leaders in their own domain . Other differentiating strengths include powerful healthcare institutions, and the convergence of deep capabilities in both advanced manufacturing and life sciences, combined with a planned buildout of MIP to a life sciences innovation mega-hub at 3.5M square feet when fully developed.

"The mission of MIP is to help ventures start, scale and thrive and we do that by complementing what is happening in Toronto and the region by providing step-up and scale-up spaces so that more of our high potential biotech ventures remain in in Ontario and in Canada," says MIP's Chief Executive Officer Ty J. Shattuck.

MIP provides the "spatial alchemy" necessary for a CGT cluster built around homegrown and global research, manufacturing expertise, and a culture of collaboration that is firmly rooted in Hamilton, he says.

"We provide the elements that identify the hurdles and reduce the friction for life sciences companies so they can grow quickly to their potential."

The anchor of Hamilton's burgeoning CGT sector is contract development and manufacturing organization OmniaBio, a subsidiary of the Centre for Commercialization of Regenerative Medicine (CCRM) in Toronto. At a planned 400,000 square feet, OmniaBio will be the largest CDMO exclusively manufacturing for cell and gene therapies in Canada. The first phase, 90,000 SF is currently under construction and will be ready for occupancy in Q3 2023.

Other CGT companies Triumvira Immunologics and Century Therapeutics Canada– as well as Radiopharmaceutical company Fusion Pharmaceuticals, all spinouts of McMaster research – have already taken up manufacturing in MIP after attracting hundreds of millions in investment capital.

FIND YOUR MEDTECH PARTNER IN ONTARIO CANADA

The Ontario MedTech cluster is North America's largest and most established cluster for medical device manufacturers and related service providers.

This pioneering region boasts a sophisticated healthcare ecosystem powered by advanced industry expertise, innovative research capabilities, financial support from governments, investment in the MedTech sector, and collaborations between academia and business.

These factors make Ontario an ideal location to join the ranks of global biomedical leaders. As a business owner looking to increase your bottom line or gain a greater strategic advantage in today's challenging economy, it pays to know why the Ontario MedTech cluster stands out as one of the world's best.

With over 200 members of the Ontario Canada MedTech cluster and a combined annual revenue of more than $2.5 billion, the province of Ontario continues to be a location to start up, relocate or expand any MedTech business. Companies within the sector specialize in product design, engineering, manufacturing, research & development and clinical trial services.

Ontario's MedTech Cluster

Joining a MedTech cluster in Ontario provides numerous opportunities to increase business success.

As part of the sector, members gain access to capital investment, access to world-class regulatory and policy advice, increased collaboration with academic and research institutions, and government support for commercializing industry innovations.

By participating in the cluster, members also benefit from business coaching sessions and joint marketing initiatives. Additionally, companies that form part of the cluster can expect greater visibility with potential customers worldwide as connections are made with partners from different countries across North America, Europe, Asia and beyond. Together these benefits present compelling reasons to join a MedTech cluster in Ontario.

Benefits of Being Part of Ontario's MedTech Sector

Being part of a MedTech cluster has its advantages.

On one hand, you have direct access to some of the top research and innovation centers in the world, providing invaluable knowledge and experience for your project. Along with this, you also gain potential customers straight away through the other businesses already in the cluster that can massively benefit from your own services or products.

Furthermore, there are financial incentives available by governments or other organizations that give startups and SMEs a kick start by providing money in the form of grants or loans which can help make projects more executable. All of these elements combine to give businesses a great opportunity to thrive in an environment surrounded with others working towards a similar goal.

Ontario has Helped make Canada a Global Leader in Innovation and Manufacturing

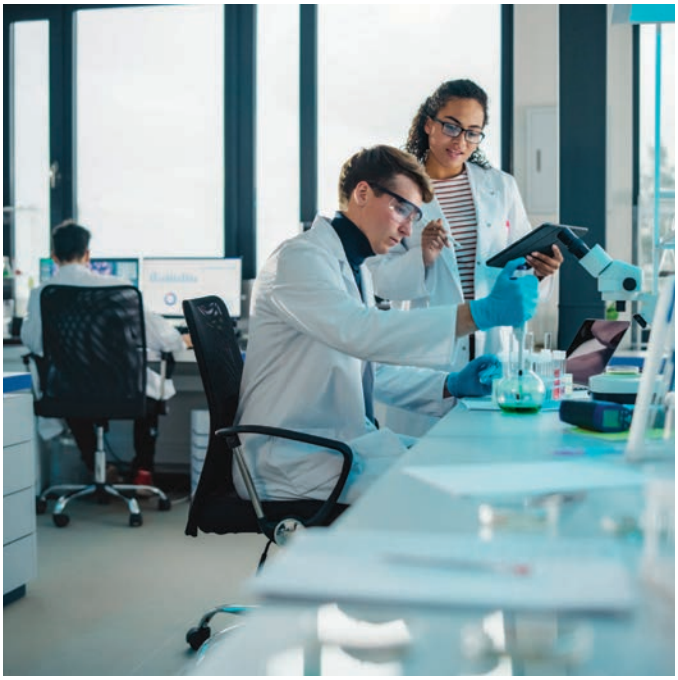
Canada's Ontario MedTech cluster has been a driving force in making Canada a global leader in MedTech innovation and manufacturing.

With its leading-edge technology and highly skilled and experienced professionals, the province has become an ideal environment for medical device development. The sector's knowledge base covers a broad range of disciplines, including chemistry, engineering, machine learning, biomedical sciences, physics and clinical research.

This enables each new product to take into account all possible angles, resulting in the creation of superior quality medical devices that have not only become beloved around the world but also set industry-wide standards.

Innovations have paved the way for Canadian companies such as Medtronic, Stryker Corporation, Mindary Corporation and CSL Behring to become some

[Story continues on page 12]



Hamilton Ontario Canada

THE SYNAPSE LIFE SCIENCE CONSORTIUM IN HAMILTON OFFERS EASY ACCESS TO A BROAD, DEEP AND DIVERSE LIFE SCIENCES SECTOR – THE FASTEST-GROWING IN CANADA

Hamilton is already one of Canada's most important health innovation clusters – with more than 36,000 employees, 200-plus organizations, 56 research centres and institutes, $462 million invested in life sciences research, and $5.7 billion in economic activity – and it's still growing quickly.

The city is home to world-class post-secondary institutions, globally recognized research and clinical excellence in two hospital networks and a powerful innovation ecosystem that exists to help companies scale and grow.

"There is a network of sophisticated accelerators and incubators and other organizations that provide the supports, from help with regulatory approval to funding for clinical trials, that allow companies to succeed in global markets," says Alex Muggah, Synapse Consortium Director.

It has paid off – collectively, Hamilton's life science companies have raised more than $620 million in the last five years.

