LIFE SCIENCES ONTARIO

SUCCESS STORIES

Ontario life sciences companies are producing astounding innovations across our sector. Read about how their businesses are fuelling our economy – and how we can help them reach their full potential to accelerate life sciences into a major economic powerhouse.

SUCCESS STORIES

Amgen Canada Inc.

www.amgen.ca

Sector: Pharmaceuticals
Countries/ markets of focus: Presence in approximately 100 countries worldwide
Year founded: 1991
Number of employees: 450 in Canada
Recent Major Investments/Acquisition: Horizon Therapeutics

COMPANY OVERVIEW

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing, and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology. Our belief—and the core of our strategy—is that innovative, highly differentiated medicines provide large clinical benefits in addressing serious diseases. And we believe these medicines not only help patients but also help reduce the social and economic burden of disease in society. Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology innovator since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients worldwide and is developing a pipeline of medicines with breakaway potential.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

One way that Amgen Canada is making a unique impact is through the Amgen Biotech Experience (ABE), which has reached one million students globally, including over 8,000 in Canada. This program introduces high school students to biotechnology via hands-on experiments with research-grade equipment, fostering a culture of scientific inquiry. Since its inception in 1989, ABE has expanded to 16 countries and involved 4,400 teachers worldwide. In Canada, the program began in 2016 at the University of Toronto Mississauga and later expanded to Carleton University in Ottawa. ABE not only boosts student confidence in biotechnology, but also equips them with skills to become scientifically literate citizens. Amgen's commitment extends beyond medicine to community engagement and science education, preparing the next generation of innovators to tackle future challenges with curiosity and creativity. This initiative underscores Amgen's dedication to improving lives and fostering a passion for science among students.

BARRIERS TO SUCCESS

New medicines aren't always available or accessible when Canadian patients need them. Less than 20 per cent of new medicines launched globally are available on Canadian public plans, and patients wait almost twice as long to access them compared to peer countries. Canada ranks last in the G7 and 19th out of 20 among peer OECD countries in terms of public access to new medicines.

To address these challenges, we need to work together to create a resilient healthcare system and improve patient care. For drugs addressing high unmet needs, it is crucial to make them available to patients upon Health Canada approval through innovative agreements. Additionally, improving timelines for the pick-up of files by CADTH and pCPA by allocating appropriate resources will enhance accountability and predictability. Enhancing the Provincial implementation of pCPA decisions will also allow for consistency across Canada. The issue is Canada's multi-layered, sequential system for public reimbursement, which is far too complex and slow. As a result, Ontarians wait an average of 22 months after Health Canada's regulatory approval to gain public access to innovative medicines. We are encouraged by comments made at the recent Council of the Federation meetings, acknowledging and noting that one of their focuses will be doing everything possible to give Canadian patients the same timely access to life-changing treatments as patients in the rest of the world. Without improved availability and timely access to new medicines, health and life sciences programs designed to help Ontarians will fail to attract investment, save money, and most importantly – save lives.

KEY WINS

Amgen has brought over 20 products to the Canadian market, including innovator drugs and biosimilars. Amgen Canada has also made significant strides in the rare disease space, marked most recently by the acquisition of Horizon Therapeutics in 2023. This strategic move has enriched our portfolio with innovative medicines designed to treat patients with rare disorders, further strengthening our leading inflammation, oncology, bone, and cardiovascular health portfolios with first-in-class, early-in-lifecycle treatments. Our commitment to the national strategy for drugs for rare diseases is a pivotal step in ensuring patients receive the care they need. We are dedicated to collaborating on several fronts: removing barriers to timely access, ensuring equity in care across Canada, and sharing our expertise to support policymakers and system experts in their research and data collection efforts. Additionally, we are leveraging our global footprint to develop a robust clinical trial network tailored to Canadian needs.

These successes are a testament to our unwavering dedication to improving patient outcomes and our proactive approach to addressing the challenges in the rare disease landscape.

LOOKING FORWARD

Amgen's goals are focused on delivering long-term growth through innovative, life-changing medicines and advancing a robust pipeline of first-in-class molecules. The company aims to achieve this by leveraging strategic acquisitions, such as the Horizon Therapeutics plc deal, and maintaining a balanced portfolio across four therapeutic pillars: General Medicine, Oncology, Inflammation, and Rare Disease. In the next five years, Amgen envisions expanding its global presence and impact by continuing to innovate and deliver new treatments. The company plans to capitalize on the convergence of biotechnology and technology, using artificial intelligence and machine learning to accelerate drug development. Amgen is also committed to supporting its employees and inspiring the next generation of innovators through initiatives like the Talent Marketplace and the Amgen Biotech Experience. Overall, Amgen aims to create significant value for shareholders and improve global health by addressing unmet medical needs and advancing scientific discovery.

Bayer Inc.
https://www.bayer.com/en/

Sector: Pharmaceuticals
Countries/ markets of focus: Canada, Operate in over 80 countries globally
Year founded: 1863
Number of employees: +100,000 Globally, over 1,200 in Canada

COMPANY OVERVIEW

Bayer is a leading global life sciences company that has established itself as a leader in health and agricultural innovation. The company's mission, 'Health for All, Hunger for None,' embodies Bayer's commitment to addressing global societal challenges through innovative solutions. Through its global sustainability strategy and responsible practices, Bayer aims to enhance health and well-being for current and future generations, ensuring that everyone has access to the resources they need to thrive. Bayer's three business areas include:

1. **Pharmaceuticals division** which focuses on research and development of innovative medications to treat serious health conditions, including oncology, cardiology, gynecology, and ophthalmology.
2. **Consumer Health division** which division aims to empower consumers to take charge of their health with trusted brands that address everyday health concerns, such as pain relief, digestive health, and allergy relief.
3. **Crop Science division** which focuses on sustainable practices that enhance productivity while minimizing environmental impact. Bayer is committed to helping farmers adapt to climate change and improve food security through research and development in biotechnology and precision agriculture.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Bayer is dedicated to supporting Canadians through robust research and development across its three divisions — pharmaceuticals, consumer health, and crop science. With an annual R&D investment of approximately $140 million (CAD) into Canadian activities, Bayer is committed to advancing innovative solutions that enhance health outcomes, improve everyday well-being, and promote sustainable agricultural practices, ultimately benefiting communities and the environment across Canada.

Pharmaceuticals: Bayer is actively involved in advancing healthcare in Canada through innovative research and development. For instance, Bayer's investment in oncology is focused on developing treatments for various cancers, including prostate and lung cancer, and on strengthening its position as a leader in precision oncology. The company has invested in clinical trials that evaluate new therapies across cardiology, nephrology, thrombosis, ophthalmology, radiology and Women's Health. Additionally, through its subsidiary, BlueRock Therapeutics, Bayer is pioneering research in cell therapies aimed at treating conditions such as Parkinson's disease and other neurodegenerative disorders. BlueRock's research focuses on developing regenerative medicine that could potentially transform the treatment landscape for these challenging conditions. Bayer also plays an important role in the development and innovation of radiopharmaceuticals, enhancing diagnostic imaging and targeted therapies in oncology. By leveraging advanced technologies and extensive research, Bayer aims to improve patient outcomes through precise imaging techniques and effective treatment options that target cancer cells while minimizing damage to healthy tissues. The company's commitment to advancing radiopharmaceuticals underscores the importance the company places on the development of more personalized medicine in healthcare.

Consumer Health: Bayer's consumer health division provides a range of well-known over-the-counter products that cater to everyday health needs. For example, products like Aspirin for pain relief and suspected heart attacks, and Claritin for allergy relief, are widely used by Canadians. Bayer also engages in community health initiatives, such as educational campaigns on the importance of preventive care and wellness, which empower Canadians to manage their health proactively.

Crop Science: Bayer plays a crucial role in supporting Canadian agriculture through its innovative crop science solutions. The company provides new products to farmers across five technology platforms (Plant Breeding; Biotechnology; Crop Protection; Biologicals and Data Science). This includes developing elite genetics across corn, soybean and canola by breeding for disease resistance and stress tolerance. Farmers tend to upgrade their plant genetics with biotech traits to manage their bugs and weeds. Farmers will also protect their investment with a crop protection package to further mitigate impacts from pests. Additional performance can be achieved by using a biological applied as a seed treatment to enhance nutrient uptake. Lastly, farmers are enabled to practice precision agriculture through Bayer's digital platform.

Bayer is also broadening its sustainability approach focusing on regenerative agriculture. Today we talk about producing more and restoring more. This means helping our farmers restore soil health, improve biodiversity and conserving more water. Taken together with our five technology platforms, Bayer's focus on regenerative agriculture aligns with many of Canada's climate change targets and seven of the United Nations Sustainable Development Goals.

By focusing on these specific areas, Bayer is committed to improving the health and well-being of Canadians while fostering more sustainable agricultural practices that benefit both farmers and the environment.

LOOKING FORWARD

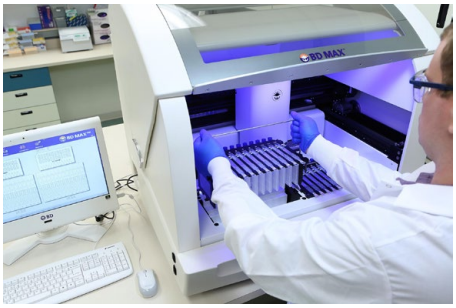
Looking ahead, Bayer is poised to continue its trajectory of growth and innovation, with a strong emphasis on sustainability and social responsibility. The company is investing in cutting-edge technologies such as digital farming, biotechnology, and precision oncology to address pressing global challenges. Bayer's commitment to sustainability includes ambitious goals to reduce its carbon footprint, enhance biodiversity, and promote responsible use of resources.

Furthermore, Bayer aims to strengthen its partnerships with governments, NGOs, and communities to drive positive change and foster collaboration in health and agriculture. By prioritizing research and development, Bayer envisions a future where science and innovation lead to breakthroughs that improve lives, protect the environment, and create a more equitable world for all.

BD Canada

https://www.bd.com/en-ca

Sector: Discovery, Diagnostics, Medication Management, and Therapy Management
Countries/ markets of focus: Canada, Operate in 190 countries globally
Year founded: 1897 Globally, 1951 in Canada
Number of employees: 75,000 Globally
Major Investments/Acquisition: Synergy Medical, Edwards Critical Care
Relevant Links: Announcement of BD's partnership with Humber: https://bit.ly/40JEV2O



COMPANY OVERVIEW

BD is one of the largest global medical technology companies in the world and is advancing the world of health™ by improving medical discovery, diagnostics and the delivery of care. The company develops innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for health care providers. BD helps customers enhance outcomes, lower costs, increase efficiencies, improve safety, and expand access to health care.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

BD assists Canadians in tackling their largest healthcare challenges by developing innovative technology, services, and solutions that advance both clinical therapy for patients and clinical processes for health care providers. 70% of medical decisions rely on lab results and there is an increasing demand for testing due to factors such as an aging population, preventive medicine expansion, and emerging pathogens. This means that our healthcare workforce, including our dedicated Medical Laboratory Associates and Technologists, need to feel empowered and enabled to address this increasing healthcare need. To support this challenge, we are embracing new ways of working with our partners by combining our innovative technological solutions with collaborative realworld training to reshape workforce development. At BD, we believe the impact of using future-driven training approaches will allow our healthcare providers to focus on their most important tasks while removing unnecessary burdens. This can create a shift in how we all show up as collaborative partners across the healthcare ecosystem as we begin to craft co-created solutions that bridge industry expertise with practical training needs that put Canadians at the forefront of decision-making.

BARRIERS TO SUCCESS

Recruitment and retention of a skilled healthcare workforce remains an ongoing challenge across Ontario and Canada. This issue extends to the field of medical laboratory professionals, with 70% of labs experiencing staff shortages which impact student training during placements. Human health resources shortages mean delays in turnaround times, extended hospital stays, and duplicate appointments with family doctors. The current shortage of MLTs means that 13.6 million lab tests are not being performed each year. Without intervention, ongoing MLT shortages could cost over $1.6 billion dollars annually and negatively impact patient health. Rural and remote areas are most impacted by this shortage, necessitating a targeted recruitment and retention strategy to support healthcare in these communities.

KEY WINS

In April 2024, Humber Polytechnic and BD-Canada announced the signing of a memorandum of understanding to work together to develop initiatives to enhance education, training, and career opportunities for health care professionals. This collaboration will include several initiatives to enhance education, training, and career opportunities for health care professionals, one of which is exploring the creation of a comprehensive Medical Laboratory Assistant (MLA)/Technician and Medical Laboratory Technologist (MLT) program. The plan for this program is to equip students with essential skills and knowledge to excel in the rapidly advancing medical technology field. Humber and BD will collaborate to design and develop innovative educational materials, modules and microcredentials, bridging industry knowledge gaps and providing certification for stakeholders. These initiatives will seek to ensure that the next generation of health care professionals are equipped with the knowledge and skills to use innovative technologies, services and solutions for today's and tomorrow's challenges.

LOOKING FORWARD

One of the biggest healthcare challenges of our time is in Health Human Resources (HHR). Each of us has a role to play in enabling frontline workers to gain hands-on experience. This means that students can have an effective transition from academic learning to professional practice while being trained on technology that will equip them to make better-informed decisions faster and enhance care for patients. This means improved workforce competencies, earlier diagnosis, and more proactive care interventions for today and tomorrow. Training and development are important mechanisms in creating a healthcare system's resiliency, but they are just one of many that have achieved this goal. At BD, we acknowledge that as industry partners, we have an instrumental role in addressing other health human resource needs across our system and will need to continue to show up differently to advance healthcare resiliency for all healthcare workers. By being future-driven in our solutions, BD has accounted for future expanded engagement with the larger medical lab community to ensure the education being provided by partners like Humber is informed by these real-world experiences.

BioAcuity Consulting Inc.
www.bioacuity.com

Sector: Biopharma SME
Countries/ markets of focus: Canada, United States, Europe
Year founded: 2010
Number of employees: 8 full-time / 10 part-time
Projected number of employees in 3-5 years: 25

COMPANY OVERVIEW

Our results-oriented Regulatory, Clinical, Quality, Compliance, and Operations consulting practice, focused on US, Canadian, and European regulations, serves start-ups, institutions, small to mid-sized enterprises, and fortune 500 companies. The team's extensive experience spans large and small volume parenterals, biologics, bio/pharmaceuticals, plasma therapeutics, solid dosage, APIs, ATMPs, medical devices, and natural health products. We support clients with a team of Subject Matter Experts in the areas of regulatory strategy, clinical, quality, GMP, GLP, GCP, GPP, MDSAP compliance, outsourced manufacturing, CMC & regulatory strategy, tech transfer, operations, clinical through commercial scale production, and CAPEX management. We are seasoned professionals with a track record of success, a commitment to client partnerships and a passion for delivering practical solutions tailored to meet our clients' unique needs. Drawing on over 250+ years of collective experience across government, industry, academia and institutions, our experts bring an unparalleled depth of knowledge and insight to every project.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

We know that no two clients are alike. We take the time to truly understand your goals, challenges and organizational culture. We listen closely, analyze, leverage our wealth of experience, to design strategies and deliver outcomes tailored to your objectives – ensuring sustainable and impactful results. We don't just provide recommendations; we become trusted partners invested in your success. By working with us, clients receive practical, actionable solutions that drive growth and improved performance. Our consultants draw upon the teams' collective hands-on experience in government, industry, academia, and various institutions, to provide a multi-dimensional perspective to tackle the regulatory, clinical, quality, compliance, and operations, challenges and needs being faced by our clients.

BARRIERS TO SUCCESS

A critical resource in the life sciences industry is access to talent. Employers have long identified a skills and knowledge gap within the sector. BioAcuity helps our clients address this issue, and advance their product development and commercialization programs, by providing immediate access to a team of experts that provide regulatory strategy, clinical, quality, compliance, and operations support from the pre-clinical stage, through commercialization to market, without growing the size of the company or delaying due to lack of available, experienced resources. We offer virtual Regulatory Affairs, Quality Assurance, and Clinical Department services on a fractional, development stage appropriate, basis. We also assist clients to develop their existing team, through training and coaching, to help clients continuously improve their existing pool of talent.

KEY WINS

Some of our key wins over the past year include: remediating years of investigation backlogs for a global fortune 500 company over the span of 6 months; providing virtual quality assurance department services and compliance oversight of contract clinical manufacturing activities for an early stage start-up; providing mock GMP & GCP inspections and inspection readiness support to numerous organizations leading to successful compliant regulatory inspection outcomes; identifying and remediating costly non-conformance issues with the organizations raw material supply chain; providing regulatory strategy, CMC, and quality /compliance due diligence supporting a clients successful acquisition of product for their portfolio. We are committed to providing effective strategies for the future, solving client problems and relieving your teams from the day-to-day pain points.