"Hamilton is an ideal location for life sciences investments," says Norm Schleehahn, Director of Hamilton Economic Development.

"The massive, 2.8 million square feet, $1.75-billion plan to build a life sciences mega-hub at McMaster Innovation Park (MIP) means that land, space and innovation supports are readily available for start-ups, scale-ups and existing domestic or global life sciences companies looking to expand or relocate."

Other differentiators for Hamilton are: proximity to two international airports, including Canada's busiest overnight cargo hub in Hamilton International Airport; the country's largest research nuclear reactor that is producing medical isotopes at McMaster University; and Hamilton's location as a gateway to the North American market.

Hamilton is also unique in that the major players in the life sciences ecosystem have banded together through the Synapse Consortium to support and accelerate the commercialization of health innovation. It acts as a strategic broker that has already facilitated more than 2,500 relationships and collaborations.

Through Synapse, Hamilton offers white-glove, concierge support in a city gaining international recognition as a place of innovation, commercialization and entrepreneurship, says Muggah.

"We are always open for business and we do what is required to help companies from around the world grow and succeed. Our track record speaks for itself."

The latest win is the $580 million investment by OmniaBio at MIP, Canada's first full-scale manufacturing facility serving the cell and gene therapy market. Other recent successes include radiopharmaceutical developer Fusion Pharmaceuticals, which launched the second-largest biotech IPO in Canadian history, and the $100-million investment by Stryker in a Canadian headquarters in Hamilton. As one of the top-ten largest medical device makers in the world, Stryker chose the city because of its deep talent pool, medical technology programs at McMaster University and Mohawk College, and its deep relationships with local hospitals.

Now is the time to take root in Hamilton and be part of its next chapter, says Ty Shattuck, CEO at MIP.

"Hamilton is transforming from a community with a deep capability in research to a community that is creating jobs and ventures out of that research. We are on the road to becoming a life sciences powerhouse on the scale of Boston or San Francisco as we take start-ups to scale-ups and launch biomanufacturing."

[Story continued from page 10]

of the largest medical device companies globally - no small feat! By tapping into this incredible pool of innovation and manufacturing skillset in Ontario – where it all started – other international markets can now benefit from made-in-Canada cutting-edge guidance on life-saving products.

The Future of the Ontario MedTech Cluster and How it can Continue to Grow and Prosper

The Ontario MedTech cluster is already an innovative and vibrant hub of activity, but its future looks even brighter.

As healthcare professionals recognize the need to embrace technology, the industry has incredible potential to develop innovative products and services. Foreign investors are also recognizing the competitive advantages that exist in this region, making investments that will fuel both short-term and long-term growth in the sector.

To continue prospering, leaders in the industry must be proactive in staying abreast of advances in technology. They should promote collaboration between startups, large companies and researchers - a symbiotic relationship that encourages knowledge transfer and innovation. With these strategies in place, Ontario can remain at the forefront of revolutionizing the medical technology landscape.

The Ontario MedTech cluster has helped to make Canada a global leader in MedTech innovation and manufacturing. By providing access to talent, markets and capital, the cluster has been able to support the growth of many successful companies.

Looking to the future, the cluster will continue to be a key driver of economic growth in Ontario. With continued government support and investment, the cluster has the potential to become an even more important contributor to the economy and create even more high-quality jobs.

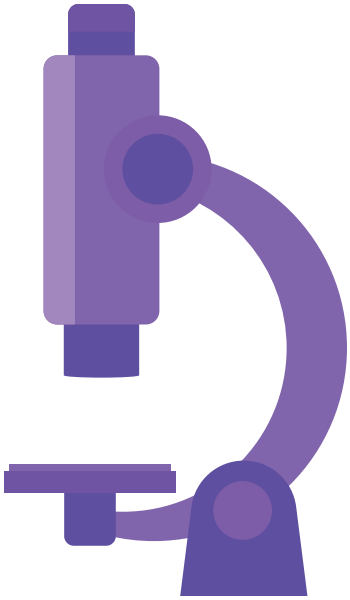
ONTARIO'S MEDTECH INDUSTRY BY THE NUMBERS

29,600 MEDTECH EMPLOYEES

1,300 MEDTECH COMPANIES

$14B IN MEDTECH REVENUES ANNUALLY (2017)

$2.4B IN YEARLY EXPORTS



Source https://www.investontario.ca/medtech#by-the-numbers

INVESTING IN INNOVATION: BRAMPTON'S BURGEONING MEDTECH AND HEALTH & WELLNESS SECTORS.

Brampton has long solidified its place as a healthcare and medical technology pioneer, with over 100 biotechnology firms within a 30-minute drive, including several well-established global companies who have established headquarters in the city due to the vast opportunities Brampton holds.

In 2022, the City of Brampton welcomed the new Canadian Headquarters for Boston Scientific to their new location. A global medical devices company, this innovative leader in medical technology is a key partner in the City's health and life sciences cluster.

"We are very excited by our decision to locate our new Canadian hybrid-collaboration HQ and national product replenishment centre to Brampton, one of the fastest growing and most innovation-friendly cities in Canada. We look forward to drawing on the diverse talent pool within the Brampton Innovation District to do our important work of serving Canadian health care provider heroes and enabling improved health outcomes for Canadian patients, says Ken Spears, VP/General Manager, Boston Scientific."

Brampton: Home to Ontario's Newest Medical School.

The Toronto Metropolitan University (TMU) School of Medicine – to be located in Brampton – marks the first new medical school in the Greater Toronto Area in over a hundred years. With this historic achievement, Brampton will be home to TMU's unique community-centric focus on inclusivity, innovation and primary care.

How Brampton is Transforming the Healthcare System for Canadians

Brampton has nurtured a generation of focus-driven, community-centric young intellectuals and workers. Composed of over 250 cultures and 171 languages, the city has cultivated an immensely diverse workforce suited to re-envisioning a healthcare system that is culturally respectful, relevant and inclusive. The City and its health sector stakeholders are dedicated to targeting systemic problems at their root; thinking beyond the scope of traditional medicine and healthcare practices. With more than 400,000 students enrolled in surrounding institutions, the future is bright, with many promising minds inviting alternative perspectives to the healthcare discussion, such as preventive care.

The city has built a reputation as one of the leading innovation-friendly cities in Canada and is tasked with informing healthcare practices worldwide.

Brampton's Innovation District: the place to Be for entrepreneurs

Brampton's Chair of Economic Development, Councillor Gurpartap Toor, shares that "the start-up scene is very hot right now in Brampton, especially in health and life sciences." This sentiment rings true to Brampton's prosperous Innovation District, which has partnered with resources such as B-Hive to provide new business start-ups and entrepreneurs with support, mentorship, and funding. B-Hive specifically assists new immigrant entrepreneurs with the Start-Up Visa Program to help them launch their business right here in Brampton. The City is dedicated to fostering talent development, supporting local businesses and providing a new source of jobs and income for its citizens.