LOOKING FORWARD

Over the coming years, BioAcuity plans to expand our capabilities by adding to our core team of subject matter experts in order to help support a broader group of clients. We are deeply committed to understanding and supporting your business objectives and goals. With our extensive knowledge and personalized approach, we can respond swiftly to your needs and provide exceptional support at every stage of the product development lifecycle. You can count on us to be responsive, reliable, and always focused on delivering value and results.

BioCanRx
www.biocanrx.com

Sector: Innovation & Research
Countries/ markets of focus: Canada
Year founded: 2015
Number of employees: 12

COMPANY OVERVIEW

BioCanRx is Canada's Immunotherapy Network. Our vision is to turn all cancers into curable diseases. We are a network of scientists, clinicians, cancer stakeholders, academic institutions, non-governmental organizations and industry partners working together to accelerate the development of leading-edge immune oncology therapies for the benefit of patients. By investing in the translation, manufacture, and adoption of cancer immunotherapies, we bring world-class technologies from the research lab to clinical trials, leveraging existing Canadian infrastructure. We provide a made-in-Canada approach to supporting translational research through to early economic data collection in clinical trials, providing researchers with funding, expertise, training, and streamlined access to analytical and biomanufacturing core facilities to advance their technologies. Our award-winning training program fostering talent for the Canadian health biotechnology sector has been recognized for its efforts in the areas of inclusion, diversity, equity, and accessibility.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Canadians consistently demand effective, safe, and affordable therapeutics. However, they often wait up to two years for access to new medicines through public drug plans following drug approval from Health Canada – double the average time reported in several other high-income OECD countries. For individuals with cancer who have exhausted all available treatment options in Canada, accessing other approved treatments or clinical trials abroad is often out of reach for a multitude of factors, including cost. Historically, Canada has not strategically invested in translational research to advance technologies from the bench to the clinic. This critical phase, often referred to as the 'valley of death', is fraught with funding difficulties, expertise shortage and is inherently high risk. To address these barriers, BioCanRx has developed an integrated national translational cancer research engine designed to bridge the bench to bedside gap. By supporting the development of innovative immunotherapies, and ensuring they reach clinical trials, the BioCanRx network brings new hope and a fresh approach to accessing innovative therapies in Canada.

BioCanRx addresses national challenges in both developing homegrown discoveries and adopting international innovations. Our tailor-made approach to translational cancer immunotherapy has established a high-performing program delivering potentially curative therapies today. We address critical health system needs by bolstering translational research capacity within our borders, and capturing the value of Canada's early-stage cancer research investments. The growth of the global cancer immunotherapy market, projected to reach CAD 350.9 billion by 2030, underscores the economic imperative for Canada to capitalize on these long-term investments, fostering new companies and scaling existing ones.

BARRIERS TO SUCCESS

It is estimated that 45% of all people in Canada will receive a cancer diagnosis in their lifetime and as our population ages, new cancer cases and deaths from cancer are rising. With the pace of cancer research increasing daily, the need for novel treatments is also increasing. That said, brining highly innovative and novel approaches from the lab to patients via early stage clinical trials is an expensive and intensive process. In fact, due to the lack of investment in translational research in Canada, few Canadian world-leading discoveries ever make it to patients by way of clinical trials in Canada. While BioCanRx is working to change this for cancer immunotherapy, the funding required to sustain and build our capacity in Canada is significant. More investment is required from multiple sources – federal and provincial agencies, industry – and the regulatory processes in place in Canada need to be revisited to ensure they are encouraging a vibrant and innovative life sciences sector.

KEY WINS

The BioCanRx Network supports collaborations among scientists and clinicians, academic institutions, industry, government organizations, charities and patient groups, not-for-profits and highly qualified personnel (the next generation of cancer immunotherapy researchers) with one vision – to cure and enhance the quality of life of those living with cancer.
Our Network has:

- Launched 12 made-in-Canada cancer immunotherapy clinical trials for the benefit of Canadian patients in need.
- Provided novel therapies to over 400 patients in BioCanRx-funded and supported clinical trials.
- Enabled the training of 675 HQP, providing many of them with advanced training in translational research, GMP biomanufacturing, and science communication.
- Worked with 202 partners in diverse sectors.
- Introduced over 34 new therapies to the CDN ecosystem and supported the creation of 8 spinouts.
- Leveraged an initial $40 million investment by the Government of Canada into $109.49 million of partner investments.

LOOKING FORWARD

Over the next 5 years, BioCanRx will make use of a $38M investment through the Strategic Science Fund to expand support for translational research in cancer immunotherapy. This funding will enable us to continue the translation of products already in our pipeline and enable us to onboard new products that are able to modulate the immune system and fight cancer.

In addition, one of BioCanRx's most significant accomplishments to date is the establishment of made-in-Canada CAR T cell therapy manufacturing program named CLIC: Canadian-Led Immunotherapies in Cancer involving provincial partners. On the horizon for the CLIC program is the availability of novel products to a greater number of clinical sites, across Canada. By supporting both translational research, manufacturing and the clinical sites capable of delivering novel treatments, we are working towards our goal to increase access to these types of therapies to an even greater number of Canadian cancer patients. The metric that matters most to the BioCanRx team and network is the number of patients treated. Our hope is to turn that into number of patients cured.

Bioenterprise Canada
https://bioenterprise.ca

Sector: Agri-Food
Countries/ markets of focus: Canada
Year founded: 2003
Number of employees: 30
Projected number of employees in 3-5 years: 50
Recent Major Investments/Acquisition: GreenShoots Program, OAFRI Commercialization Stream, Grow Ontario Accelerator Hub Initiative (GOAH), Sustainable Growth and Adoption Program (SGAP)

Dave Smardon, CEO of Bioenterprise Canada (R) with Lloyd Longfield, Member of Parliament (L) at FedDev Ontario funding announcement, August 2024

COMPANY OVERVIEW

Bioenterprise Canada is Canada's Food & Agri-Tech Engine, the country's leading national agri-tech alliance, uniting innovators, industry partners, and investors to drive groundbreaking agri-food advancements and commercial success. The Bioenterprise Canada team specializes in assisting scaling agri-food businesses by offering mentoring, funding, and other critical resources to facilitate growth.

Since 2003, Bioenterprise Canada has supported more than 325 projects with over $30 million in funding. With seven locations across the country, The Engine has grown to include more than 800 members and partners, connecting the agri-food value chain from coast to coast. We're committed to strengthening Canada's agri-food ecosystem and supporting entrepreneurs in turning their ideas into successful ventures.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Globally, Canada is a leading agricultural producer. Compared to other countries, it ranks high in industry research and development. However, when it comes to bringing agri-innovations into the marketplace, Canada ranks significantly lower. Bioenterprise bridges this gap between agricultural research and commercialization.

Due to Canada's size, its multifaceted agri-food industry spans diverse regions, creating a disconnect in communication, policies, and processes. These fragmented systems present complex challenges for agri-food entrepreneurs. As Engine members, entrepreneurs have access to customized mentoring and coaching, funding sources, networking and other essential services critical for scaling businesses to overcome barriers to growth.

Additionally, recognizing the unique needs of underserved groups such as women, Indigenous Peoples, and newcomers to Canada, The Engine is committed to delivering tailored support to these communities. By fostering inclusivity and collaboration, we enhance global innovation performance and drive meaningful change in Canada's agri-food industry.

The Engine's collaborative approach fosters market readiness, accelerates adoption, and advances sustainable practices across the sector. This strengthens Canada's value and supply chains and drives global competitiveness. Successful commercialization and adoption of agri-tech innovations contribute to Canada's food security, sustainability, and economic development. Bioenterprise Canada is dedicated to building a stronger, more resilient agri-food sector that benefits all Canadians.

BARRIERS TO SUCCESS

Despite the continued growth of our collaborative national alliance, The Engine, we share common challenges with our partners in Canada's agri-food ecosystem. The lack of universal pathways and national cohesion often leads to duplicated efforts and hinders the full potential of Canadian agri-food innovation.

We anticipate that integrating diverse regional priorities into a unified national framework will continue to be complex. Additionally, rapidly changing global food systems, exacerbated by climate change and geopolitical tensions, poses ongoing challenges that require agile and innovative responses.

KEY WINS

Bioenterprise Canada has achieved significant milestones this year, managing and delivering programs like GreenShoots, a collaboration between Invest Nova Scotia, the Greenspring Bioinnovation Hub, and The Engine.

The Engine launched the Grow Ontario Accelerator Hub Initiative (GOAH) to provide robust support for Ontario-based agri-food and agri-tech companies through tailored mentorship, business resources, and networking. We also launched the Sustainable Growth and Adoption Program (SGAP), aimed to enable agri-tech companies to secure funding and scale their operations. Most recently we announced the second round of the OAFRI Commercialization Stream that provides innovative agri-tech organizations with support and funding up to $150,000.

By connecting innovative ventures with essential resources and support, we're driving significant advancements in agri-food innovation.

LOOKING FORWARD

This year, Bioenterprise Canada launched a series of leadership roundtables, bringing together key industry stakeholders from across the country to identify gaps, foster collaboration, and develop cohesive strategies for the industry's diverse regional initiatives.

Supported by partners Bennett Jones LLP, Agriculture and Agri-Food Canada (AAFC), Canadian Federation of Agriculture (CFA) and Farm Credit Canada (FCC), we hosted events with industry stakeholders in Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, Quebec and Atlantic Canada. The project will culminate in a national agri-food innovation summit in Ottawa this fall, where we will share the outcomes from these regional discussions.

Moving forward, better informed and with strengthened partnerships, our objective is to continue growing The Engine alliance to create a more unified national ecosystem. We know that a cohesive structure is the foundation for providing the necessary, equitable support for innovative agri-food start-ups and scaling companies to grow and thrive. We believe a more unified ecosystem will enhance our national food, agricultural, and sustainability sectors, positioning Canada as a global leader in agri-food innovation while equipping us to address some of the most pressing global challenges.

CANADAMASQ

Canada Masq Corporation
www.canadamasq.com

Sector: Healthcare
Countries/ markets of focus: Canada/USA
Year founded: 2020
Number of employees: 38

Anthony Zhao, CEO,
Canada Masq Corporation

COMPANY OVERVIEW

Canada Masq Corporation is a leading manufacturer of CSA-certified CA-N95 Respirators and ASTM Level Procedure Masks, based in Richmond Hill, Ontario. Committed to advancing health and well-being, we produce innovative, high-quality disposable medical supplies through local manufacturing. With a mission centered on safety and reliability, we empower healthcare professionals and support communities. Canada Masq strives to lead the industry in compliance, quality assurance, and sustainable practices, making a lasting, positive impact on Canadian healthcare.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Canada Masq is pioneering local manufacturing for essential healthcare products, building a resilient and sustainable supply chain that shields Ontario from future disruptions and prevents critical PPE shortages. Our innovation, such as the Q100 CSA Certified CA-N95 Respirator, available in four sizes, addresses an unmet need in the industry by providing a solution for healthcare workers with smaller facial profiles. This unique approach enhances safety, comfort, and breathability, aligning with the life sciences focus on patient and provider protection. Through our local manufacturing efforts, we're not only meeting today's demands but also securing reliable, future-ready PPE access for Canadian healthcare providers.

BARRIERS TO SUCCESS

Scaling up during the pandemic, Canada Masq faced the challenge of balancing high production volumes with stringent quality standards amid supply chain disruptions and rapid hiring. We addressed these barriers through strategic investments in quality control, staff training, and R&D, plus establishing an internal quality lab and pursuing ISO 13485 certification to ensure consistency as we grow. Local manufacturing reinforces our supply chain resilience, reducing reliance on global suppliers. To mitigate future supply disruptions, we're localizing critical supply chains and bringing key material production in-house. Our commitment to compliance, supported by ISO certification and regular audits, keeps us aligned with Health Canada and CSA standards. Lastly, as we scale, we actively maintain our core culture of innovation and local impact through clear communication, training, and team cohesion.

KEY WINS

Canada Masq has become one of Canada's largest producers of CSA Certified CA-N95 Respirators and ASTM Level Procedure Masks, reaching sales of around 50 million respirators and 250 million procedure masks within four years. This success is driven by our commitment to innovation, rigorous quality control, and adaptability in meeting healthcare demands. By consistently aligning with high standards of safety and compliance, Canada Masq has built trust within the life sciences sector as a reliable supplier of Canadian-made, patient-centered PPE.

LOOKING FORWARD

Looking ahead, Canada Masq aims to strengthen its role in the life sciences industry by advancing Canadian healthcare resilience and sustainability. Over the next five years, we aspire to be recognized for our innovative, high-quality, and Canadian-made solutions that support patient safety, healthcare worker protection, and supply chain security. As we expand our product portfolio, we are committed to sustainable healthcare practices, including recycling initiatives and developing advanced, eco-friendly PPE materials. This approach reflects our dedication to contributing lasting value to the life sciences sector through local, reliable, and responsible production.

Canada Protein Ingredients Ltd.

https://cpi-ipc.ca/

Sector: Agri-Food
Countries/ markets of focus: Canada, United States, Japan, EU
Year founded: 2020
Number of employees: 1
Projected number of employees in 3-5 years: 48
Recent Major Investments/Acquisitions: Protein Industries Canada CA$7.3m, Private Equity investors CA$500k, Lead Series A investor CA$30m

Jim Millington, CEO & Founder, Canada Protein Ingredients Ltd. - Ingrédients Protéiques du Canada Ltée

COMPANY OVERVIEW

We have developed and proven a scalable method of de-oiling soybeans that does not use neurotoxic solvents like hexane. Rather, our novel and unique method uses ethanol as a much more sustainable and environmentally friendly solvent extraction process. Our finished product will be clean label organic or non-gmo soy protein isolate, concentrate, fiber and oil for the global food industry.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

- Value added domestic processing utilizing existing world class Canadian supply chain.
- Efficiency – two processing lines (crushing + purification) in one facility.
- Sustainability leadership, elimination of hazardous, neurotoxic solvents.
- Certified Sustainable supply – Grower program, positive HowGood impact.
- De-oiling process verified (de-risked) and guaranteed by manufacturer.
- Market: high demand worldwide for soy protein isolate.
- High gross margin business – forecasted results in year 3, Gross margin 69%, Income CA$29.5m.
- Return for investors and growers IP soy premium.
- First North American solvent extraction plant for Certified Organic soy isolate.

BARRIERS TO SUCCESS

Our biggest challenge has been securing equity financing with strategic partners that are currently invested in this space.

KEY WINS

We have successfully completed 4 pilot runs that proves our method is viable and scalable at commercial volume. We have significantly de-risked future investments with a performance and throughput guarantee from our main equipment supplier. We have also completed our supercluster funding program with Protein Industries Canada. Our engineering model and financial model is complete and we have begun site planning for a new facility.

LOOKING FORWARD

We have begun site planning for our initial production line which will be located in Eastern Ontario. Once this line is up and running we will begin planning the second production line with 3X capacity. Future production could also include food grade oil refining, bio-diesel production and soy protein extrusion/texturizing capability.

CATTI

www.catti.ca

Sector: Cell and Gene Therapy
Countries/ markets of focus: Canada and USA
Year founded: 2021
Number of employees: 8
Projected number of employees in 3-5 years: 15
Recent Major Investments/Acquisitions:
1.6 M$ from Next Generation Manufacturing Canada (NGen) (with CCRM and OmniaBio) to establish our University of Guelph BSL2 training lab.

1.7 M$ from Palette Skills (with OBIO) for subsidised workforce training - https://catti.ca/upskilling/

COMPANY OVERVIEW

CATTI delivers hands-on and virtual training for efficient and rapid upskilling of the biomanufacturing workforce, including highly specialized hands-on training to produce cell and gene therapies.

We offer bootcamps, onboarding training, gowning and aseptic techniques workshops that provide the skills needed to perform technical work in a cGMP manufacturing environment. Learners will cover all the needed skills in a hands-on fashion. Our hPSC and MSC bootcamps deliver the fundamental theoretical knowledge and practical experience in unit operations covering the steps of thawing, expanding, harvesting and cryopreserving cells. Participants learn GDP by writing SOPs and completing batch records while working in the buddy system for their cell culture tasks in simulated cleanroom production.

Participants will perform a portion of their work in Grade B/ISO 7 gowning. Throughout the bootcamp they will be closely coached on how to observe cells (what healthy cells, differentiation looks like, etc.). These skills can only be learned through hands-on repetition, in an environment where mistakes can be made without dire consequences. Throughout the training, participants are closely evaluated by our experienced trainers. An assessment report and certificate of completion is provided at the end of the training process.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

The rapid growth of the biomanufacturing industry has made it a global challenge to keep up with talent requirements. CATTI delivers hands-on and virtual training coupled with well defined objective evaluations, and feedback is provided regularly throughout the training. This mix of intensive training and evaluation provides participants with a strong sense of accomplishment and a confidence in their technical skills upon completion of training. This approach goes a long way towards providing the industry with work ready employees AND it gives new employees a very good introduction to the rewarding yet often demanding work that our industry requires.