There's no mistaking it—**Brampton is thinking bigger.**

Mississauga Ontario Canada

UNPARALLELED GROWTH FOR MISSISSAUGA'S LIFE SCIENCES HUB

What began as a bedroom community, has since grown into Canada's second largest life sciences sector that continues to draw business investment from across the globe. It all began in the mid-1960s, when the first of these companies – now known as AstraZeneca – opened a manufacturing facility in Mississauga. Other pharmaceutical firms soon followed, eventually in such large numbers that the area was nicknamed 'Pill Hill'.

Mississauga's life sciences hub has since diversified far beyond its pharmaceutical roots. And while the name Pill Hill is still used on occasion, the area is now described in more glowing terms. Like 'one of the leading life sciences hubs in North America'. And 'a magnet for the brightest minds and leading-edge companies' in Canada. Those sentiments speak to the incredible success and rapid growth of Mississauga's life sciences sector. In less than six decades, Mississauga's life sciences hub has grown to more than 470 companies. Combined, those companies employ more than 25,000 workers, nearly a third of all life sciences workers in Ontario. And it's still growing. Growing rapidly, in fact.

Over the past five years, the expansion of Mississauga's life sciences hub has exceeded the average of every other Canadian industry. In the past two years alone, this hub attracted more than $1billion in investment. Clearly, Mississauga's Life Sciences Strategy, the first of its kind for a Canadian municipality, is working.

Not only is Mississauga attracting new companies, existing firms in the sector are also growing and expanding. Last year, Resilience Biotechnologies Inc., the Mississauga-based subsidiary of National Resilience Inc., announced plans to modernize and expand its commercial scale manufacturing capacity. The $401 million project will increase the company's biomanufacturing capacity for vaccines and therapeutics, including novel technologies, such as mRNA, that are used to fight COVID-19.

Roche, one of the world's largest biotech companies, is also expanding its Mississauga presence, investing $500 million, and adding an additional 500 jobs, to establish a global pharma technical operation. "Our search included a competitive review of life sciences centres of excellence all around the globe," says Damian Siggins, Global Head of Pharma Technical (PT) Transformation. "Mississauga was our final choice for this investment, because it is home to a thriving and growing life sciences sector, is a collaborative municipal partner and is home to some of the best talent we need today and for the future of our industry."

Homegrown companies are also spreading their wings. Among them, the biotechnology company Microbix Biosystems. Established in 1988 in Mississauga, Microbix supplies key biological ingredients (antigens) for infectious disease tests to more than 100 diagnostics companies globally. After significantly extending its operations in the past two years, Microbix is now establishing a third site in Mississauga.

Life sciences companies, whether international firms, scale-ups or start-ups, flock to Mississauga because they recognize its positioning at the very core of Canada's innovation and technology activity. They come because Mississauga offers the support, resources and community life they need to cultivate growth, success and global impacts. They appreciate the virtually unlimited supply of exceptional talent (thanks to more than 30 universities and colleges, all within commuting distance).

Then there's the city's strategic position in Southern Ontario's Life Sciences Corridor, with the McMaster Innovation Park situated to the west and the MaRS Discovery District in downtown Toronto to the east. The result is quick and easy access to various partners from the regional life sciences ecosystem. While proud of the success of its life sciences sector, Mississauga remains focused on how best to support the cluster's continued growth and development. The city is doubling down on its support for scaling, high-growth companies, especially in key sectors like life sciences. Acting on recommendations from a 2019 study on Mississauga's Innovation Ecosystem and the City's Economic Development Strategy, the city identified priority actions to enhance services in the entrepreneurship and innovation ecosystem. Earlier this year, Mississauga launched IDEA (the Innovation District of Mississauga) to elevate the city's entrepreneurship and innovation ecosystem by working with its partners collaboratively to help businesses launch and grow. Later this year, Mississauga will open IDEA Square One, a 4,300-square-foot innovation hub, in Square One Shopping Centre. IDEA Square One will be a collaborative venue for entrepreneurs and innovators to connect, learn and grow their ventures in the heart of Mississauga.

"IDEA Mississauga brings together a rich network of mentorship, partners, talent and connections to test, scale and commercialize solutions to global challenges," says Christina Kakaflikas, Mississauga's Director of Economic Development. "Our new scale-up programming and mentorship will help start-ups develop into high-growth companies like Microbix." Some of the sector's most promising start-ups begin as scientific breakthroughs within the University of Toronto-Mississauga's (UTM) Centre of Medicinal Chemistry (CMC). Founded in 2016, CMC has a relatively small footprint of just 4,000-square-feet but has developed innovations that have attracted significant investment and created several spinout companies and numerous jobs.

To scale up its success, a new state-of-the-art 90,000-square-foot facility including lab and incubation space, and support for affiliated new company start-ups is being built as part of the new science building at UTM. Construction is expected to be completed in the spring of 2023.

"The UTM Centre is an important success story for Ontario's life sciences sector," says the centre's director, Dr. Rav Kumar. "Strategically located in Mississauga, the CMC's proximity to global pharmaceutical leaders brings together cutting-edge academic science with industry expertise."

Mississauga's commitment to its life sciences hub, and those firms that populate it, is unrivalled. The City is committed to supporting life sciences companies at any phase of growth and has the necessary resources and connections to set them up for success.

To learn more about Mississauga's unlimited opportunities in life sciences and connect with a team of experts, visit: www.thefutureisunlimited.ca/lifesciences

GOVERNMENT AND PRIVATE INVESTORS SUPPORT CUTTING-EDGE RESEARCH

In Ontario, Canada, funding for life science projects has long been a priority for government and private investors. With its vibrant and innovative research institutions, the province is home to some of the most cutting-edge life science projects in North America.

The Ontario government has taken proactive steps to make sure that life sciences research continues to be funded, with the Ontario Research Fund—Life Sciences Initiative (ORFLSI) providing grants to companies and organizations conducting life science research. The program is designed to promote investment in research that leads to new products or services, advances knowledge and strengthens the life sciences industry.

In addition, many of Ontario's universities have established multidisciplinary centres to foster research and development in the life sciences. These centres often have access to significant private and public funding, allowing them to conduct extensive research projects that otherwise may not be possible.

The Ontario government also provides additional funding for life science initiatives through its Scientific Research & Experimental Development (SR&ED) program. This program promotes innovation and technological advancement in a wide range of industries, including life sciences. SR&ED provides incentives for companies to invest in research and development, helping them bring their products or services to market quickly and cost-effectively.

In addition to government funding, private investors are also increasingly interested in investing in life science projects. Several venture capital firms specialize in investing in life science-related startups, providing the necessary capital to get these projects off the ground.