Our philosophy is based on the notion that the training should resemble real-world skills while handling actual products. Our participants LEARN by DOING in an environment with rapid corrective feedback. This is more akin to sports training than to traditional academic or observational learning. Only through this approach can we truly reduce the risks of human error during critical manufacturing steps. Deployment of this vision has been made easier with our recently announced Palette Skills funding; we will provide highly subsidised practical training throughout Canada to 280 people by the end of March 2026.

BARRIERS TO SUCCESS

The demand for highly skilled professionals is now much larger than the supply and this gap can not be filled solely by currently available talent for a multitude of reasons. Industry has not yet fully adapted its thinking to account for this new reality. Both industry and government must invest more and differently in training. More effort must be made to find the right people for the right jobs and provide them with the right training.

Traditionally, companies have relied on in-house training, mostly through one-on-one shadowing, SOP reading and a slow ramp-up of skills. This results in a productivity lag time and is no longer economically advantageous. Despite this truth, many companies are slow to adapt to the new talent bottlenecks that hinder growth and endanger business continuity. Furthermore, the industry has not yet developed reliable data showing the value of high-quality training on reduced batch rejections, non-conformities and delays in development milestones and manufacturing targets. It has been amply shown that high quality training has an impact on performance, yet there are no clear metrics for this in our industry and as such it has not yet become the cornerstone of company strategy in the way it should.

KEY WINS

- CATTI and OBIO have just launched a Palette Skills funded training program that includes a weeklong hands-on bootcamps and online learning with minimal participant cost.
- CATTI has been recognized as OmniaBio's preferred training provider. We deliver a 4-week onboarding training program for OmniaBio's new hires in operations. This training strengthens the fundamentals skills and ensures competency development for alignment with GMP manufacturing expectations for excellence in cell and gene therapy production.
- We're partnering with McGill University to run our GMP bootcamps and gowning training in their Grade C/ISO-7 cleanroom facility.
- We have built strong collaborations with equipment and consumables suppliers (ex. bioMérieux, Canada Clean Room, Chemometec) that support our training initiatives.
- We're partnering with the UK Cell and Gene Therapy Catapult to create an assessment standard framework that we will use to develop competency assessment standards for advanced therapies manufacturing. These assessment standards will be used to assess the skills and competencies required for working in the advanced therapies industry.
- Quality approach to training: we can provide a Quality Agreement to clients as well as detailed information on our evaluation of competencies that can be included in employee training records for regulatory audits. CATTI is ready to be audited and qualified as a training vendor.

LOOKING FORWARD

We aim to become a reference in high quality training and to help establish assessment standards that will facilitate and encourage the propagation of competence-based learning. We aim to deliver our training across Canada. CATTI also plans to expand its training offerings to assist early-stage companies with Quality and Regulatory filings. In this rapidly growing sector, our goal is to support the development and launch of therapeutic breakthroughs by assisting companies in building the talent and expertise needed to get the job done.

CCRM
www.ccrm.ca

Sector: Innovation & Research
Countries/ markets of focus: Canada and North America with global clients
Year founded: 2011
Number of employees: 242
Projected number of employees in 3-5 years: 1,000+ (including OmniaBio)

COMPANY OVERVIEW

The future of health care lies in regenerative medicine, including cell and gene therapy, with CCRM at the forefront of this revolution. This not-for-profit, public-private partnership is enabling Ontario and Canada to play a leadership role in the growing regenerative medicine industry by expediting the development of these promising therapies into real, life-changing treatments for patients. Since its inception in 2011, CCRM has focused on overcoming challenges in translating innovative therapies from lab to practical use, collaborating with leading research institutions and partners to create new ventures, build biomanufacturing infrastructure, and support emerging companies. Through these initiatives, CCRM is ensuring groundbreaking therapies are accessible, transforming health care and enhancing patient outcomes across Ontario, Canada, and beyond.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

CCRM recognized more than a decade ago that manufacturing would be critical to success in the field. In our Toronto facility we have specialized infrastructure to advance and enable the industry. The Centre for Advanced Therapeutic Cell Technologies (CATCT) was built to solve cell manufacturing industrialization challenges, and the Centre for Cell and Vector Production (CCVP) is a Good Manufacturing Practices (GMP)-compliant facility producing cells and viral vectors for Phase I/II clinical trials. To expand on the capabilities in Toronto, CCRM spun out OmniaBio Inc. to provide Phase III and commercial-scale manufacturing. In addition, CCRM partnered with Montreal-based CellCAN to create the Canadian Advanced Therapies Training Institute (CATTI) in 2021. CATTI is helping to fill the critical biomanufacturing skills gap by offering specialized workforce training that is accessible worldwide.

CCRM's efforts will ensure that companies that are invested in and launched within Canada can grow with local talent and facilities, and not need to move to the U.S. to thrive.

BARRIERS TO SUCCESS

The cell and gene therapy industry has two major challenges: a shortage of skilled talent and the high cost of treatments. To address the talent gap, CATTI offers leading-edge in-person and online biomanufacturing training opportunities to both industry professionals and trainees. CATTI opened a dedicated training facility at the University of Guelph in 2023 and, in 2024, CATTI partnered with McGill University to pilot a bootcamp providing its students with GMP techniques for working with pluripotent stem cell-derived products. CATTI continues to pioneer new ways to support training.

The second challenge is the expensive nature of these therapies, which hampers their adoption by health systems. To make them more accessible, reducing the cost of goods sold (COGS) is crucial. This can be achieved through efficient industrial processes and manufacturing, supported by collaborations with CDMOs like OmniaBio. OmniaBio is introducing robotics and automation into its workflow, to improve efficiency and reduce costs.

Early-stage collaboration is essential since later stages lock in processes due to regulatory requirements. Thus, CCRM promotes the use of high-quality, GMP-compliant iPSC lines, like those from LineaBio, to cut costs and speed up manufacturing. Through these efforts, CCRM is working to overcome industry challenges and improve treatment accessibility.

KEY WINS

CCRM created an ecosystem that fosters home-grown innovation in Canada while attracting global investments. CCRM's unique model has engaged over 600 organizations worldwide, employed nearly 250 highly qualified personnel, and provided CA $20 million annually in essential services to numerous companies, supported by tens of millions in investments in specialized facilities.

CCRM has launched and scaled 18 portfolio companies, which have collectively raised over $1.2 billion. Recent achievements include the completion of the construction of OmniaBio's 120,000 square foot facility in Hamilton, Ontario, set to be Canada's largest contract development and manufacturing organization (CDMO) for cell and gene therapy.

CCRM's second global hub, CCRM Nordic, launched in 2023. It follows on the heels of CCRM Australia, which was established in 2016 and incorporated in 2022. Both are making significant progress toward critical goals in 2024, including the opening of specialized facilities.

In July, CCRM and OmniaBio launched LineaBio Inc., a spin-out that supports the cell and gene therapy industry with high-quality, off-the-shelf induced pluripotent stem cell lines. LineaBio helps therapy developers cut costs and accelerate timelines, striving to make cell therapies universally accessible and affordable. These successes highlight CCRM's commitment to driving innovation and building a thriving regenerative medicine ecosystem.

LOOKING FORWARD

In five years, CCRM will have transformed the cell and gene therapy sector. Its commercial-scale subsidiary, OmniaBio, will be thriving with over 1,000 employees and an annual revenue of $300 million. This success will spur future growth, with at least two $1 billion manufacturing facilities for cell and gene therapies underway, boosting Ontario's status as a major manufacturing hub. The sector is expected to create 22,000 direct and induced jobs by 2032. Additionally, Canada will have another $1.1 billion in annual government revenues from taxes and $4 billion in annual GDP growth.

Moreover, CCRM's efforts will have anchored an additional $2 billion in investment capital in Ontario, fueling the start-up and expansion of numerous new companies in cell and gene therapies.

Globally, CCRM's innovative model of turning early-stage discoveries into clinical-ready technologies will establish international hubs in countries with strong science but a gap in commercialization. These hubs will generate over $1 billion in investment and work together to advance regenerative medicine worldwide. CCRM's aims to reshape the industry, drive job creation and foster global collaboration in the field of cell and gene therapies.

CGEn

www.cgen.ca

Sector: Innovation & Research

Countries/ markets of focus: Canada and Global / Research and Innovation in Healthcare and human Studies, Conservation and sustainability, Agriculture and other sectors

Year founded: 2015

Number of employees: 200+

Projected number of employees in 3-5 years: 200+

Major Investments/Acquisition: Over $200M from federal government including over $90M from CFI-MSIF

COMPANY OVERVIEW

CGEn is Canada's federally-funded national platform for genome sequencing and analysis. CGEn is funded primarily by the Canada Foundation for Innovation (CFI) through its Major Science Initiatives Fund (MSIF), leveraging investments from the provincial governments of Ontario, Quebec, and British Columbia, Genome Canada, its host institutions, and others. CGEn operates as an integrated platform with nodes in Toronto (The Centre for Applied Genomics (TCAG) at The Hospital for Sick Children), Montréal, (McGill Genome Centre at McGill University), and Vancouver (Canada's Michael Smith Genome Sciences Centre at BC Cancer), leading large-scale projects and providing advanced genomic services to enable research in the health sciences, agriculture, forestry, fisheries, the environment, biodiversity, and other sectors of importance in Canada. Led by Meredith Mclaren (CEO), CGEn is privileged to be associated with a founding Executive Team that includes four members—Stephen Scherer, Steven Jones, Mark Lathrop, and Marco Marra—ranked among the top five genetics scientists in Canada. Additionally, we benefit from the expertise of key scientific leaders Lisa Strug, Jiannis Ragoussis, and many others, as well as the guidance of our Board of Directors and Scientific Advisory Board.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

CGEn is a critical platform for Canadian genomics research, advancing discoveries that improve health care, drive innovation, and strengthen sectors like biodiversity, agriculture, and commercial applications. Genome sequencing is challenging, requiring advanced technologies, expertise, and considerable computational and data storage resources. CGEn helps researchers overcome these challenges, providing end-to-end service from sample preparation through data analysis to enable diverse genomic applications. By producing high-quality data, supporting scientists, and fostering collaborations, CGEn drives large-scale genomic initiatives, research excellence, and lasting impact in Canada.

Since its inception, CGEn has been at the forefront of genomics research, supporting over 3,000 Principal Investigator laboratories, including over 800 from Ontario annually. These users span academic, government/NGO, and private-sector research. CGEn's infrastructure offers services including whole genome, exome, targeted, single-cell DNA/RNA sequencing, transcriptomics. CGEn also provides comprehensive bioinformatic and statistical analysis support. Visit our website for details.

CGEn fosters strong vendor relationships to continually assess emerging technologies and engages in internal technology development projects to deliver cost-effective, timely genomics solutions. In the past year, CGEn-Toronto and other nodes have acquired and deployed two of the newest genome sequencers: the Illumina NovaSeq X Plus Series for short-read applications and the PacBio Revio for long-read sequencing, while also upgrading the Oxford Nanopore Technologies PromethION sequencer.

BARRIERS TO SUCCESS

Genomics is a fast-paced field where a rapidly evolving technology landscape requires the ongoing acquisition of new instruments, as older ones become obsolete. CGEn has been successful in securing funding to continually keep pace by acquiring the latest genomic sequencing instruments and updating our existing technologies. CGEn's expert staff undergo training, and participate in technology development projects to stay abreast of newer technologies and methodologies and contribute to the evolving field of genomics. The rapid advancements in genomic science have dramatically increased the amount of data generated, a trend that will continue in the coming years. Managing these growing data volumes, including the constant need for more storage, processing capacity, as well as relevant approaches to data governance and sharing, remains a top priority for CGEn and the wider genomics community to maximize the impact of this data.

KEY WINS

CGEn's Toronto, Vancouver, and Montreal nodes have sequenced over 125,000 whole genomes, generating over 13 petabases of data. CGEn has deposited over 4 petabases of genomic data into accessible databases for future research, including 3.5 petabases of which has whole genome sequence data from over 50,000 genomes. These data support research across Canada and worldwide, via open science principles.

In Ontario, TCAG led by Dr. Stephen Scherer, CGEn-Toronto (TCAG) supports key Ontario projects like MSSNG (Autism genome sequencing), KiCs and PROFYLE (paediatric cancer), the Canada BioGenome Project (biodiversity; with linkages to the international Earth BioGenome Project) and HostSeq Showcase. Led by CGEn and supported by numerous partners, HostSeq was launched in 2020 under Genome Canada's CanCOGeN initiative to establish Canada's largest genomic health databank. To date, it has supported over 100 researchers and trainees across 32 research projects in various health domains and developed a blueprint for future population-scale genomic initiatives including national study enrollment, minimal consent elements, and data governance.

LOOKING FORWARD

The goal for CGEn is to continue excelling as a leader in genomic science by fostering collaboration across its nodes to support large-scale projects. CGEn plays a crucial role in enhancing Ontario's and Canada's global presence in genomics and aims to sustain its track record of scientific excellence through expert staff, cutting-edge infrastructure, and continuous technological innovation.

CGEn continues to strengthen Canada's role in genomics globally. As an example, HostSeq allowed Canada to contribute to the worldwide COVID-19 Host Genetics Initiative, demonstrating readiness and capability to generate and share valuable data. This collaboration underscores Canada's commitment to leading and supporting large-scale population studies and positions CGEn as a trusted partner in international genomics research.

CHX
CHX Technologies Inc.
Advancing prevention in oral health

CHX Technologies Inc.

www.chxtechnologies.com

Sector: Pharmaceuticals

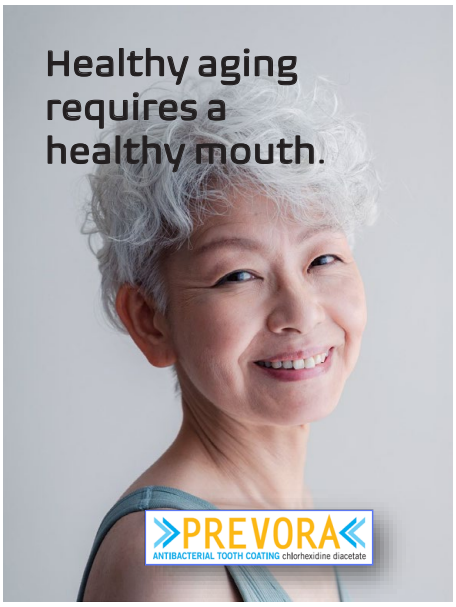
Countries/ markets of focus: Canada, the UK, Ireland (Reference Member State in the EU) and the EU. Phase III studies for FDA approval are expected to commence in 2025-2026.

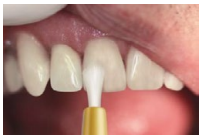
Year founded: 2000

Number of employees: 4

Projected number of employees in 3-5 years: 10

Recent Major Investments/Acquisitions: Selling of $48 million for the EU and UK marketing rights in 2024.





Prevora is a clear, medicated coating which helps manage harmful bacteria on your teeth & gum line.

Your healthcare provider applies Prevora quickly & painlessly, according to a treatment plan to improve your oral health.

Prevora patients commonly enjoy years of no cavities and no gum disease. They save money too.

Prevora is rated by seniors as "very important" and "very beneficial to my genera health".

Visit Prevora.com
or email: info@prevora.com

COMPANY OVERVIEW

CHX Technologies has developed and gained multiple approvals of a new standard of care for the most common and most expensive chronic disease in North America and the EU -- poor oral health. CHX's procedure called Prevora works to reduce the harmful bacteria in the mouth which cause cavities and gum disease. Years of clinical studies in high-risk adults show Prevora is very safe, very effective and very much preferred by the patient and many providers. Prevora also enables the integration of dental care with medical care and overcomes access problems common to dental care because (a) it is a quick procedure which can be conducted outside the dental practice (b) it requires no special equipment and minimal training of nurses, PSWs, pharmacy personnel and (c) it is painless with no anxiety and dental fear. Prevora is a first-in-class approach to improving oral health, which is a predicate to disease management of many other chronic diseases such as diabetes, frailty, malnutrition, systemic inflammation, mood disorders, hypertension and confusion.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Prevora is the first treatment which prevents dental decay and treats gum disease simultaneously; this significantly improves its application and health economics. Poor oral health is as common as hypertension in older adults, but too often goes unaddressed because of the cost of dental care, dental fear and anxiety (which 1 in 3 adults experience), and difficulties of getting to and from the dentist. Prevora overcomes these barriers to treating poor oral health as it can be administered outside of the dental practice (e.g. seniors' residences, medical practices and pharmacies), it avoids pain, and takes 10 to 15 minutes. Prevora reduces the cost of dental care by half, and is the most preferred dental treatment by older Canadians (according to 2 recent studies involving seniors). Prevora is partly paid for by the new Canada Dental Care Plan which makes integration into homecare, long-term care, pharmacies and other venues more possible. 1 in 3 older Canadians cannot or will not visit the dentist for treatment. Prevora is the only possible treatment for this major unmet need.

BARRIERS TO SUCCESS

Prevora is disruptive to Canadian dentistry as it is currently conducted because (a) it addresses the root cause of poor oral health (too many harmful bacteria in the mouth) (b) it reduces the cost of care significantly (c) it enables other non-dental healthcare professionals to deliver oral healthcare (d) it stops the "chasing of disease" which is the current model of Canadian dentistry under the fee-for-service model of employer-sponsored dental insurance schemes. Accordingly, CHX has had to innovate in its marketing channels and messaging, by way of hooking up with medical and pharmacy facilities, going direct to the patient, and working under the themes of "Healthy aging requires a healthy mouth".

KEY WINS

1. 4 drug approvals for a first-in-class therapeutic indication (prevention of dental caries in high risk adults).
2. A full panel of studies for a new periodontal indication.
3. Completion of a strategic marketing and purchase agreement for the UK and EU.
4. Completion of a validated proprietary manufacturing process.
5. Demonstration of integration of preventive oral healthcare into medical and residential care programs.

LOOKING FORWARD

CHX has these goals: (a) gain EU approval of Prevora for the treatment of both caries and periodontal disease (b) Commence Phase III studies for FDA approval of Prevora as a topical treatment of chronic oral inflammation suitable for dental and non-dental venues (c) Form strategic marketing partnerships in Canada with pharmacy chains, medical chains and providers of homecare and long-term care. CHX's market of improving poor oral health is the largest unmet need in pharmaceuticals. Given achievement of the above goals, the company will be valued at a very high level by investors, and will be a major Canadian success story in healthcare.

Council of Ontario Universities

www.cou.ca

Sector: Postsecondary Education
Countries/ markets of focus: Ontario universities
Year founded: 1962
Number of employees: 50
Projected number of employees in 3-5 years: 50

COMPANY OVERVIEW

The Council of Ontario Universities (COU) is a member association that provides a forum for Ontario's universities to collaborate and advocate in support of their shared mission to the benefit and prosperity of students, communities and the province of Ontario. Ontario's universities are partnering across sectors to strengthen Ontario's life sciences sector by ensuring a future of discovery, life-saving treatments and expanded biomanufacturing capacity that leads to job creation, economic growth and improved outcomes for all Ontarians.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

COU supports and unites universities in equipping students with essential skills, improving society, and advancing industries through comprehensive research. By contributing skilled talent and innovative research, Ontario's universities play a role in advancing the province's life sciences sector. They collaborate with industry and public-sector stakeholders to attract investment, commercialize innovations, and propel the sector forward. In the past five years, universities have secured $3.5 billion from private-sector sources for life sciences research at affiliated hospitals, including funding from business enterprises, individuals, and foundations and non-profits.

Ontario's universities are creating a highly skilled life sciences workforce through innovative programs and work-integrated learning opportunities, ensuring graduates are job-ready. Between 2017 and 2022, over 614,000 students enrolled in undergraduate life sciences programs, and more than 100,000 students enrolled in graduate life sciences programs, according to COU enrolment data.

Additionally, university researchers are partnering with industry to turn discoveries into tangible products and services. Between 2017 and 2022, over 720 life sciences start-ups were created across 10 Ontario universities, including more than 290 research-based and over 300 student-originated start-ups, according to COU data.

BARRIERS TO SUCCESS

As stated by the Toronto Board of Trade, with $27.4B in GDP contributions, 89K employees, and $1.2B in pharma-related R&D, Ontario's life sciences sector has a strong foundation. However, it is lagging behind other jurisdictions due to its inability to commercialize, scale or economically benefit directly from Ontario innovations, products or services. There is increased demand for highly skilled talent, critical lab infrastructure and commercialization capacity in Ontario. Investment in the life sciences ecosystem is crucial. This includes funding for research and innovation, expanding enrolment in high-demand programs, and building infrastructure to retain talent that might otherwise migrate to other jurisdictions. Additionally, strategic provincial matching of federal dollars in biomanufacturing and life sciences will ensure Ontario does not fall behind. In particular, a strong and financially sustainable university sector in Ontario will further ensure the province has access to the talent and research it needs propel life sciences forward.

Ontario's universities, in partnership with life sciences companies and the provincial government, need to work together to strengthen the life sciences ecosystem and all stages of its pipeline, from research discovery to commercialization, to ensure a thriving life sciences ecosystem that drives economic growth and advances health outcomes for those in Ontario and beyond.

KEY WINS

In May 2023, COU established and led the Ontario's Life Sciences Collaborative, an inaugural table with representation from industry, health care, and academia, to discuss ways we could work together to advance the sector. Their work culminated in a report, Building Ontario's Resiliency: Empowering the Life Sciences Ecosystem, outlining how Ontario could strengthen its role as a global leader in life sciences (https://bit.ly/48l5rkY).

Furthermore, universities are leveraging their talent and expertise, alongside their partnerships with hospitals, research institutes and industry, to foster innovation in life sciences and attract investment across the province. For example, an airlift pump was engineered, prototyped, and commercialized at the University of Guelph and through its Leading to Accelerated Adoption of Innovative Research program for the agriculture, aquaculture, aquaponics, hydroponics, vertical farming and water/ wastewater industries. These pumps now perform as well as or better than conventional pumps, while reducing operating costs and cutting energy consumption by 50-70%.

In addition, from 2017-22, eight Ontario universities reported that more than 60 major infrastructure projects have been built on campuses to help foster life sciences research, innovation and talent development. For example, OmniaBio Inc. launched a new biomanufacturing facility in Hamilton's McMaster Innovation Park that will pioneer treatments for many forms of cancers, cardiovascular diseases, Parkinson's disease and diabetes. The facility focuses on manufacturing leading edge treatments, discovered and researched here in Ontario and abroad.

LOOKING FORWARD

Ontario's universities will continue to partner across sectors, working with industry, hospitals and research institutes to ensure Ontario can be a global leader in life sciences. As a sector, we will continue to contribute to the highly skilled talent and ground-breaking innovation Ontario's life sciences needs in order to unleash its fullest potential.

DNAstack
https://www.dnastack.com/

Sector: Innovation & Research
Countries/ markets of focus: North America, Europe, Africa, Asia
Year founded: 2014
Number of employees: 25
Projected number of employees in 3-5 years: 150

COMPANY OVERVIEW

DNAstack is a Toronto-based company whose mission is to improve lives by unlocking the collective power of the world's genomics and health data. Omics AI is a software suite by DNAstack that enables privacy-preserving federated insights across distributed data. DNAstack is a global leader in the development of open, interoperable standards as part of the Global Alliance for Genomics & Health (GA4GH).

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Precision health is poised to transform how we receive healthcare, yet scientists and decision makers often cannot access large or diverse enough data to answer their research questions due to health data siloing. Omics AI leverages a federated approach to data connection and analysis, allowing discoveries to be made from genomics and health data across geographic and digital borders. Data federation offers significant privacy, security, and scalability advantages over the traditional "centralized" model, which requires large, sensitive datasets to be copied and transferred over the internet. With Omics AI, users are able to generate insights and train AI models on data without it leaving the control of the original data stewards—enabling secure collaboration on precision health at a global scale.

BARRIERS TO SUCCESS

By analysing and training AI models on large and diverse health datasets, prevention, diagnostics, prognostics, and care can be tailored to the individual. However, this opportunity is often lost because datasets are siloed across different institutions, provinces, countries, devices, and clouds, due to the size, sensitivity, and regulatory requirements around health data. Although most companies recognise the value of connecting their data to cloud-based federated data networks, many of these institutions are not ready to transition to cloud to enable this collaboration. Furthermore, many of the consent forms and protocols by which data stewards must oblige do not consider the evolving way scientists want, and need, to connect and analyze data with their trusted collaborators.

KEY WINS

In 2024 alone DNAstack announced new software (https://bit.ly/4fso2hF) to support genomic data analysis through direct integration with sequencing instruments, alongside a key global partnership with Pacific Biosciences (PacBio) – developer of the world's most advanced sequencing technologies. Additionally, DNAstack further cemented their leadership in the patient advocacy space through the launch of disease-specific research networks together with The Michael J. Fox Foundation and Target ALS, as well as helped expand the world's largest genomics database for Autism Spectrum Disorder together with Autism Speaks. DNAstack was also awarded the Health Privacy Leadership Award (2024) from the Canadian PICCASO Awards - a great addition to previous awards such as bein\g named a Life Sciences Ontario Company of the Year (2023) and World Economic Forum Technology Pioneer (2022).

LOOKING FORWARD

DNAstack's goal remains to advance healthcare discoveries by enabling scientists to analyze data at scale. Omics AI will also continue to serve as a distribution platform for AI-powered applications in genomics and health. For example, supporting the distribution of scientific AI models that identify the genetic causes of rare and neurodevelopmental conditions and improving cancer treatment by accurately classifying tumors based on gene expression profiles.

In 5 years DNAstack will grow to be the software provider of choice for national and international organisations and governments wanting to extend the value of their data and drive AI-based discoveries to support precision medicine.

Eisai Limited
https://ca.eisai.com/en-CA

Sector: Pharmaceuticals
Countries/ markets of focus: Eisai currently conducts business globally through 40 subsidiary companies
Year founded: 1941 Tokyo, Japan; 2011 Mississauga, Ontario Canada
Number of employees: 100

COMPANY OVERVIEW

Founded in 1941, Tokyo-based Eisai has over 80 years of history and innovation as a leading global research and development-based pharmaceutical company. Rooted in Eisai's focus on delivering human health care (hhc), Eisai Canada, founded in 2011, is on a mission to support all Canadians by creating solutions in areas where significant medical challenges and treatment gaps persist. We define our corporate mission as "giving first thought to patients and their families and to increasing the benefits health care provides," which we call our human health care (hhc) philosophy.

With approximately 10,000 employees working across our global network of R&D facilities, manufacturing sites and marketing subsidiaries, we strive to realize our hhc philosophy by delivering innovative products to address unmet medical needs, with a particular focus in our strategic areas of Oncology and Neurology. Eisai's commitment to innovative R&D and open collaboration across lines of business, industry, language and culture has resulted in an industry-leading pipeline in Neurology and Oncology. Powered by the strength of our collaborations, we discover and deliver medicines that matter to people living with Cancer, Epilepsy, Insomnia and Alzheimer's Disease.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Our hhc mission is the shared purpose that connects us to those we serve. It creates a network of powerful relationships that enable us to identify, understand and address unmet needs and healthcare disparities as we work towards achieving societal good.

Across our portfolio and pipeline, we aim to contribute to the cure of cancers and neurodegenerative conditions by exploring the depths of human biology. In oncology, our goal is to find new therapeutic approaches that accelerate progress in discovering novel treatments for difficult-to-treat cancers. Our intent is to bring transformative solutions and thinking to these healthcare challenges. As global innovators in neurology, we have dedicated over four decades of research to developing breakthroughs for Alzheimer's disease and dementia. Eisai has been searching for a human-centric approach to Alzheimer's Disease, a treatment that only manages symptoms was not enough—we sought to genuinely make a difference, to not only soften the impact of Alzheimer's related decline but to actually buy back time for patients and their care partners. We have been working with clinicians, researchers, patients, caregivers, patient organizations, and other stakeholders to build consensus and actionable solutions on how to improve the patient path to diagnosis and treatment.

BARRIERS TO SUCCESS

As a member of Ontario's vibrant life sciences ecosystem, Eisai continues to advocate for the advancement of the health of Ontarians and all Canadians, but we must do better. New medicines aren't always available or accessible when Canadian patients need them. Canada currently ranks last in the G7 and 19 out of 20 peer OECD countries in the time it takes for patients on public plans to access new medicines. Canada must reduce the time it takes to get much needed medicines to patients. We will continue to work with organizations like Life Sciences Ontario, BIOTECanada, and Innovative Medicines Canada as well as governments across Canada to make these much-needed improvements a reality.

KEY WINS

Since Eisai Limited was established in Mississauga, Ontario in 2011, we have grown from 5 employees to almost 100 today, and we continue our growth trajectory. The key to our success is that we are a patient focused company that works to improve patients' lives. We are driven by science. We are a small, nimble, result-oriented company that exceeds expectations. It is through this that we are able to recruit high potential overachievers who act like owners, work like a team and are passionate about our products, our customers, and most importantly the patients we serve. At Eisai, we each make a difference, every day. Our employees are required to devote a portion of their time to meeting and understanding patient needs. These insights fuel our thinking and ensure that Eisai is always looking for solutions that will benefit patients first.

In a notable example of our hhc mission, Eisai Limited collaborated with health charities, patients, caregivers, advocates, primary care networks, and industry stakeholders to enhance the diagnosis and care pathway for people with mild Alzheimer's Disease. This collaborative effort focused on co-learning and a people-first approach, uncovering a diagnosis disparity that they are now working to address together with those affected by dementia, fostering hope and collective action.

LOOKING FORWARD

At Eisai Limited, we are deeply committed to continuing to be a vibrant participant in the Ontario life sciences ecosystem. Our growth trajectory will continue, and we look forward to opening our new expanded office footprint in Mississauga later this year – where we will increase our footprint by 50%. We have a strong history of continued investment in research and development and annually invest over 9% of our revenues back into research.

Furthermore, we invest in recruiting and retaining our robust pipeline of talented employees. Through collaborations with some of Ontario's leading post-secondary institutions such as the University of Toronto Pharmaceutical Residency Program, Queen's University Pharmaceutical and Healthcare Management & Innovation Program and the University of Toronto Mississauga Master of Biotechnology, we have supported the next generation of innovators through residency, internship, and co-op placements where they gain practical knowledge and experience in all aspects of business and science. Many of these students continue full-time employment with Eisai in Mississauga following the completion of their academic studies.

We are at an exciting and pivotal time in the innovative pharmaceutical industry and we at Eisai look forward to continuing to bring our hhc mission to life. We are relentless in our efforts to break through on a number of fronts from immuno-oncology to Alzheimer's Disease and dementia. We will do this through the development of targeted therapies and precision medicines to benefit more patients and reduce unmet needs across these difficult to treat conditions.

FluidAI
Data-Driven Patient Recovery

FluidAI Medical
https://fluidai.md/

Sector: Med Tech
Countries/ markets of focus: Canada, Gulf Region, US, and Europe
Year founded: 2014
Number of employees: 60
Projected number of employees in 3-5 years: 180
Recent Major Investments/Acquisition: Series A in 2023 - $15M USD

COMPANY OVERVIEW

FluidAI Medical is a medical technology company using artificial intelligence to enhance patient care throughout their surgical journey. The company has pioneered the development of Stream™ Platform, an innovative patient monitoring system that uses advanced predictive modelling and novel sensor technology to facilitate early prediction of complications following gastrointestinal (GI) surgery. As FluidAI's first in-market product, Stream™ Platform includes Origin™, an inline monitoring device that continuously measures pH and electrical conductivity in patient effluent, and Stream™ App, which analyzes patient data to provide real-time updates about the patient's status. FluidAI's solution empowers clinicians with robust predictive analytics and advanced visualization tools to facilitate early prediction of complications, transforming healthcare from reactive to proactive, to improve patient care, reduce length of stay, and reduce costs. Based in Kitchener, ON, FluidAI is committed to transforming healthcare delivery in Canada and globally alongside top clinical and academic partners. By developing these innovative solutions, the company seeks to strengthen Canadian medical technology manufacturing, enhance the local job market, and establish Canada as a global leader in healthcare innovation.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

The current postoperative standard of care is delayed and reactive, using a "wait and see" approach to monitor symptoms that are often non-specific. This means that patients with undetected complications get sicker, and patients who are healthy stay longer unnecessary. Addressing this crucial gap in healthcare, FluidAI's Stream™ Platform utilizes predictive models and novel sensors to provide real-time, continuous updates about the patient's status, enabling the detection of postoperative complications up to 80.

BARRIERS TO SUCCESS

Like most companies in the medical technology space, FluidAI has had to overcome several challenges, particularly in navigating the long procurement cycles and budget constraints within the healthcare industry. The lack of mature innovation pathways to procurement has made it difficult to quickly integrate new technologies like Stream™ Platform in clinical settings. Additionally, FluidAI has observed a lack of interoperability between different healthcare provider systems, which could hinder the data integration and usage of Stream™ Platform in hospitals and clinical institutions.