Ontario has a Long History of Investing in Life Science Projects

Ontario has been a trailblazer when it comes to investing in life science projects. This tradition dates back many decades, with the province consistently making resources available to fund cutting-edge research and medical breakthroughs.

These efforts have produced significant dividends in the form of jobs, economic output and improved healthcare outcomes across the country. The Ontario government's commitment shows no signs of abating as it continues to make major investments in life science initiatives each year.

The success stories that keep coming out of these projects are exciting evidence of how these funds are being put to their best use.

The Ontario Canada Scientific Research & Experimental Development (SR&ED) Program

The SR&ED program offers strong support for businesses that are investing in research and development activities. This high-value program is designed to stimulate payment of income tax credits earned from eligible research and experiment activities.

It encourages companies to invest, conduct more research and take advantage of the innovation economy for greater success. With knowledgeable personnel able to help you navigate through your SR&ED claim as well as pooling, filing and other related opportunities, the Ontario Canada SR&ED program makes it easier to offset current taxes with previous investments in R&D. It's a great opportunity to grow your business or idea into the future and become competitive in today's highly driven market.

Investing in Ontario's Innovation Economy: Co-Investing with LSIF

Life Sciences and Healthcare Technologies play a vital role in providing Canadians with the opportunity to access quality health care solutions. The Life Sciences and Health Care Technologies Investment Fund (LSIF) provides an opportunity for early-stage companies, based in Ontario and aiming to raise pre-seed or seed investments, to access much-needed capital.

By co-investing up to $500,000 into these Life Sciences startups, LSIF aims to make early stage investments less risky while simultaneously encouraging private sector co-investors to help scale solutions created in Ontario to global markets.

Investment has Led to Many Breakthroughs in the Life Sciences Sector

Ontario's Life Science sector has made tremendous strides thanks to increased investment in recent years.

Consequently, a wide range of medical and biotechnological breakthroughs have been achieved; these include the development of stronger pandemic control measures, improved diagnosis and treatment plans, and advancements in drug research.

The investment has enabled top scientists and innovators from around the globe to collaborate, bringing together unique skill sets that are pushing boundaries in the field of life sciences even further. It goes to show how important sound investments can be for driving progress in critical areas such as this one.

Commitment to Continuing Investment

With its encouraging economic landscape, world-class innovation infrastructures, and attractive talent base, Ontario is a natural hub for life science innovation.

The Government of Ontario recognizes this potential and is dedicated to making investments in the sector to share the benefits across the entire province. By committing to sustained investment in the Life Sciences sector, Ontario is encouraging economic growth through innovation and job creation while transforming breakthrough ideas into sustainable businesses that enhance quality of life.

Supportive Investor Community

Given the industry's remarkable growth and strategic positioning, the life sciences sector in Ontario has support from a strong investor community.

As more and more businesses enter into this field of research, venture capital has followed suit with more than 1,300 investment deals since 2012. This growth has enabled the province to firmly establish itself as the second-largest life sciences commercialization hub on the global market.

The generous supplication of governmental programs, incentives and resources has provided fertile ground for new ventures to breed further collaboration and advancement within this sector, as well as create a stimulating environment in which to do business.

The life science sector in Ontario, Canada is strong and growing. With the support of government and private investors, cutting-edge research projects are being conducted in world-class institutions. This makes Ontario an attractive place to invest in life science companies and technologies.

University of Toronto

ONTARIO: A PLACE FOR INNOVATION AND RESEARCH

If you're looking for a place to nurture innovation and research in science and technology, Ontario, might just be the place for you.

With its diverse economy and highly educated workforce, this Canadian province has become a hotbed of activity for scientists looking to develop new breakthroughs in their fields. In recent years, government initiatives have helped spur growth in scientific innovation throughout the region.

With investment from both domestic and international tech companies flooding into the area, business owners have an exciting opportunity to get involved on the ground level of cutting-edge research projects here in Ontario.

Ontario is Home to Many Top-tier Universities that are Ranked Among the Best in the World for Scientific Research

Ontario has long been lauded for its outstanding universities, and this proud academic tradition is evidenced today by the way the province's institutions of higher learning continue to lead the field in scientific research.

From biomedicine to law, business to engineering, Ontario universities are making significant contributions to the global discourse on scientific discoveries. Faculty and students from Ontario boast an impressive array of awards, including Nobel Prizes and other prestigious honours, and their innovative research in this arena continues to make waves around the world.

It is no surprise then that the province's universities remain among the most highly sought-after destinations for post-secondary education.

Institutions Attract Some of the Brightest Minds in Science, Constantly Developing new Breakthroughs

Ontario universities' reputation for excellence in science draws some of the most gifted minds from around the world. Researchers focus their talents on discovering new innovations and pushing past existing boundaries, allowing humanity to progress through their collective intellectual endeavours.

Thanks to their hard work and burning curiosity, many remarkable advances have been made in a wide range of sciences over the years, with the promise of exciting new discoveries still to come.

Ontario Is a Hotbed of Activity for Scientists, and a Great Place to Be if You're Looking for Cutting-Edge Research Opportunities

With its abundance of world-class universities, research centers and hospitals, Ontario has long been one of the most desirable locations for scientific research and development.

The province is home to some of the country's top engineers and scientists, who are pushing the boundaries of innovation in an array of disciplines. From biotechnology to artificial intelligence, Ontario is a hub for pioneering studies and collaborations that shape how we see and use technology today.

With ample support from government agencies, research facilities and public-private investments, Ontario is the ultimate destination for anyone looking to experience top-notch research opportunities.

Western University

Ontario Has a Strong Infrastructure for Supporting Scientific Research, With Ample Funding

The province of Ontario is a leader in scientific research, known for having an excellent level of infrastructure that provides ample financial resources and state-of-the-art facilities.

Featuring world-class experts and academics, Ontario's research environment is one of the most competitive in the world, offering cutting-edge development and exploration opportunities.

With both public and private institutions actively involved in discovering and funding important scholarship, knowledge production, and innovation, there are many inspiring foundations to support success - from artificial intelligence to medical breakthroughs. Indeed, many believe that Ontario has created an unmatched platform for collaboration between disciplines which can propel us forward as a model for progress globally.

An Ideal Place for Scientists Looking to Make Their Mark on the World Stage

With state-of-the-art universities, resources, and facilities located across its many cities, Ontario is a prime destination for scientists who want to make a real impact on the world stage.

The number of leading research institutions coupled with an immensely supportive environment makes it easy for those in STEM fields to discover and share their ground-breaking findings. Furthermore, new technological advances are always well within reach which means the exploration of possibilities knows no limit. For any individual looking to leave a lasting impression in modern science, Ontario truly offers the best foundation for success.