KEY WINS

In 2023, FluidAI successfully began its Limited Market Release (LMR) in Canada and Saudi Arabia, marking a significant milestone in introducing our innovative products into hospitals and enabling real-world testing of the Stream™ Platform. These achievements were driven by a passionate team committed to revolutionizing postoperative monitoring through proprietary hardware and AI-driven solutions.

Our success is also attributed to securing $15 M USD in Series A funding, alongside $1.4 million CAD from the Advanced Manufacturing and Innovation Competitiveness (AMIC) cluster, which enabled us to scale production and refine our manufacturing processes.

Our team's relentless focus on innovation has led to collaborations with key medical distributors and partnerships with top Canadian hospitals, including the University Health Network, Hamilton Health Sciences, and St. Michael's Hospital. These partnerships have been essential in gathering clinical data and validating our platform's efficacy. FluidAI has also partnered with industry leaders such as Medtronic, Cleveland Clinic, and Mayo Clinic, paving the way for future growth.This unique combination of technological leadership, strategic partnerships, and a passion for patient care has fueled our success and continues to drive our expansion.

LOOKING FORWARD

Over the next five years, FluidAI aims to become a leader in AI-powered clinical decision support systems by developing interpretable models that leverage robust EHR data and novel sensor measurements to provide accurate, clinically relevant risk predictions across the entire patient journey. FluidAI's ongoing product advancements will elevate the Stream™ Platform's capabilities, enabling reliable patient monitoring and personalized care.

As an Ontario-based company, FluidAI will continue to expand strategic partnerships with industry leaders and top clinical institutions in Canada and abroad, staying at the forefront of technological innovation and enhancing predictive models. FluidAI aims to deliver comprehensive solutions that drive innovation, enhance patient care, and optimize hospital efficiencies by integrating expertise in medical devices, data analytics, and academic research.

FluidAI also plans to expand its commercial footprint into the US, Europe, and Asia, validating the performance of the Stream™ Platform in real-time clinical settings and driving profitable growth. Ultimately, FluidAI's goal is to seamlessly integrate cutting-edge AI solutions into clinical workflows, advancing healthcare innovation both in Canada and globally.

FroggaBio Inc.
www.froggabio.com

Sector: Med Tech
Countries/ markets of focus: Canada, US
Year founded: 2009
Number of employees: 25

COMPANY OVERVIEW

FroggaBio Inc. is a Canadian company dedicated to providing innovative products and solutions for life science research and clinical laboratories. We offer a broad range of high-quality laboratory equipment, consumables, and reagents used in fields like molecular biology, cell culture, genomics, and diagnostics. Our tools empower scientists and healthcare professionals to conduct experiments, research, and diagnostic tests that advance medical science and improve healthcare outcomes.

Celebrating our 15th anniversary in 2024, we strive to be at the forefront of emerging applications, supporting research and clinical institutions with cutting-edge, reliable, and cost-effective products. Our strong partnerships with leading manufacturers ensure access to the latest technologies, and we are committed to delivering exceptional customer service, technical support, and fostering long-term collaborations with Canada's research and healthcare communities.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

By staying at the forefront of emerging trends, FroggaBio is able to provide cutting-edge solutions like the AS-410M, the only system of its kind in the world. This groundbreaking technology automates the processing of tissue samples in pathology labs, eliminating much of the manual work involved in preparing and analyzing samples. FroggaBio is proud to have brought this revolutionary solution to Canada, significantly improving the speed, accuracy, and efficiency of lab workflows. In healthcare settings, where timely diagnosis is critical, the AS-410M enables pathologists to deliver faster, more reliable results, allowing for earlier intervention and a strong impact on better patient care.

BARRIERS TO SUCCESS

One of FroggaBio's biggest challenges was competing against well-established U.S. companies when we first entered the market. Convincing Canadian research and clinical institutions to buy from a local Canadian company rather than sourcing from the U.S. required a significant effort. We had to demonstrate that we could provide the same high-quality products with better customer service, faster delivery, and a deeper understanding of local needs. This challenge was amplified during the COVID-19 pandemic, when U.S. companies began keeping stock for themselves and shipping less to Canada. Despite the supply chain disruptions, FroggaBio remained committed to meeting Canadian demand. We were able to continue providing essential goods to research and clinical labs, ensuring that the Canadian healthcare system was supported during that critical time. This resilience further solidified our position as a trusted supplier in Canada.

KEY WINS

FroggaBio's key successes include growing from a small provider of DNA ladders and filter tips into a 25-person company serving all of Canada and expanding into the U.S. market. This growth is driven by our focus on quality, reliability, and strong customer relationships, enabling us to serve both research and clinical markets. These achievements are the result of understanding customer needs, partnering with top manufacturers, and offering cutting-edge solutions. Our team's expertise and our long-term relationships with the scientific and healthcare communities have also been critical. By staying innovative, FroggaBio continues to drive progress in research and healthcare.

LOOKING FORWARD

As FroggaBio celebrates its 15th anniversary in 2024, our primary goal is to continue driving innovation in life science and clinical labs by expanding our offerings of automated solutions to improve lab efficiency and diagnostic accuracy. In the next five years, we aim to solidify our presence in the U.S. market, build stronger relationships with the clinical sector, and broaden our reach by introducing more cutting-edge technologies that streamline workflows in both research and healthcare.

We envision FroggaBio as a leader in providing automated solutions that empower labs to operate more efficiently, reducing manual processes while improving patient outcomes. As we grow, we plan to increase our workforce, further develop our product line, and continue establishing ourselves as a key partner for laboratories seeking advanced, reliable, and innovative tools.

FUJIFILM
SONOSITE

FujiFilm Sonosite
https://www.sonosite.com/ca

Sector: Medtech
Countries/ markets of focus: Global network of direct sales teams and distributors
Year founded: 1999
Number of employees: Approx. 1000 worldwide

COMPANY OVERVIEW

FUJIFILM Sonosite, Inc. is the innovator and world leader in bedside and point-of-care ultrasound, and an industry leader in ultra-high frequency micro-ultrasound technology. Headquartered near Seattle, the company is represented by a global distribution network in over 100 countries. Sonosite's portable, compact systems are expanding the use of ultrasound across the clinical spectrum by cost-effectively bringing high-performance ultrasound to the point of patient care. For more information, please visit www.sonosite.com.

FUJIFILM Holdings Corporation, Tokyo, leverages its depth of knowledge and proprietary core technologies to deliver "Value from Innovation" in our products and services in the business segments of healthcare, materials, business innovation, and imaging. Our relentless pursuit of innovation is focused on providing social value and enhancing the lives of people worldwide. FUJIFILM is committed to responsible environmental stewardship and good corporate citizenship.

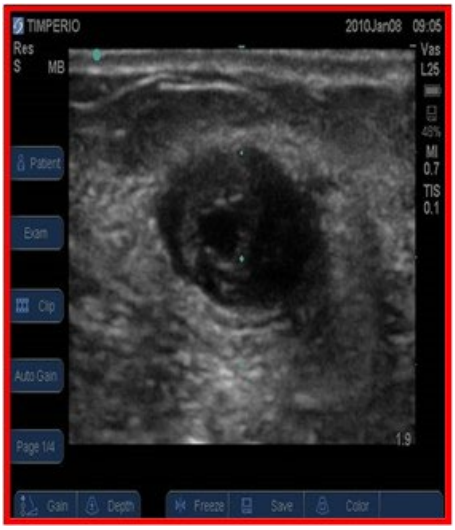
WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

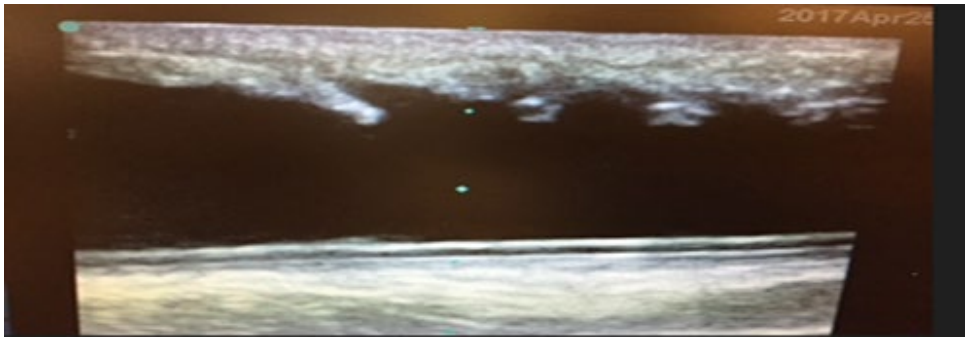
St. Joseph's Healthcare Hamilton provides a great example of types of healthcare challenges FUJIFILM Sonosite is helping to solve. St. Joseph's Healthcare Hamilton utilizes FUJIFILM Sonosite's Point-of-Care Ultrasound equipment to enhance care for dialysis patients. Dialysis patients typically visit the hospital or dialysis center several times a week for 3-5 hours to undergo treatment, which involves connecting to a dialysis machine that cleans their blood through an arterio-venous (AV) graft or fistula. This process requires two needles to access the blood, and with each insertion comes the risk of damaging the AV access site, which can lead to complications like infiltrations, inflammation, and pain.

To mitigate these risks, St. Joseph's has invested in multiple point-of-care ultrasound systems. The ultrasound serves as an additional assessment tool to improve accuracy in cannulation in arterio-venous (AV) accesses used for hemodialysis. Ultrasound guided cannulation allows
a) Determination of depth and length of cannulation segment
b) Selection of the best cannulation site for rotation of needle sites and choosing buttonhole sites
c) Creation of buttonhole tunnel tracks with consistency
d) Detecting thrombosis/clots, narrowing/stenosis in vessel.

Examples of how we use the ultrasound in our daily dialysis sessions:

- **Clotted Access** - a physical assessment indicated a lack of blood flow in a patient's AV access. An ultrasound assessment revealed that the AV access was clotted, confirmed by the absence of color in the ultrasound (image), where normal access typically shows a mix of blue and red (venous and arterial blood). This visualization prevented the clinician from inserting needles into the clotted access, which could have resulted in infection and further complications. With this critical information, the clinician was able to proactively develop an alternative plan, ensuring the patient could still receive safe dialysis treatment that day.
- **Overuse of AV Grafts** - ultrasound assessment is used to review AV grafts, looking for overuse, which may indicate it is time to plan an alternate AV access and/or repair.
- Pseudoaneurysm - AV access assessment for pseudoaneurysm identification allows early intervention for this known complication of cannulation to hemodialysis arteriovenous grafts (AVGs) and fistulas (AVFs). Pseudoaneurysm is associated with an increased risk of thrombosis, bleeding, infection, pain, and failure of attempted hemodialysis.
- Cannulation after Surgical Revision - ultrasound allows the mapping of safe areas to cannulate in an access that also needs to rest and heal after a surgical revision procedure.
- Infiltration/Hematoma formation - Ultrasound assessment used to assess the infiltration and guide cannulation away from the areas to allow it to heal.





Gilead Sciences Canada Inc.
https://www.gilead.ca

Sector: Pharmaceuticals
Countries/ markets of focus: Global
Year founded: 2006 in Canada
Number of employees: Approx. 570 in Canada
Recent Major Investments/Acquisitions: CymaBay Therapeutics, Inc

COMPANY OVERVIEW

Gilead Sciences Canada, Inc. ("Gilead") is the Canadian affiliate of Gilead Sciences, Inc. Earlier this year Gilead recommitted its business operation in Ontario with the launch of a new office supporting full-scale commercial, medical, regulatory, finance and legal operations for both Gilead Sciences and Kite, a Gilead Company, in Canada.

Gilead supports Canada's goal of creating a vibrant life sciences sector, investing significantly across our operations. Our innovation is helping people with diseases and conditions that include cancer, viral hepatitis, HIV, COVID-19 and primary biliary cholangitis (PBC). Our ambitions have helped with the development of a cure for hepatitis C, and to transform the treatment and prevention of HIV. In the treatment of blood cancers, Chimeric Antigen Receptor (CAR)-T-cell therapy represents a revolutionary advancement, offering hope and life-saving options for patients who previously faced a poor prognosis and limited alternatives. We continue to set our sights on advancing treatment options for more viral diseases and cancers, and we understand the importance of uniting all partners – community organizations, government, healthcare practitioners, and academia – who share the same aim.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Gilead maintains a strong commitment to promoting equitable healthcare. To that end, ensuring patients can access innovative medications and preventative care is a vital component of our mission. Gilead collaborates closely with communities around the world to expand patient access, improve health equity, and fulfill their obligations as a responsible corporate entity. In 2023, Gilead made its largest commitment to health equity for Indigenous communities in Canada through the GLOWS Indigenous grant, pledging $4 million over three years to help address inequities in HIV and Hep C care.

Ontario is the location where almost half the global pill production takes place for Gilead. Gilead is also proud to sponsor over 40 active clinical trials across Ontario, in therapeutic areas such as oncology and virology, providing early access to our therapies to patients who need them most. Our focus remains on advancing medicines to ensure today's breakthroughs will become tomorrow's cures.

BARRIERS TO SUCCESS

System capacity and connectivity to care pathways limit the ability to further expand these highly innovative treatments like CAR-T and HIV prevention. Access timelines can impact our ability to reinvest significant dollars in R&D for future medicine development.

KEY WINS

We are a fast-growing company with clear leadership in HIV and Oncology.

Building system expertise and partnerships within jurisdictions is critical, as well as manufacturing capacity and reliability when it comes to life saving therapies such as our CAR-T therapies marketed for oncology and virology.

Results from Gilead's PURPOSE clinical program, the most comprehensive and diverse program for any investigational HIV pre-exposure prophylaxis (PrEP) medication conducted to date, have demonstrated the potential to transform the prevention of HIV and help to end the epidemic.

In 2023, Gilead invested over $100 million in Research and Development (R&D) in Canada. Through such investment, Gilead has consistently exceeded the Patented Medicine Prices Review Board (PMPRB)'s R&D-to-sales ratio target for industry, with a ratio of 13.5% in 2023. This R&D investment includes $12.5M spent in Ontario on the research and development of medicines.

LOOKING FORWARD

Gilead aims to deliver 10+ transformative therapies that address the needs of people living with HIV, cancer, and liver disease.

In partnership with community and governments, we will continue to work towards achieving the UNAIDS 2030 targets and end the HIV epidemic for everyone everywhere and eliminate the viral hepatitis as a public health threat by 2030.

In oncology, we are rapidly building a diverse pipeline with a focus on depth and breadth that is guided by our scientific framework. Our work is driven by our talented team that strives to deliver the best possible outcomes for people with overlooked, underserved, and difficult-to-treat cancers. We will continue to advance significant growth in this area, internally and through collaborations, as our pipeline and clinical development program mature and expand.

GMP Engineering
https://www.gmpeng.com/

Sector: Engineering & Consulting - Life Sciences Industries

Countries/ markets of focus: Canada, USA, Europe - Life Sciences (Pharmaceutical and Bio-Pharmaceutical)

Year founded: 2003

Number of employees: 40

Projected number of employees in 3-5 years: 60

COMPANY OVERVIEW

GMP Engineering Inc. is a leading process engineering and consulting firm serving the life sciences industry. Founded and headquartered in Oakville, Ontario, Canada, the company has expanded globally with offices in the USA and UK. GMP Engineering supports a wide range of sectors, including API manufacturing, biotechnology, oral solid dose, plasma-derived protein manufacturing, aseptic fill-finish, and consumer health products.

The firm's expertise spans critical areas such as chemical synthesis, antibody drug conjugates (ADCs), high-potency APIs, vaccines, viral vectors, and aseptic production. GMP Engineering offers full project life-cycle services, from feasibility and conceptual design to detailed engineering, commissioning, and qualification. By adopting a "process-out" design approach, the company ensures facility design aligns with production goals.

Leveraging cutting-edge visualization tools like 3D modeling, make-a-batch simulations, and virtual/augmented reality, GMP enhances client engagement and project efficiency. Known for solving complex, unique challenges, GMP Engineering serves as a trusted partner for clients pushing the limits of innovation in the life sciences industry.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Our clients are pushing the boundaries of the life sciences industry to deliver innovative new treatments, therapies and cures – this often requires "First-of-a-kind" solutions. These solutions require a flexible and collaborative mindset between end users, designers, equipment suppliers and fabricators, driven by GMP Engineering's process definition.

An example includes our work on new ADC and Peptide manufacturing facilities, as this new technology requires a blend of traditional chemistry (often potent) and biologics, thorough understanding of each is needed to achieve a harmonious product. Additional challenges include the need to utilize cutting edge technology within a hazardous environment, materials have potency or flammability, that traditionally would only be used within smaller scale labs – therefore custom containment solutions and integration is required to protect product and operators.

BARRIERS TO SUCCESS

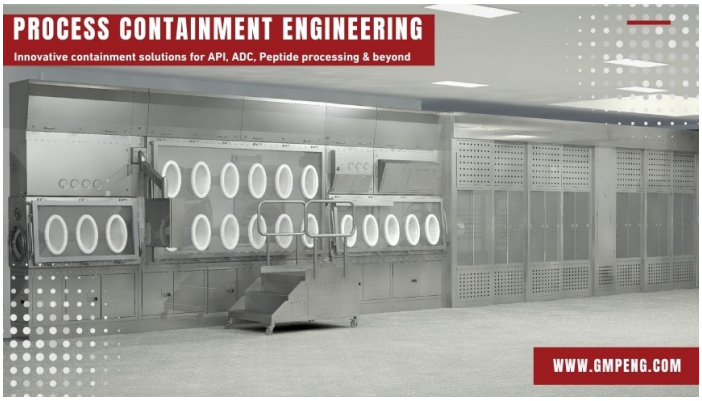
Recent economic uncertainty for our clients combined with higher interest rates have had a wait-and-see attitude for projects. Our inability to predict when a client will start a project has been a barrier to forecasting.

KEY WINS

GMP Engineering has been fortunate to be a part of several major projects critical to Canada's strategy for pandemic preparedness including the original Medicago Vaccine Plant and recent BioVectra Biologics Manufacturing Center Expansion. These successes are in combination with our work outside Canada's borders as we support other major projects - such as the new Merck Facility, Rahway NJ, through our US office. We are continuing to broaden our range of support and have now officially incorporated in the United Kingdom as GMP Engineering UK Limited – with plans to finalize a brick-and-mortar location by end of 2024.

LOOKING FORWARD

In the next 5 years, GMP Engineering aims to continue to expand our reach within the life sciences industry. We will continue to work with our partners and clients to deliver innovative new process design solutions, while adhering to the highest standards of quality.



HDAX Therapeutics
https://hdaxtx.com/

Sector: Biopharma SME
Countries/ markets of focus: Canada, USA, Europe
Year founded: 2021
Number of employees: 9
Projected number of employees in 3-5 years: 30

COMPANY OVERVIEW

HDAX Therapeutics is pioneering next-gen therapeutics for better patient outcomes. We are overcoming conventional challenges of HDAC6 targeting approaches with our novel dual binding mechanism to deliver a safe, effective, and long-lasting therapeutic solution for diseases driven by microtubule dysfunction, such as cardiometabolic diseases and neuropathies.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Although HDAC6 is a validated clinical target whose inhibition can be an effective & safe strategy to treat and fully reverse diseases like peripheral neuropathies and cardiometabolic diseases, there are no FDA-approved HDAC6-targeting drugs, and most pipeline candidates suffer from poor target engagement, toxicity and suboptimal pharmacokinetics profile. Our goal is to transform how HDAC6 can be targeted to overcome conventional challenges and deliver a truly meaningful drug to patients.

Driven by over 7 years of research and track record for innovation, HDAX has developed a next-gen solution which features a proprietary 2-site binding mechanism, allowing us to "grasp" onto the target with 2 hands while others do so with only 1 hand, to deliver a platform of ultrapotent, highly selective small molecules to tackle critical drug design challenges.

BARRIERS TO SUCCESS

One of our greatest challenges has been securing capital as a preclinical-stage biotech in Canada. With limited local funding, we expanded our search to the U.S. for investment for early-stage funding, a trend we expect to continue. Additionally, regulatory hurdles and the high costs and complexities of clinical trials are significant changes in developing novel therapeutics. To tackle these, we are focused on building a strong strategy early on by recruiting top industry experts to advise is through these critical stages.

KEY WINS

HDAX has recently completed their seed financing of over $5M CAD round to nominate a development candidate while expanding our management, R&D, and board of directors! (https://bwnews.pr/4fi6MLI)

LOOKING FORWARD

Conventional drug design approaches have been constrained by their ability to effectively target disease driver proteins, resulting in the failure to translate into meaningful drugs for patients. Our proprietary technology unlocks a novel binding mechanism to key biological molecules, for improved targeting and ultimately, better patient outcomes. We are initially focused on HDAC6, a validated target for conditions such as neurological and cardiometabolic diseases, where treatment options remain inadequate. By developing differentiated small molecules, we aim to set new standards in these disease areas. Our vision is to lead the field by advancing our potentially best-in-class candidates towards clinical development. With growing validation of HDAC6 as a critical therapeutic target, we see vast potential for our technology to address unmet needs across a range of diseases. Beyond our scientific aspirations, we are deeply committed to supporting underrepresented women in leadership as a female-founded and led biotech company.

Pimyupa Manaswiyoungkul, COO & Co-Founder, HDAX Therapeutics; Nabanita Nawar, CEO & Co-Founder, HDAX Therapeutics.

HDAX Therapeutics Team (Murugan Subaramanian, Weike Liang, Bin Yan, Pimyupa Manaswiyoungkul, Nabanita Nawar, Harsimran Garcha, Bertrand Le Bourdonnec, Chao Chang)

Health Innovation Hub (H2i)
https://h2i.utoronto.ca/

Sector: Innovation & Research Health Accelerator

Countries/ markets of focus: Canada; Several countries/markets throughout Africa through the Africa Health Collaborative.

Year founded: 2014

Number of employees: 12 (3 full-time, 9 part-time)

Recent Major Investments/Acquisition: Doubled operating budget from $250K/yr to $500K/yr.

The H2i executive team celebrated a decade of operations at the H2i ten-year anniversary celebration in September 2024.

COMPANY OVERVIEW

Health Innovation Hub (H2i) is the University of Toronto's health-focused campus linked accelerator, housed at the Temerty Faculty of Medicine. Since 2014, H2i has worked to mobilize talent and translate research to foster a thriving, efficient and resilient Canadian health system fueled by scientific and technological innovation, creative business models, and extensive lived entrepreneurial experience. It does this by providing tailored mentorship and innovative support to founders and their teams, from early stages of development through to scaling. Over the past decade, H2i has supported 750+ early-stage (pre-seed/seed) health ventures (average of 3-5 employees/venture), who have generated more than $520 million CAD to-date. In 2023-24 alone, H2i supported 248 ventures and hosted 147 entrepreneurial education events, attended by over 4500 participants.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

University of Toronto (UofT) recently ranked second globally for clinical medicine, and earned top ten spots for multiple health fields, providing the accelerator with cutting edge innovations. The rankings highlight the University's enormous scope of talent.

As the UofT health commercialization training unit, H2i facilitates meaningful change to the broader health economy, ensuring that talent translates into scalable solutions for macro level problems, HQP jobs, and investment into Canada's economy. Through its real-world entrepreneurial training and work connecting industry experts and key opinion leaders to ventures, it is contributing to transforming the cultural mindset of health science in Canada. H2i catalyzes healthcare impact to address challenges to population health in Canada and internationally.

H2i's unique continuum support approach cultivates an ever-growing community of mentors and partners. In 2023-24, H2i had 160+ mentors who provided 2600+ mentorship hours, and 118+ partner organizations who expand operating capacity through collaborative initiatives. This broad-reaching community allows for cross-sectoral collaboration and outstanding EDI initiatives which H2i leverages to stimulate debate and actionable advocacy for furthering healthcare impact. For example, in 2023-24, H2i and MaRS brought together entrepreneurs, academia, hospitals, government and industry to discuss current needs and future possibilities for wet-lab scarcities in Southern Ontario.

BARRIERS TO SUCCESS

Healthcare founders face several challenges for which H2i is limited in its ability to solve on its own for the ventures. For example, a lack of hotelling wet-lab spaces or accessible early-stage/risk taking funding streams for life science ventures provide barriers which H2i seeks to address through advocating for broader system change. Further, a continued area of exploration for H2i is how to create effective support for pre-accelerator stage ideas. Many healthcare innovations end before they start, getting stuck or abandoned while in the ideation phase. Finally, accelerators like H2i are further constrained in their ability to contribute to a venture's match, to access non-dilutive funding opportunities, based on their own limited operating budgets. Expanded programming and scope will continue to rely on greater attention and prioritization of health commercialization and research translation training support.

KEY WINS

Major successes include the success and growth of programs created in response to the expressed needs of founders:

- H2i's FemSTEM program is dedicated to inspiring, engaging and celebrating women entrepreneurs. In 2017, only 5% of H2i ventures were women-founded. Since the program expansion in 2021, women-led companies have risen from 28% to 56%.
- In 2021, H2i joined an international coalition strengthening and connecting health entrepreneurial ecosystems through knowledge exchange and collaborative practice on a global scale. Health Entrepreneurship (HENT) is one of three pillars within the broader Africa Health Collaborative, of which H2i is a partner. The HENT pillar is supporting initiatives driven by eight innovation hubs across the African continent.
- In 2021, H2i held focus groups with ventures, investors and investment lawyers to understand what more could be done to help prepare ventures in earlier stages to be ready to obtain investment in later stages. The findings, alongside subsequent consultation with ventures and industry experts, led to the publishing of H2i's Investor Program White Paper in 2023. In 2023-24, H2i addressed needs outlined in the White Paper through three tailored investment workshops with an additional five workshops in the coming year, that are accelerating its impact on the community.

LOOKING FORWARD

As it enters its second decade of operations, H2i will continue to focus on delivering tailored entrepreneurial training and endeavor to create funding and less risk adverse investment in Canada to support early-stage health ventures. Further, H2i will continue to seek opportunities to create equity- and user-informed programs which provide support to all aspiring entrepreneurs. As our healthcare system faces increasing challenges, the H2i team seeks to continue advocating for innovation that delivers health commercialization. Through research and publications to examining cross-sector use cases, H2i will identify opportunities for innovative collaboration with Canadian and international partners.

HealthPartners
www.healthpartners.ca

Sector: Not-for-profit
Countries/ markets of focus: Canada
Year founded: 1988
Number of employees: 15
Projected number of employees in 3-5 years: 18

COMPANY OVERVIEW

HealthPartners brings workplaces, health charities and the patients and families they support together in a single, shared purpose — to improve the lives of people across Canada who are living with serious illness through innovative workplace fundraising campaigns. Over our 35-year history, we've empowered over 600,000 employees who have supported with more than $230 million dollars in donations to 17 of Canada's most respected health charities, which have supported life-changing research, programs and community services, benefitting millions of people in Canada.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Did you know that nearly 60% of the Canadian workforce is living with at least one chronic medical condition? Serious illness is on the rise, the healthcare system is spread thin and donations to health charities are on the decline. In fact, the 17 health charities we work with saw donations decline by nearly $74 million between 2019 and 2021. We believe that the solution to this problem starts in the workplace. Workplaces have the power to save health charities. In 2023 alone, our collective efforts enabled these 17 charities to directly serve over 30 million people, provide programs to over 5.6 million people, and invest $114.4 million in crucial medical research. These numbers are a testament to what we can achieve when we work together. Running a HealthPartners fundraising campaign is a great way to bring more purpose to your workplace while helping us build a healthier Canada. And it's FREE and TURNKEY– in this purpose economy, the ROI is tough to dispute.

BARRIERS TO SUCCESS

Giving Gap: Like all charities, HealthPartners is experiencing a "giving gap" as fewer people in Canada are choosing to make charitable donations. Even as demand spikes for the charitable support these organizations provide, people across Canada are now donating significantly less to charity than even five years ago.

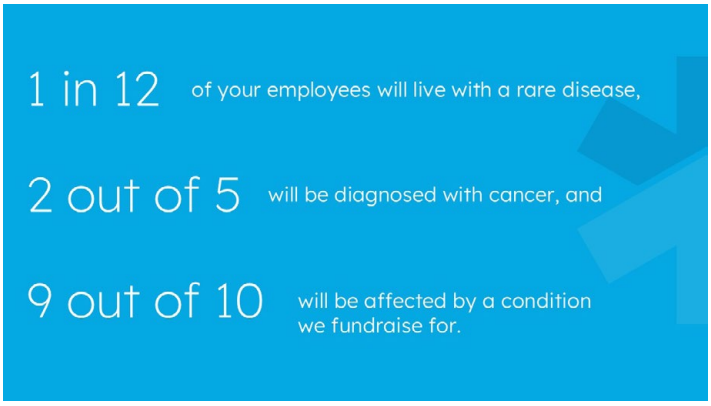
Tight Budgets: We know one major barrier to corporate philanthropy is a tight budget. This is why we've worked hard to build a business model where we can offer significant benefits to employers – helping build brand and reputation as an organization that commits to supporting the community - without being a line item on any budget.

KEY WINS

- A legacy of success supporting and raising funds through Canada's largest annual workplace campaign – Government of Canada Workplace Charitable Campaign (GCWCC).
- Fundraising experience and expertise resulted in nearly $10M in pledged revenue in 2023.
- Our commitment to transparency and accountability has earned HealthPartners a 4-star rating with Charity Intelligence.
- We recently expanded our membership – the national charities we raise funds for – with the addition of our 17th member: Mental Health Commission of Canada. We can now proudly say we support the physical and mental wellbeing for all people living in Canada.

LOOKING FORWARD

HealthPartners has a strong three-year strategic plan that will enable us to build our annual revenues back above $11 million by 2026. We'll do that by amplifying and learning from the experiences of people affected by serious medical conditions across Canada with the establishment of our Health Advisory Networks, which will underpin our "25 by 25" plan to add 25 new corporate campaigns by 2025. This will enable our charities to deliver even more patient support and fund even more health research in Canada.



Hyivy Health
https://hyivy.com/

Sector: Med Tech
Countries/ markets of focus: United States, Canada
Year founded: 2019
Number of employees: 10
Recent Major Investments/Acquisition: September 2024 - $2M Seed Round

Rachel Bartholomew,
Founder & CEO, Hyivy Health

COMPANY OVERVIEW

Hyivy Health is a Canadian medical device company headquartered in Kitchener-Waterloo created after founder Rachel Bartholomew's recent fight with cervical cancer. Hyivy is creating remote therapeutic and monitoring system for the more then 300 million patients with pelvic floor dysfunction causing chronic pelvic pain.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

The data sets from the Hyivy system sees promising and exciting results for not just the treatment of pelvic pain, but also potential diagnostic capabilities across the more than 51 conditions associated with pelvic pain that affect women at any stage of life. Hyivy's approach serves as a medical connective bridge between patient and healthcare professional to provide the first ever pelvic and gynecological benchmarking/baselining, real-time monitoring, and therapeutic intervention through the clinician software portal, all while the patient uses the Hyivy device and patient app from the comfort of home.

BARRIERS TO SUCCESS

As Hyivy Health continues to innovate on solutions for the treatment of pelvic pain as a medical device, we continue to encourage investors and other stakeholders to support our mission. As a prominent Canadian FemTech company working to bridge the gap between patients and clinicians, we're working to dismantle the stigma, shame, and lack of education around this critical issue.

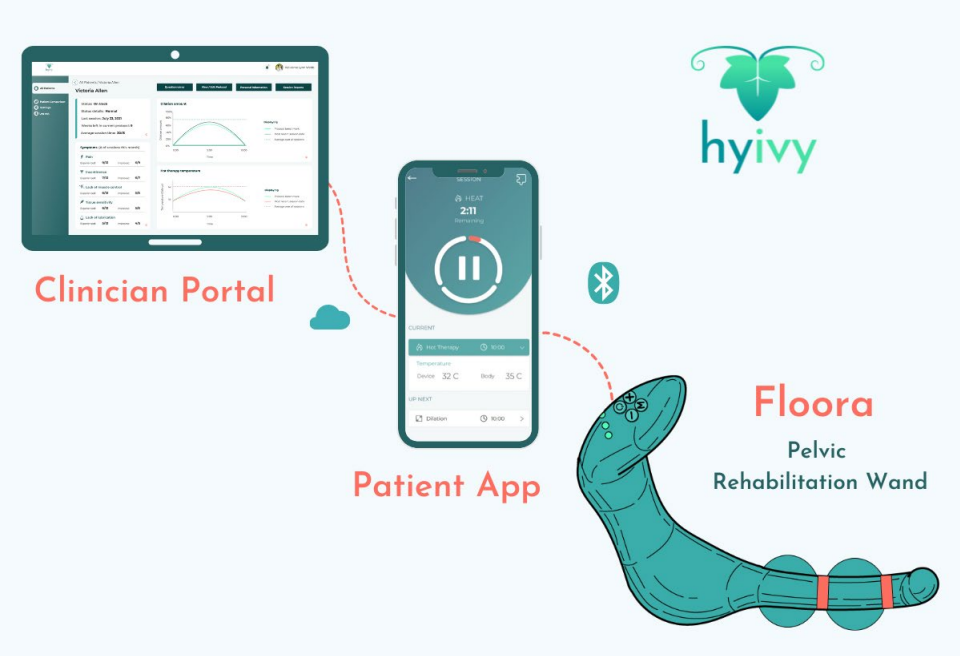
KEY WINS

Building from recent Health Canada approvals for Investigational Use, Hyivy Health has spearheaded two revolutionary clinical trials with world-class researchers, updating the 84-year-old global standard of care for cancer and endometriosis patients. The first trial with Grand River Hospital Regional Cancer Centre involves addressing the needs of large, complex gynecological and colorectal patient populations who have not been studied or supplied with updated treatment options for almost a century. The second trial is led by world-renowned gynecological surgeon and endometriosis specialist Dr. Mathew Leonardi at McMaster University to employ Hyivy technology in the first-of-its-kind study measuring the impact, measurement, and contributors to pelvic pain in endometriosis patients with a new and proven pain management tool introducing efficacy and safety-first solutions for this prolific patient population.