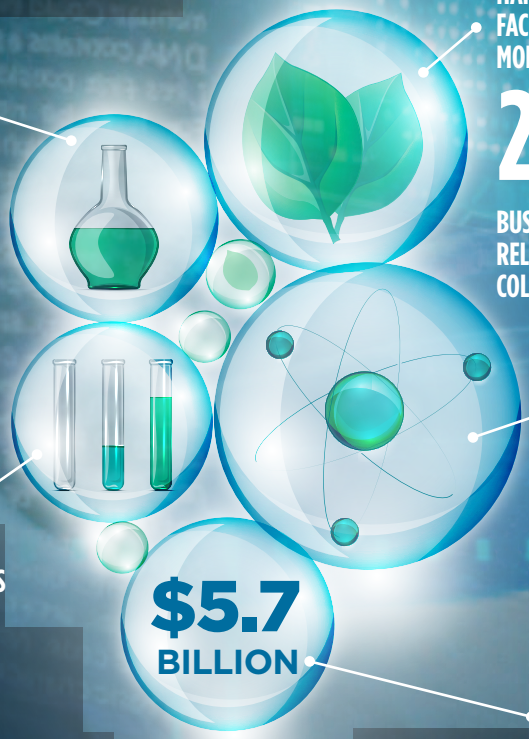
If you're looking for a place to nurture innovation and research in science and technology, Ontario, might just be the place for you. With its many post-secondary institutions focused on scientific study and discovery, as well as its collaborative environment between public and private sector organizations,

Ontario provides ample opportunity to get involved in meaningful research. What are you waiting for? Come explore what this province has to offer budding scientists and engineers.

THE CITY OF HAMILTON

LEADING IN LIFE SCIENCE RESEARCH AND COMMERCIALIZATION

A city of discovery and creation along with one of the most learned workforces in Ontario will accelerate your business goals in Canada.



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Hamilton

(from left to right) Nicole Barron, Associate Dean, Mohawk College School of Health and Community Services; Leslie Gauthier, Vice President of Clinical Support Services and Surgery, Hamilton Health Sciences; Wendy Lawson, Associate Vice President of Academic Mohawk College and Dean, School of Health and Community Services

ONTARIO COLLEGE – ANSWERING THE CALL

Mohawk College in Hamilton, Ontario has created the new Centre for Professional Advancement offering customized, accelerated on-demand training for hospitals

Targeted, rapid on-demand training for health care workers through Mohawk College's new Centre for Professional Advancement (CPA) is helping hospitals locally, provincially, and nationally cope with care backlogs amid pandemic recovery.

The CPA is the formalized structure that has resulted from dozens of training partnerships with health organizations over the last several years.

Project by project the CPA within the School of Health and Community Services has worked to close skills gaps and increase capacity in the workforce through a new model of on-the-job training that prioritizes innovative, responsive, accelerated and specialized instruction to address fast-emerging and future employer needs.

"This came out of a desire to respond to an acute situation in our community. We needed solutions and this was an innovative way to help solve problems," says Wendy Lawson, Dean of the School of Health and Community Services.

"We recognized that there are challenges facing our community in health care. The crisis forced everyone to be innovative."

The CPA provides flexible, high-quality learning solutions online, in-person, or using a blended approach with a mix of self-study and facilitated instruction. In collaboration with employer partners, Mohawk's team of curriculum developers and subject matter experts develop and deliver customized training solutions designed to address specific competencies and desired learning outcomes.

Mohawk College faculty then support the delivery of clinical training by clinical educators and mentors at the learner's home site.

"What makes this approach transformative is that it is a real partnership with the hospitals and clinical employers to create something specifically for them that answers their needs," says Associate Dean Nicole Barron.

Training has been delivered to cohorts as small as five and as large as 138. The team at the CPA continues to work with partners and governments to identify labour gaps that can be addressed through laddered training, extended roles, skills specializations and bridging.

"This is a sustainable and scalable model of training that contributes to a highly skilled and agile workforce. Our partners are committed to this and the successes of this approach are clear," says Lawson.

The model is now gaining attention from health care providers across Canada.

"It helps employers create a culture of learning and career progression," says Barron.

The partnership with the CPA has helped Hamilton Health Sciences (HHS) take a logical approach to filling areas of need, says Leslie Gauthier, Vice President of Clinical Support Services and Surgery. Ten HHS employees took the MRI training – paid for by the hospital – that finished in late spring. "We are learning as we go and correcting course where we need to but this is a great partnership that will help us address our needs."

The strengths of the approach are that Mohawk can work with a partner anywhere at any time, can offer the accelerated training to multiple organizations at once, and it addresses both immediate needs and long-term human resources planning.

The Operating Room Assistant (ORA) clinical training was delivered simultaneously in five labs over two Saturdays to staff from six different hospitals. OR Assistants are not intended to replace RNs or RPNs during surgery but by playing a supporting role and acting as an additional resource in the OR.

Kate Cook and Dulce Isorena from the Greater Niagara General Hospital were among the ORA trainees. Both worked in the hospital's medical device processing department that handles sterilization of instruments used in the OR. They each jumped at the chance to add to their skills and take on a new challenge. It was an intense, exhausting experience.

"It was exhilarating to be in the OR for the first time," says Cook.

"I really love doing this," says Isorena,

"This is such a great collaboration between Mohawk, HHS and our healthcare system. Everyone is committed to facing down the challenges and doing what is needed and doing it quickly."

Mohawk's accelerated critical care nursing program is designed for RNs looking to prepare for a career in a critical care setting or those currently employed in a critical care setting who wish to improve their knowledge and skills. This 300-hour program aligns with specifications of the Critical Care Services Ontario and will also prepare nurses to challenge the Canadian Nurses Association national certification exam in critical care.

"Queenston Carleton Hospital in Eastern Ontario has worked in partnership with Mohawk College to leverage the flexible, hybrid model to combine didactic learning with clinical mentorship to provide a wonderful foundation to nurses working as part of a skilled critical care team. The innovative design of this program integrates the online course and clinical experience through self-directed, asynchronous virtual learning, allowing students to integrate new knowledge into their practice on an ongoing basis," says Jen Plant, Director, Professional Practice and Ambulatory Care. "The hospital has a seven-point plan to stabilize its workforce through recruitment and retention," she added.

"The accelerate critical care program will provide learners with the advanced knowledge, specialized skills and abilities to practise competently and safely within a fantastic team."

For more information, visit www.mohawknewsdesk.ca

THE BENEFITS OF LIVING AND DOING BUSINESS IN ONTARIO, CANADA

Quality of life in Ontario Canada is a major reason why life science companies should move or expand in this province. With some of the highest standards for healthcare, education and safety, as well as an array of cultural attractions, there are many compelling reasons to make Ontario your home.

When it comes to healthcare, Ontario has maintained excellent standards of care and research. The province boasts one of the most comprehensive healthcare systems in the world, with more than 14,000 physicians, over 500 hospitals, and hundreds of long-term care facilities. Ontario also has a strong network of medical research centers that support cutting-edge advances in diagnosis and treatment.

When it comes to education, Ontario offers some of the best educational opportunities in North America. The province is home to world-class universities, such as University of Toronto, McMaster University, and Queen's University. There are also numerous colleges and trade schools that provide technical training and skills development.

Quality of Life is a Top Priority for Life Science Companies

Quality of life has become a top priority for life science companies based in Ontario, who are continually developing innovative solutions to improve the quality and standards of living for Canadians.

Innovative solutions encompass both technology and ethical considerations, with the intention being to save lives and create access to better treatment options. The focus on quality of life has seen a strong shift within the industry, one where companies are creating more meaningful partnerships with community groups and local institutions which have helped bring about positive changes in healthcare outcomes.

With their commitment to improving the quality of life for residents across the province and beyond, it is clear that these companies value people above profits.

Living and Working in Ontario is Great for Employees and their Families

Ontario's excellent quality of life not only benefits employees but extends to their families too. With its numerous parks and conservation areas, there are plenty of outdoor opportunities for families to explore and bond over.

The province is home to some of Canada's best universities and colleges, providing many options for further education. On top of all this, the low cost of living in comparison to other major cities make it an ideal destination for both job seekers and their loved ones.

The Province has a Strong Infrastructure that Supports the Life Sciences Sector

Ontario has become a powerhouse for the life sciences sector in recent years due to its exceptional infrastructure capabilities. Supporting this industry requires solid foundations such as well-equipped laboratories, university research centers and strong manufacturing facilities. In Ontario, all of these are available at the highest quality possible.

Guelph Ontario Canada guelph.ca/business

Not only that but the government also invests heavily in increasing innovation by supporting local start-up companies with funding and mentoring programs that help businesses create and develop life science products. This kind of support gives entrepreneurs in the life sciences field great opportunities to succeed, further expanding Ontario's economic growth and leadership in this domain.

There are Many Opportunities for Growth in the Life Sciences Industry in Ontario

The life sciences industry in Ontario offers many opportunities for growth, especially with the recent introduction of new government measures to bolster the sector's strength. Ontario is well-suited to taking advantage of this technology due to its highly educated population, diverse economic base and thriving entrepreneurial climate.

With its access to capital markets and robust commercialization system, there is tremendous potential for innovation and growth in this area. New initiatives are helping companies take full advantage of these tools and the develop world-class products that can compete globally. There is a great deal of potential for business owners, investors, personnel and students alike who desire to become part of this fast-growing industry.

The Province has a Talented and Skilled Workforce

Ontario boasts an impressive roster of talented and skilled professionals from various backgrounds. From technology and engineering to healthcare and finance, the diverse economy of Ontario taps into these highly certified individuals to provide industry-leading products and services.

With lower unemployment rates than the rest of Canada and consistent growth on core sectors, there is no doubt that businesses have a wealth of talent to draw from for their workforce needs. The skillsets found in this province make making Ontario an attractive choice for businesses looking to expand or relocate to a region with educated and professional workers.

The Cost of Doing Business in Ontario is Competitive

Doing business in Ontario offers competitive costs for entrepreneurs and established corporations alike. Low overhead requirements, working capital savings, and the availability of experienced workers are just a few advantages of doing business here.

The provincial government also offers industry-specific resources to help businesses innovate, grow, and succeed in the global marketplace. In addition to cost competitiveness, Ontario's population of 14 million people provides customers that can expand a business's customer base while building an innovative workforce. Overall, Ontario is a market primed for success with its competitive costs and desirable environment for businesses of all sizes.

Ontario offers an exceptional quality of life that is highly attractive to families, employees and employers alike. With world-class healthcare, education and safety standards, as well as a multitude of cultural attractions, there are many compelling reasons to make Ontario your home. If you are considering relocating or expanding your life science company, Ontario should be at the top of your list.

COMMERCIAL REAL ESTATE: ONTARIO LIFE SCIENCES SPACE LEADS THE WAY

Commercial real estate in the life sciences sector in Ontario Canada is an area that has been rapidly developing in recent years. The province of Ontario is home to a large number of life science companies, including some of the world's largest. This has made it an attractive destination for investors interested in taking advantage of the technological and financial opportunities available.

The Life Sciences Sector is Booming in Ontario and Commercial Real Estate is Developing to Meet the Needs of Businesses in this Industry

The life sciences sector in Ontario is experiencing unprecedented growth, resulting in unprecedented demand for commercial real estate. As smart companies seek new spaces to accommodate their burgeoning needs, developers are creating new infrastructure and servicing existing buildings with life science capabilities.

With the access to provincial financial incentives, grants, and other programs, businesses within the life sciences sector have made it an attractive place to be. And with a strong talent pool that facilitates industry research and development activities, as well as established training facilities across the province, Ontario remains well-positioned to support this ever-growing industry.

There are a Number of Incentives Available for Businesses that Set up Shop in the Life Sciences Sector, Including Tax Breaks and Grants

The life sciences sector in Ontario is highly attractive to businesses due to the range of incentives available. The Canadian government offers various tax breaks and grants that support startups and growing companies, making it an ideal place for businesses to invest their resources and cultivate new opportunities.

With its world-class universities and research laboratories, as well as its strategic location in North America, Ontario serves as a key innovation hub in the life sciences sector - providing market-leading partnerships and cutting edge technologies for businesses looking to make a big impact on the industry.

Commercial Real Estate in this Sector is Typically High-quality and Offers Ample Space for Businesses to Grow

Located in the heart of Canada, Ontario is known to be an epicenter for biotech and life sciences.

If you are looking for a commercial real estate opportunity in the sector, Ontario is definitely the place to be. From high-end research facilities built for cutting edge health advances, to sprawling office complexes for biopharma companies, Ontario's commercial real estate landscape offers impeccable quality and ample space for businesses to thrive and grow.

The province boasts exemplary infrastructure and low operational costs relative to other developed nations — making it an ideal choice for life science investors on the hunt for profitable ventures.

LIFE SCIENCES PRACTICE GROUP

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The Development of Commercial Real Estate in the Life Sciences Sector will help to Create Jobs and Spur Economic Growth in Ontario

The life sciences sector is a major component of the economy in Ontario, and its growth has generated substantial advancement in recent years. However, the next step for the sector to reach its full potential is to develop commercial real estate. Investing in commercial developments within this industry would not only create new jobs, but also stimulate economic growth throughout the province as well.

This can be done through incentivizing companies in this field through tax breaks or other measures so they are encouraged to invest in local real estate which would boost their own production capabilities while creating more positions and increased economic momentum regionally. In this way, the development of commercial real estate can contribute significantly to further progress in the life sciences sector in Ontario.