LOOKING FORWARD

Hyivy is currently working towards bringing their FDA approved, reimbursed device to their first alpha customers, growing their commercialization of the device, continuing R&D into the product pipeline, growing their research portfolio into new indications for use, and the potential of diagnostic capabilities.

Hyivy is continuing to recruit gynecological and pelvic floor physiotherapists to adopt this first of its kind solution.



Innomar Strategies

https://www.innomar-strategies.com/

Sector: Healthcare
Countries/ markets of focus: Canada
Year founded: 2001
Number of employees: 3150

Guy Payette, President of Innomar Strategies, with Amar Pabla, VP of Nursing, Clinics, and Scheduling Operations, and Jason Zabransky, VP of Specialty Operations and our InnomarClinics™ and InnomarPharmacy™ with our dedicated team members serving one purpose: being united in our responsibility to create healthier futures.

COMPANY OVERVIEW

Headquartered in Oakville, Innomar Strategies, a part of Cencora, is Canada's leading specialty medications service provider. We help patients get the medications they need, where and when they need them. Our active commitment to exceptional patient care is why we established the most extensive integrated healthcare service network across the country. It's how we ensure Ontarians experience reliable access to their medicines, as well as quality care throughout their treatment journey.

Innomar's Patient Support Programs (PSPs) are designed to alleviate challenges faced by patients and their caregivers through the navigation of public and private benefits and the coordination of clinical requirements related to drug administration.

Innomar's infusion clinics and specialty pharmacies closely integrate into over 165 PSPs to allow patients to promptly start their drug treatment and fill an important need within the Ontario healthcare system.

Through our distribution services, we connect manufacturers, care providers, and patients to ensure that those who need therapies can get what they need. Our growing services portfolio includes solutions that span the full pharmaceutical product lifecycle — from assisting manufacturers in meeting the logistical challenges to helping pharmacies connect with patients in their community. Care providers depend on us for the secure, reliable delivery of pharmaceuticals, healthcare products, and service care solutions.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Extensive footprint and capabilities. Innomar has an extensive network of clinic and home care nursing services, with over 750 nurses and more than 165 InnomarClinics™ across Canada, covering over 95% of the population. Their clinics provide biologic infusions, injections, and select diagnostic services as part of patient support programs.

Product safety for all Ontarians. Innomar ensures product safety for all Ontarians through their advanced infrastructure and technology, maintaining an efficient and secure pharmaceutical supply chain that supports regulatory compliance. They were the first in Canada to have all their clinics and home care nursing services certified under the ISO 9001:2015 standard, demonstrating their commitment to quality management systems and rigorous quality standards.

Responsible 3PL and sustainable operations. We have a unique ability to drive environmental sustainability throughout the supply chain. As part of the global Cencora network, we work collaboratively across the organization to share best practices in energy efficiency, GHG emissions management, waste management, and responsible packaging to maximize our efforts.

KEY WINS

Advancing end-to-end care. As Canada's rare disease strategy moves forward with provinces, Innomar's nursing and clinics infrastructure continues to support initiatives for specialty medications treating rare or complex diseases; since 2015, Innomar has participated in over 50 clinical trial projects across over 20 different clients from CROs, manufacturers and study site or research centers.

From clinical trials to regulatory submissions and approval of drugs, Innomar creates tailored regulatory strategies and solutions to drive affordable access to the specialty medications Ontario patients need, helping bring the much-needed healthcare innovations to Ontario's providers, pharmacies and clinics.

Leading in times of health challenges. As part of our end-to-end care, we are also incredibly proud to support reliable access to COVID-19 vaccines coast to coast, to the most northern regions of Canada. To date, we have distributed more than 78 million COVID-19 vaccines to provinces and territories across Canada, including vaccine distribution efforts to over 94 Canadian embassies around the world, to ensure that Canadians, wherever they are, have access to the specialty medications they need.

LOOKING FORWARD

Innomar has evolved its capabilities and response measures beyond the pandemic to enhance agility and resilience for future healthcare challenges, particularly those affecting vulnerable populations. With a national distribution model and strong partnerships with local manufacturers, Innomar is well-equipped to tackle emerging issues.

The company's new 92,000-square-foot GMP-compliant facility boosts logistics storage, quality assurance, and importation services, significantly expanding its capacity to store and manage pharmaceutical and medical device products, including complex specialty medications that require strict temperature controls. Innomar's two logistics centers in Ontario, including a 160,000-square-foot distribution facility in Milton, offer expanded storage across various temperature ranges: controlled ambient (15°C to 25°C), refrigerated (2°C to 8°C), frozen (-25°C to -15°C), and ultra-frozen (-40°C to -80°C).

Innomar is proud of its achievements in driving affordable medication access and innovating for providers, pharmacies, and clinics. The company is excited to continue building on its progress and fulfilling its commitment to creating a healthier future for all.

Innovation Factory
https://innovationfactory.ca/

Sector: Innovation & Research
Countries/ markets of focus: Canada
Year founded: 2010
Number of employees: 25

COMPANY OVERVIEW

Innovation Factory is a not-for-profit business accelerator and a regional innovation centre, serving as the catalyst for technology innovation in Southern Ontario since 2010. Providing business advisory services, training, mentorship, and strategic connections, Innovation Factory helps drive market adoption, revenues, investment, jobs and leverage of intellectual property.

Funded by the Government of Ontario, Innovation Factory helps Ontario-based innovators and entrepreneurs clear commercialization hurdles — accelerating the growth of companies so that they can compete and succeed globally and create high-quality jobs in our province.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

At Innovation Factory we help Ontario-based businesses solve critical challenges like securing funding, talent, and expertise. The Federal Economic Development Agency for Southern Ontario (FedDev Ontario) funded our life sciences program like SOPHIE (Southern Ontario Pharmaceutical and Health Innovation Ecosystem) and CAMEDA (Canadian Medtech Alliance). These programs stand out because they provide life science innovators with up to $100,000 in non-dilutive funding and strategic connections to Hamilton's premier research institutions like McMaster University, Mohawk College, Hamilton Health Sciences, and St. Joseph's Healthcare Hamilton as well as some of Ontario's leading Contract Development and Manufacturing Organizations (CDMOs).

Since its inception in 2021 the program has supported more than 160 innovative Ontario life science start-up and scaling companies provided $5.3 million in direct grants, mentorship and strategic connections to support the commercialization of life science technology, ultimately driving economic growth and fostering innovation beyond our immediate network.

BARRIERS TO SUCCESS

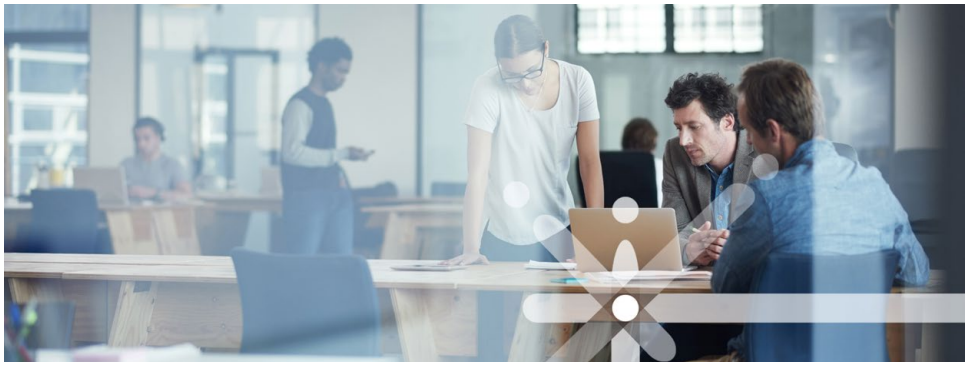
One of our biggest challenges has been uniting all the key stakeholders in the community, including government at all levels, along with private and public institutions. We work hard to keep our partners' attention amidst competing news and activities that can shift their focus away from supporting high-potential life science innovation. Our goal is to build a connected network of organizations, allowing us to coordinate efforts and better support early-stage, innovative life science companies.

KEY WINS

Since its launch in 2021, Innovation Factory's SOPHIE and CAMEDA programs have been a driving force behind the growth and commercialization of over 160 life science start-ups in Ontario. Through $5.3 million in direct grants, strategic connections, and access to world-class research and clinical infrastructure, SOPHIE and CAMEDA have enabled these companies to accelerate their path to market. The program's impact is evident in the creation or maintenance of 194 jobs, the development or licensing of 37 new pieces of intellectual property, and the generation of $15.3 million in collaborative initiatives. This success is attributed to the program's ability to provide not only financial resources but also invaluable connections to Ontario's leading academic and clinical institutions, and leading CDMOs.

LOOKING FORWARD

Innovation Factory is committed to strengthening Hamilton's life science ecosystem and supporting the city's growth in this field. Our mission is to champion innovative entrepreneurs and foster collaboration with leading institutions. Through programs like SOPHIE and CAMEDA, we work to connect healthcare startups with clinical expertise. By partnering with funding organizations, community stakeholders, and businesses, we strive to create impactful life science programs and funding opportunities. Our collaborative approach ensures that life science companies receive strong support, especially during critical stages of commercialization, helping them navigate challenges effectively.



IPS - Integrated Project Services

www.ipsdb.com

Sector: Architecture, Engineering and Construction - AEC

Countries/ markets of focus: Pharmaceutical, cell and gene therapy, biotechnology, medical device, radiopharmaceutical, and bioscience sectors

Year founded: 2017 in Canada. 1989 in US

Number of employees: 65 in Canada. 1700 worldwide

Projected number of employees in 3-5 years: 100+ in Canada

COMPANY OVERVIEW

IPS - Integrated Project Services, ULC, a Berkshire Hathaway company, is a global leader in developing innovative design solutions, for technically complex, life sciences facilities. We are an integrated solutions provider, offering Architecture, Engineering and Construction services (AEC). Our full services offering covers, consulting, architecture, process and facilities engineering, project controls, procurement, construction management, and commissioning, qualification, validation (CQV). With expertise in, R&D laboratories, pilot-scale production and large-scale manufacturing, IPS has a deep understanding of cutting edge technologies, industry trends, and regulatory requirements. We deliver world-class facility projects that enable our clients to bring life-saving products to markets, globally.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

IPS was founded with a vision to merge historically separated AEC disciplines into ONE integrated organization and transform the way the life sciences industry approached facility design. Our founders believed that a fully integrated, client-centered design team—working from concept through to completion—could change the trajectory of life sciences projects. And they were right.

From project inception, we bring every discipline - architecture, engineering, construction, and CQV—into the conversation, ensuring that the entire project is not only compliant, but also fully aligned with the client's goals and objectives. We design with the end in mind, taking into account regulatory requirements and operational realities from day one. This holistic approach delivers results: projects that meet stringent timelines and budget requirements while maintaining the highest standards of quality.

Knowledge, Skill and Passion is our maxim, and encapsulates the mission, vison and values of IPS. We understand what it means to be in the business of delivering impactful health sustaining treatments. The health and wellbeing of our nations are in your hands. The opportunity to help you fulfill your mission commands our utmost respect. We take our responsibilities seriously and are committed to working closely with you to realize your success.

KEY WINS

IPS has been recognized by numerous industry bodies and publications, for innovation and design, project execution, operational excellence and workplace culture. List of accomplishments includes:

- Industry Leadership and Innovation
- Engineering News-Record (ENR) Rankings: a) Consistently ranked among Top 500 Design Firms (2023, 2022, 2021) b) Top 225 International Design Firms (2023, 2022, 2021)
- ENR Global Bests Project Award 2021 – Fill & Finish Facility
- Building Design & Construction: Consistently ranked among Top 70 Engineering + CA Firms (2023, 2022)
- Facility of the Year Awards (FOYA): 17 FOYA awards from the International Society for Pharmaceutical Engineering (ISPE) which recognizes innovation and excellence in pharmaceutical and biotechnology manufacturing facilities
- Best Places to Work: a) Canada's Best Employers for Recent Graduates - The Career Directory (2024, 2023) b) OC Register Top Workplaces - (2017-2023)

Sustainability and Green Initiatives

- Engineering News-Record (ENR) Rankings: a) Top 100 Green Contractors (2023, 2022) b) Top 5 in Manufacturing and Industrial for Green Contractors (2023)
- Award of Merit in Manufacturing for Sanofi's Evolutive Vaccine Facility (EVF) in France (2022)
- IPS released our first ESG report this year with targeted commitments, benchmarked by leading industry organizations, to reduce our carbon footprint. We aim to procure 100% renewable energy in 2025.

LOOKING FORWARD

IPS is about to enter its 8th year of full operations in Canada. Our team has grown from just a single person, to a passionate group of 65 staff and is still growing. In this period of time, our client base has expanded to include the brightest names in the Canadian life sciences industry.

Once described as Canada's best kept secret, our reputation for service excellence, has become unrivalled. Clients reach out to us because of our recognizable brand of knowledge leadership. As we continue to grow with the support of Berkshire Hathaway, we do not lose sight of what has brought us here today: listening to the needs and challenges that you, our clients, face and providing integrated project and business solutions that help you create and shape the future of health care.

Kare Chemical Technologies
https://www.karechem.com/

Sector: Pharmaceuticals
Countries/ markets of focus: North America, South America, Europe, Asia, Oceania and Africa
Year founded: 2020
Number of employees: 3
Projected number of employees in 3-5 years: 20-30

The founding team and scientists at Kare Chemical Technologies.

COMPANY OVERVIEW

Kare Chemical Technologies Inc. (Kare) is a chemical and pharmaceutical technology company located in Ontario. Kare has developed catalytic processes for the commercial production of cannabinoids as active pharmaceutical ingredients, and their precursors. These processes and precursors are protected by more than 40 national phase patents and patent applications, including several issued patents.

Kare has access to a Health Canada License to possess, produce and use the cannabinoid products for pharmaceutical research. Kare already has several commercial licensees for its technologies and products. Several commercial products have been in production since 2021, generating revenues.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

The benefit of Kare's technology is the ability to produce pharmaceutical grade cannabinoids at a lower cost, lower environmental impact, and higher purity. Finished products include CBD (brand name Epidiolex) and THC (brand name Dronabinol or Marinol) and many other pharmaceutically relevant cannabinoids. This technology replaces the need to extract cannabinoids from cannabis and hemp, thus removing stigma and legal restrictions in some countries. Beyond the major cannabinoids, this technology allows for the availability of rare and ultra-rare cannabinoids which cannot be produced in commercial quantities from plant sources. Using our technology, rare cannabinoids are no longer rare and can be produced in a streamlined and continuous process.

The next step for this company is the development of new pharmaceutical cannabinoid medicines through clinical research.

BARRIERS TO SUCCESS

Teaching the general public about the difference between pharmaceutical cannabinoids and recreational products or the affiliation and difference between cannabinoids and cannabis, especially when it come to medicinal purposes. Gaining traction through outreach and publicity.

KEY WINS

- Developed the technology and identified key precursors and processes - 2020.
- Filed patents, and issuance of patents - 2020 to current.
- First licensee in early 2021. Followed by our largest licensee in mid 2021.
- Built new research facility - 2020-2022.
- Moved into new facility - April 2022.
- Initiation of pharmaceutical development - 2023.

LOOKING FORWARD

Develop clinical assets for new pharmaceutical cannabinoid medicines.

Expansion of facility to include cGMP manufacturing for pharmaceutical cannabinoid products.

Life Sciences Ontario Scholarship and Mentorship Program

https://lifesciencesontario.ca/scholarship/

The Life Sciences Ontario (LSO) Scholarship and Mentorship program was developed in 2019 and has grown from its modest beginnings to becoming an important element of the LSO mandate, under education and mentorship. Each spring, we accept applications from undergraduate students at University or College studying in fields that are linked to employment within the life sciences sector.

In the 6 years of running the program, we have provided financial support to 186 students worth $578,000. And more importantly we have paired each student up with an experienced professional within the life sciences sector. Through the support of our sponsors over the years, we have been able to help bring awareness to the many opportunities that exist in Ontario's life sciences sector.