The life sciences sector in Ontario is a rapidly growing area with immense potential. It is home to many world-renowned companies, making it an ideal destination for investors looking to capitalize on the opportunities available. With its strong infrastructure and supportive environment, the province of Ontario is poised to become a leading global hub for commercial real estate in the life sciences.

CANADIAN LIFE SCIENCES COMPANIES COMMERCIALIZING INNOVATION IN HAMILTON

The commercialization of research and innovation is establishing Hamilton as a key player in Canada's life sciences corridor and in the global future of medical technology.

The cutting-edge work of researchers at McMaster University, Hamilton Health Sciences, St. Joseph's Healthcare and Mohawk College, all supported by Hamilton's life science consortium Synapse, is leading to a growing list of made-in-Hamilton medtech/biotech success stories. They include Fusion Pharmaceuticals, Triumvira Immunologics, Mariner Endosurgery, VoxNeuro and ToeFX,

A game-changer is the arrival of OmniaBio Inc. at McMaster Innovation Park (MIP).

When operational in late 2024, it will be the first commercial-scale cell and gene therapy (CGT) manufacturing facility in Canada. A subsidiary of regenerative medicine research hub CCRM in Toronto, OmniaBio will allow a pipeline of Canadian life sciences companies to commercialize innovation at home, boost Ontario's presence in the global biotech industry, and advance pioneering medicine with the potential to unlock the body's ability to cure itself.

A $500 Million +, 400,000-square-foot biomanufacturing centre of excellence at MIP will be anchored by OmniaBio and built in three phases. It is supported by a $40-million loan from the Invest Ontario Fund.

"McMaster University has a lot of expertise in cell and gene therapy and well-known investigators in clinical and early-stage development," says Mitchel Sivilotti, CEO of OmniaBio. "And there is already knowledge of high-tech manufacturing in Hamilton. It makes a lot of sense for us to locate there."

OmniaBio is building on Hamilton's medtech ecosystem and will act as a magnet for future domestic and international investment, says Sivilotti.

"To be competitive requires much more than just setting up a facility. It requires access to other therapeutic developers and supply chain partners and we will be a catalyst for that. That cluster is critical."

Hamilton provides a talent pipeline, good transportation links, access to two international airports and the U.S. border, a better cost of living and great quality of life, says Sivilotti.

"We didn't want to be too far away from our research and development headquarters in Toronto. The transfer of information and knowledge within our organization is key to us."

A collaborative ecosystem in Hamilton and ready access to talent, resources, and supports a start-up needs to grow has been critical to drug testing platform maker eye3.

"There is a real opportunity in Hamilton and there is momentum in an ecosystem that speaks to each other," says company CEO Kate Riley.

"Working with groups in Hamilton feels like they are invested in our success. Hamilton is growing and building this space and the invitation to join in that growth has been incredible for us."

"This is also illustrated in the latest life sciences investment from AtomVie Global Radiopharma Inc. (AtomVie) – a global leader in the manufacturing and distribution of finished-dose therapeutic radiopharmaceuticals. AtomVie is a spinout from the CPDC (Centre for Probe Development and Commercialization, a McMaster Centre of Excellence) located at McMaster University and is now scaling to meet growing demand for the production of radiotherapeutics and medical isotopes through their planned new facility in Hamilton.

"The new facility and its strategic location in Hamilton, Ontario, will firm our position as a global leader in the GMP manufacturing and global distribution of radiotherapeutics for both clinical development and the commercial market, and with the outstanding contribution from our staff, to better improve patients' lives all around the world," says Bruno Paquin, CEO of AtomVie.

Over at Mohawk College, its strengths in digital health, additive manufacturing, internet of things, and mechatronics are critical capabilities called upon by the medical technology sector, says Sherif Abdou, general manager of business development at the college's research hub IDEAWORKS.

"Start-ups don't have research and development teams. We collaborate with them and work with them and act as an in-house R&D team. That is a unique function for Mohawk and the team here that is not always found other places."

Vaughan Ontario Canada

CATALYZING HEALTH INNOVATION THROUGH SMART PARTNERSHIPS

Cortellucci Vaughan Hospital is one of a small group of Canadian hospitals to feature fully-integrated smart technology systems and medical devices that can speak directly to one another to maximize information exchange and improve healthcare delivery.

This leading-edge facility – and the future plans for the land surrounding it – creates tremendous business opportunities in the health and life sciences sectors. Recognizing these opportunities, the City of Vaughan is facilitating collaborative health innovation by developing a full-fledged innovation hub.

Mackenzie Health, which operates the Cortellucci Vaughan Hospital, is working with Toronto's York University, York Region tech accelerator ventureLAB and the City of Vaughan to transform the Cortellucci Vaughan Hospital's 82-acre parcel of land into the Vaughan Healthcare Centre Precinct (VHCP). These partners, and more than 350 life science and health companies that call York Region home, are bringing the next generation of health innovation to Vaughan, creating a world-class destination for healthcare excellence.

"The VHCP represents a cross-disciplinary collaboration between top educators, researchers, practitioners and business incubators," said Vaughan Mayor, Steven Del Duca. "It will be a destination of choice for research, education, innovation and commercialization and services in healthcare delivery, technology and informatics, focused on a unique 'care without walls' approach. Importantly, the partnerships powering the VHCP will create a leading medical innovation node, offering opportunities for the incubation and scaling up of innovative health technologies by start-up enterprises, leading research, and multinational corporations in the health and life sciences sectors." Mayor Del Duca chairs the VHCP Advisory Taskforce – a working group of stakeholders committed to advancing the goals of the precinct.

The health-tech and life sciences economy in Vaughan is strong. The VHCP will further attract and grow new businesses to join Vaughan's cluster alongside multinational leaders, such as Cardinal Health, Toronto Research Chemicals/LGC Group, Argenx and Sterling Industries, to name a few. New and existing businesses benefit from Vaughan's robust local talent pool, ample land for development and strong market access. For growing start-ups and scale-ups, ventureLAB offers expert advisory services to scale quickly, raise capital, commercialize technology and intellectual property, retain talent and acquire customers.

Vaughan's health market access isn't limited to the Cortellucci Vaughan Hospital. In fact, there are 18 world-class hospitals within a 50-kilometre radius and 40,000 students in life sciences and healthcare degree programs within the Greater Toronto Area. Thanks to Vaughan's strong transportation links and proximity to Toronto and its partners' innovation and commercialization expertise, 'made in Vaughan' innovations can easily be marketed and transported globally.

The development of the VHCP has been progressing rapidly since the hospital opened in 2021. In 2022, the Ontario government announced support for creating a new long-term care facility next door, with construction to start in 2025. York University is continuing to seek approval and support for a new School of Medicine, which would be established at the VHCP. ventureLAB's MedTech Hardware Catalyst Initiative, which supports scaling new medical device companies, has received $2 million in support from the provincial government to establish in Vaughan. As progress continues, opportunities for ambitious health and life sciences companies will emerge.

Project updates on the VHCP are available at vaughanbusiness.ca.

THE BEST AND BRIGHTEST CALL ONTARIO HOME

The Life Science sector in Ontario Canada is a vibrant and growing industry that is home to some of the world's best talent. The region offers a vast array of research and development opportunities, with countless universities, colleges, research institutes and private companies contributing to the development of cutting-edge technologies. Ontario has become a leader in life sciences in North America, and is home to a wide range of innovative products and services related to the field.

For business owners looking to expand and innovate with the help of talented, highly knowledgeable professionals, Ontario's life science sector is an ideal choice.

Housing some of the world's most talented individuals, Ontario provides cutting-edge solutions has attracted companies from across industries and sectors. It offers businesses access to resources ranging from established players in the sector to young entrepreneurs eager to make their mark.

With its proven track record for success and exciting opportunities on offer, Ontario's life science sector could serve as the perfect partner for any organization looking to take the next step forward.

Ontario's Top-grade Talent Pool

The life science sector in Ontario is booming due to its abundant pool of highly skilled and experienced professionals.

With many leading universities and private research institutes located within the province, Ontario has been able to develop, attract and retain amazing talent which has allowed the life science sector to continue making great strides across various industries.

These amazing individuals have brought groundbreaking innovations in medical devices, drug discovery and diagnostics that truly push forward the boundaries of modern medicine. As we move into an ever-more digitized world, having access to the best minds makes it easier for this sector in Ontario to continue their success for years to come.

World-renowned Universities Producing some of the Best Life Science Graduates

Ontario is home to numerous world-class universities, renowned for their successful life science graduates.

Not only does the talent coming out of these universities provide a solid foundation for local businesses, but their expertise continues to shape the province

as a whole. Students benefit from valuable cross-disciplinary knowledge and guidance on how best to prepare for careers within the life sciences and related industries – from medical research conducted by academia, to biogenetics and other sciences that have caused feats of technology never previously seen.

With plentiful resources and an educated population, Ontario provides an effective environment to prepare those who are looking to make strides in the life science sector.

Ontario's Government Has a Long History of Supporting the Life Science Industry

Ontario's government has developed comprehensive policies that nurture a healthy life science sector by promoting innovation, investment, and skills development.

Through venture capital investments, tax credits, and research grants they have been able to support new business opportunities while incentivizing the growth of existing businesses. These solutions were crafted with the local economy in mind and are helping to build a vibrant and prosperous ecosystem for life sciences in Canada's largest province.

The future Looks Bright for the Life Science Sector in Ontario

The life science sector in Ontario is experiencing many positive developments and growth, positioning itself as an increasingly important part of the provincial economy.

Currently, there are over 500 life science organizations operating in the province with a workforce of 25,000 talented professionals working together to shape the future of the industry. In 2019, investments in R&D increased by 13% over 2018, indicating that there is increasing confidence in this sector - and furthering opportunities for new infrastructure, talent recruitment and product innovation.

With cutting edge advancements emerging regularly across research domains such as therapeutics, diagnostics and medical devices, it is understandable why the life science sector holds so much potential for success in Ontario's economic landscape.

The life science sector in Ontario is a booming industry with great potential. If you are looking for research and development opportunities, or to contribute to the development of cutting-edge technologies, then this region is definitely worth considering.

With its vast array of universities, colleges, research institutes and private companies, Ontario has something to offer everyone interested in making a difference in the life science field.

HAMILTON IS DRIVING INNOVATION AND ENTREPRENEURSHIP AND IMPROVING PATIENT CARE

Hamilton is one of Canada's fastest growing life sciences clusters thanks to partnerships that amplify the impact and role of each player in the ecosystem.

"As a global leader in health research, Hamilton Health Sciences is fortunate to collaborate with important players in the life sciences sector, many of them right here in Hamilton," says Dr. Marc Jeschke, Vice President of Research.

"The Hamilton life sciences ecosystem is robust and diverse. By working together, we are driving innovation and entrepreneurship and improving patient care."

The city's major institutions – McMaster University, Hamilton Health Sciences (HHS), St. Joseph's Healthcare and Mohawk College – combine to spend close to $462 million on healthcare research each year.

McMaster University has been repeatedly ranked second in research intensity in Canada.

"McMaster is a trusted and reliable research partner, and thanks to our incredible researchers who have proven the impact and significance of their work, and who continue to attract investment from government, industry and not-for-profit organizations in support of their ground-breaking research," says Karen Mossman, Vice-President of Research, McMaster University.

McMaster partners extensively with HHS – the fourth-largest hospital network in Canada and a national leader in research. The two institutions lead world-renowned research centres, including the Population Health Research Institute (PHRI) and the Thrombosis and Atherosclerosis Research Institute (TaARI).

A researcher at McMaster and HHS will lead the new pan-Canadian Accelerating Clinical Trials Consortium, which received $39 million from the Canadian Institutes of Health Research (CIHR) in January 2023.

CIHR also granted more than $8 million to McMaster researchers to proceed with Phase 2 human trials for a next-generation, inhaled COVID-19 vaccine.

The new vaccine is entirely Canadian; from design and biomanufacturing at McMaster's Robert E. Fitzhenry Vector Lab to pre-clinical and clinical testing conducted by experts within Canada's Global Nexus for Pandemics and Biological Threats based in Hamilton at McMaster University.

Partnerships are the foundation of commercialization assistance provided through SOPHIE (Southern Ontario Pharmaceutical and Health Innovation Ecosystem), which is administered by Hamilton's Innovation Factory. Private companies in Ontario can leverage up to $100,000 to work directly with an academic or hospital partner in the Hamilton ecosystem to commercialize innovation, increase sales or secure a first buyer.

Thirty-four companies accessed the program in 2021 and 2022.

Collaboration, not competition, is truly the hallmark of life sciences in Hamilton, says Peter Kalra, CEO of the Bay Area Health Trust (BAHT), a unique, arm's length for-profit entity that benefits McMaster and HHS. A partner in the Synapse Life Sciences Consortium, it operates four business units and invests in new ventures.

"Hamilton is small enough that we are still focused on building together."

The McMaster Molecular Medium story is a great example. Researchers at St. Joseph's Healthcare and McMaster University worked together on a storage medium for critical COVID-19 testing kits early in the pandemic.

But they didn't have a means to rapidly commercialize it. BAHT licensed the product through the McMaster Industrial Liaison Office and ultimately sold it to the Ontario government.

"One in five tests in Ontario are now done with MMM," says Kalra. "That allows us to distribute the proceeds back to our beneficiaries in our ecosystem. It's a great example of a closed loop. It worked and it worked quickly. I don't think a lot of other cities can point to such an example."

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