LOOKING FORWARD

BioTalent Canada predicts more than 65,000 new life sciences workers will be needed in Canada by 2029. Along with our partners, we will continue to take steps to support the future young talent as they become trained in the skills needed for the life sciences jobs of tomorrow. Our goal in the next 5 years is to triple the funds distributed to students with a goal of improving Inclusion, Diversity, Equity, and Accessibility (IDEA) within the life sciences sector.

STUDENT TESTIMONIALS

"The LSO Program helped me learn more about the life science industry and discover my place within it. The opportunity to meet with a mentor who is established in the industry was a unique experience that gave me a better understanding of what my path into the life sciences could look like. Before this program, I wasn't aware of all the different options available in the field. I highly recommend this program for undergraduates interested in a career in the life sciences!"

Erin Ohayon, York University, 2023 LSO Scholarship Recipient

"The Life Sciences Ontario Scholarship was an invaluable opportunity for me to gain exposure to many facets of Ontario's growing biotechnology industry. I had the chance to meet many knowledgeable veterans in the field who were able to offer much-needed perspective, guidance, and advice for students like me. As someone from an equity-deserving group, I have found this scholarship and LSO as an organization to be truly sincere in its effort to capture, include, and highlight intersectional life experiences. I really appreciate that LSO is not a "one and done" kind of deal to its scholarship recipients, but rather LSO is deeply invested in staying in touch with its recipients and forming long-term relationships. Of course, I could also comfortably complete my final semester of undergrad thanks to LSO funding.

I strongly encourage future scholarship recipients to see LSO as a great resource that can not only expand your network but help you in many unexpected ways."

Novera Shenin, McMaster University, 2023 Recipient

"The program really opened my eyes to the variety of careers in the life sciences. Speaking to different professionals in vastly different roles provided me with great insight and advice that I will apply to my own career path. I particularly enjoyed hearing about where my mentors' careers began, and how they progressed and changed to where they are now – it was really inspiring!"

Kirsten Entz, McMaster University, 2022 Award Recipient

Living In Silico

Living In Silico Inc.
www.livingsilico.ca

Sector: Cleantech
Countries/ markets of focus: Canada, USA, China
Year founded: 2018
Number of employees: 10
Projected number of employees in 3-5 years: 30
Recent Major Investments/Acquisitions: ElevateIP, RIIPEN and HEALTHI Grants

Figure 2: Production of lipoprotein hydrogel from microculture at water-oil interface

25mL of 80% confluent phytoplankton culture (N. gaditana, tetroselmis sp., I. galena, T. weissflogii) and 10mL culture of mycelium forming fungi and uncharacterized algae were cultured in a 75mL culture flask (Falcon®) at SATP for 14 days.

COMPANY OVERVIEW

Our company, Living In Silico Inc., works with algae and fungi to develop new types of solvents and polymers. We were fortunate to discover a new type of polymer made by algae-fungi co-culture with phytoplankton to produce a type of plastic. This plastic can be changed into biodiesel used as a natural replacement to gasoline for trucks or cars and burn cleaner. Our findings were recently published at the Curious2024 conference in Mainz, Germany and received a repost from the VP of Merck citing the excellent work. The real kicker is that we used omega-3 fatty acid oil from rancid pills so our solution contributes to the circular economy where we would end up carbon negative with our work. We are currently aiming to scale up, patent our idea and also name the plastic - we think Flubber is taken already! (https://bit.ly/3BYWAt7)

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Our unique value proposition is utilizing novel cell lines including commercially available ones and creating a system from them harmoniously producing our plastic from omega-3 fattty acid oil. My master's degree involved cell physiology of conserved mechanisms that are turned off and on through biotic (living) and abiotic (non-living) factors. Optimizing a cell line to become a bio-factory requires intricate tuning of organelle, genetics and growing space of the cells. We were successful in tuning these cells and solving key problems such as environmental waste and converting it to valuable solvents. The impact is billions of dollars saved through utilizing alternative diesel and plastic source and it being sourced through something that would be in a landfill.

BARRIERS TO SUCCESS

Our biggest challenge to working with failure. However, these failures often end up being positive. For example, we were unable to create biodiesel from just the plastic formation step as hypothesized. Though we "failed", we failed forward because the new compound that we had hypothesized would be biodiesel, which was a useful plastic polymer that could be used as a hydrogel - very valuable in research and develoment in growing cells (regeneration studies) and drug delivery. We found out later through our literature review that the plastic could be converted into biodiesel as aimed for using simply a transesterification step - making our challenge our biggest success!

KEY WINS

We have many successes to date including:

- receiving funding through ElevateIP;
- our trademarks and protecting intellectual property, HEALTHI;
- our biosurfactant project in finding a key stakeholder in St. Joseph's Hospital (Hamilton) and RIIPEN;
- assisting with simulations related to our research and development.

The innovation and technique to create these products (through fungal bioremediation) allowed us to be successful in receiving these grants. We are also a partner of Vector Institute for innovation in A.I and our goal is to create efficiencies in the production of plastic through precision fermentation.

LOOKING FORWARD

Our goals are: a) To have a dedicated lab to complete experiments including creating efficiencies in our plastic production, including precision fermentation b) To have all our intellectual property patents filed and brands protected c) To have dedicated work space with our growing employees (currently we use space at TechPlace, Innovation Factory and Brampton Entrepreneur Centre).

Medair Global
https://medair.global

Sector: Biopharmaceutical Logistics
Countries/ markets of focus: North America, Europe
Year founded: 2001
Number of employees: 37
Projected number of employees in 3-5 years: 50 - 100

COMPANY OVERVIEW

Founded in 2001 in Toronto, Canada, Medair is committed to advancing medical research through the careful transportation of bio-pharma shipments worldwide. As an award-winning company with offices in Montreal, Toronto, and London, UK, Medair boasts over 100 years of combined staff experience in the bio-pharma logistics industry. Medair offers a wide range of services, from IVF and clinical trial logistics solutions to regulatory consultancy, and excels in temperature-controlled shipping systems and personalized customer care. Medair provides a thriving environment where talent leads to success.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Medair stands out in the biopharmaceutical logistics industry through our unique combination of personalized service and dynamic expertise. We specialize in time-critical and temperature-sensitive shipments, offering tailored solutions for pharmaceutical, biotechnology, and clinical trial sectors. Our agile communication and responsiveness ensure that we adapt quickly to our clients' evolving needs.

We solve complex logistics challenges by maintaining product integrity throughout the supply chain, regardless of ambient temperature. Our comprehensive approach includes advanced packaging, monitoring systems, and 24/7 worldwide delivery services. We offer end-to-end support, from regulatory consultancy to emergency logistics, guaranteeing exceptional service at every step.

Medair's impact extends beyond our company walls by facilitating the safe and timely delivery of critical biopharmaceuticals and clinical trial materials. This supports advancements in medical research and contributes to improved global health outcomes. By facilitating the efficient transport of life-saving therapies to patients in optimal condition, we play a crucial role in the broader healthcare ecosystem. Our reliable logistics solutions aim to accelerate the development and distribution of new treatments, ultimately working towards better patient care and medical progress worldwide.

BARRIERS TO SUCCESS

Our biggest challenges to date have centered around navigating the complex landscape of global logistics for the pharmaceutical and biotech industries. Ensuring compliance with diverse and stringent regulations across different countries has been an ongoing hurdle, requiring us to continuously adapt our processes. Additionally, the global pandemic and geopolitical tensions have caused significant supply chain disruptions, pushing us to find alternative routes and solutions while maintaining the integrity of time-critical shipments. Keeping pace with rapid technological advancements has also necessitated substantial investments in our systems and staff training.

Looking ahead, we anticipate several significant hurdles. Balancing the need for rapid logistics with increasing sustainability pressures will be crucial, as we strive to implement more environmentally friendly practices. The expected growth in the biosimilar market will likely lead to more complex logistics requirements and increased pressure for cost-effective solutions. Furthermore, the integration of AI and emerging technologies in drug development will require us to enhance our capabilities to meet evolving client needs. We are committed to proactively addressing these challenges to continue providing exceptional service to our clients in the pharmaceutical and biotech sectors.

KEY WINS

Earlier this year, Excellence Canada named Medair a recipient of the 2024 Canadian Business Excellence Award for Private Businesses. These prestigious award celebrates businesses that excel in three key areas: Exceptional Customer Experience, Outstanding Employee Culture, and Driving Innovation. We're honoured to be among the outstanding Canadian private businesses making a significant impact in their industries, and are excited to celebrate this great achievement with everyone at the official awards reception in October.

LOOKING FORWARD

Medair's primary goal is to establish itself as the leading logistics provider in the life sciences sector, with a focus on biopharmaceutical transportation. In the immediate future, we are actively working towards expanding our global footprint by opening new offices in Europe and North America. This expansion will allow us to better serve our clients and partners in these key markets.

Looking ahead to the next five years, we envision Medair as a rapidly growing, internationally recognized name in specialized logistics. We aim to significantly increase our market share and establish a strong presence in major biopharmaceutical hubs worldwide. Our expansion plans include not only opening new offices but also enhancing our service offerings and technological capabilities to stay at the forefront of industry innovations.

Merck Canada Inc.
https://www.merck.ca/en/

Sector: Pharmaceuticals
Countries/ markets of focus: Global markets
Year founded: 1891
Number of employees: 800+

COMPANY OVERVIEW

At Merck, known as MSD outside of the United States and Canada, we are unified around our purpose: we use the power of leading-edge science to save and improve lives around the world. For more than 130 years, Merck has brought hope to humanity through the development of important medicines and vaccines. We aspire to be the premier research-intensive biopharmaceutical company in the world — and today, we are at the forefront of research to deliver innovative health solutions that advance the prevention and treatment of diseases in people and animals. We foster a diverse and inclusive global workforce and operate responsibly every day to enable a safe, sustainable and healthy future for all people and communities.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Merck Canada undertakes unique initiatives in oncology, vaccines, infectious diseases, and cardiovascular health to address critical healthcare challenges in a meaningful way.

- Oncology: Merck advances innovative research by pursuing clinical excellence and partnerships to improve access to care.
- Vaccines: Our work in researching and producing vaccines is guided by science and fueled by human need.
- Infectious Diseases: From pioneering antibiotics to groundbreaking work in HIV science, our focus on prevention and treatment has profound implications for public health globally.
- Cardiovascular Health: Merck introduced cardiovascular therapy more than 60 years ago and continues to pursue scientific efforts to deeply understand cardio-metabolic disorders.

Merck Canada partners with stakeholders across the healthcare ecosystem to ensure access to vital medicines and vaccines for Canadians. Merck's patient-centric approach, alongside a diverse and collaborative workforce, underscores its dedication to solving health challenges and paving the way for improved healthcare outcomes.

Merck Canada's Animal Health Division develops, manufactures and markets a broad range of veterinary medicines and services, spanning products for the prevention, treatment and control of disease in all major farm and companion animal species.

BARRIERS TO SUCCESS

Access to innovative treatments in Canada, particularly in Ontario, remains slow. Canada ranks last in the G7 when it comes to the time it takes for public patients to access new medicines. Ontario patients wait an average of almost 2 years after Health Canada's regulatory approval to gain public access to innovative medicines. Premier Doug Ford has also noted the significant delays in Canada, and has made it a priority to speed up approvals of life-saving medications and treatments as he takes on the role as Chair of the Council of the Federation.

In addition to access to innovative medicines in Canada, achieving high coverage for publicly funded vaccinations remains a barrier. Even with catch-up efforts taking place in Ontario schools, immunization rates for certain vaccines have not recovered to pre-pandemic levels, and vaccine rates for Ontario adults have not reach target levels. Stronger advocacy efforts, communication campaigns and government response can drastically improve coverage rates for publicly funded vaccination programs.

KEY WINS

Merck is bringing forward innovative solutions to help solve some of the world's most challenging diseases. Whether it's using next-generation AI-powered algorithms to complement our science or working with the medical community and industry leaders to leverage real-world insights, we are leaving no stone unturned to pave the way forward.

Based on data from 2015 to 2017, the predicted five-year net survival for all cancers combined was estimated at 64%, and we're committed to doing better. Our current oncology portfolio is based on a robust research program.

Globally, Merck has invested $12.2B in R&D in 2021, with more than 2,200 clinical trials across a wide variety of cancers and employs approximately 17.5K people in research and development alone.

LOOKING FORWARD

For over 130 years, Merck Canada has been providing leading innovations and therapies for many of our world's most challenging diseases in pursuit of our mission to save and improve lives.
We are committed to research in oncology with one of the largest development programs in the industry. Currently, we are investigating multiple molecules in both clinical and preclinical settings.

MIDI Medical Product Development

www.midipd.com

Sector: Innovation & Research

Countries/ markets of focus: Canada and United States; Medical Device Development (R&D plus Commercialization)

Year founded: 1977

Number of employees: 30

Projected number of employees in 3-5 years: 35

Relevant Links:

Alberta Health Services SEGUE-PS overview: https://bit.ly/3YAuddA
Forest Devices FDA 510(k) Clearance Announcement: https://bit.ly/40qFgXU

COMPANY OVERVIEW

MIDI is a full-service FDA & ISO compliant Medical Device Development Consulting Firm with 50 years' experience serving clients in the medical, life sciences & home healthcare markets. MIDI's teams of research, design and engineering professionals offer a unique combination of talent, experience and achievement developing Class I,II & III products. From the first idea to the last detail, we balance technical information with strong orientation toward user driven design solutions. Our prime goal is total satisfaction for the clients we serve.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

At the heart of MIDI's success is its unique DevelopmentDNA™ service offering, a comprehensive medical device development platform that drives innovation and competitive differentiation while adhering to FDA-QSR and ISO-13485 standards. This robust process supports clients in achieving their 510(k) submissions efficiently and effectively. By incorporating an AGILE front-end methodology, MIDI rapidly ideates and generates proof-of-concepts in a flexible "sandbox" environment, before deploying engineering commercialization activities tied to stringent Design Controls and Risk Management processes required for regulatory rigor. The process is further enhanced by use of Matrix Requirements™, a cloud-based tool that ensures meticulous documentation and traceability throughout the development lifecycle.

MIDI's unwavering commitment to excellence is rooted in its core values: a dedication to insightful research, user-centered design, advanced engineering, and scalable commercialization services. The company prides itself on a make-it-happen culture that is embodied in every client's project success, offering tailored solutions that align with the unique needs and goals of each partner.

BARRIERS TO SUCCESS

Capital for rapid expansion. The Canadian government has been instrumental in this regard with the package called SR&ED (Scientific Research and Experimental Development).

KEY WINS

MIDI is thrilled to announce that our client, Forest Devices, recently achieved FDA 510(k) clearance for their innovative, portable, and cost-effective stroke detection device. This milestone represents a significant advancement in the early detection of strokes using EEG technology. The device's rapidly deployable Sensor Cap headset allows clinicians to quickly gather crucial information about a patient's brain state in just minutes, facilitating timely and accurate neurological assessments.

MIDI is proud to have partnered with Forest Devices from the outset, playing a key role in the design and development of this groundbreaking technology.

During the validation phase, Forest Devices collaborated with Canadian entities to further test their AlphaStroke™ device, focusing on the early identification of ischemic stroke. In Alberta, the Cardiovascular Health & Stroke Strategic Clinical Network (CvHS SCN) incorporated AlphaStroke™ into the SEGUE-PS project, which aims to enhance pre-hospital stroke detection accuracy by Emergency Medical Services. This initiative is poised to improve triage decisions, expand access to endovascular therapy, and elevate stroke care protocols across Canada, underscoring the vital role of innovative medical technology in acute stroke management.

The successful validation in Alberta was instrumental in Forest Devices securing FDA 510(k) clearance, marking a pivotal step in their mission to revolutionize early stroke detection with EEG technology.

LOOKING FORWARD

We are heavily investing in the development of Machine Learning and AI algorithms augmenting our clients devices. We see this as a Blue Ocean expansion opportunity.

Mitsubishi Tanabe Pharma Canada

Mitsubishi Tanabe Pharma Canada
https://www.mt-pharma-ca.com/

Sector: Pharmaceuticals
Countries/ markets of focus: Canada
Year founded: 2018
Number of employees: 10
Projected number of employees in 3-5 years: 20

The entire Mitsubishi Tanabe Pharma Canada team.

COMPANY OVERVIEW

Mitsubishi Tanabe Pharma Canada, Inc. (MTP-CA) based in Toronto, is a wholly owned subsidiary of Mitsubishi Tanabe Pharma America, Inc. (MTPA), which touts a storied reputation more than 300 years in the making. Our parent company, Mitsubishi Tanabe Pharma Corporation (MTPC) - one of Japan's most respected - is a research-driven pharmaceutical company that has tirelessly pursued medical breakthroughs with global reach. MTPC has discovered and produced several first-in-class medicines for serious diseases, including multiple sclerosis (MS), diabetes mellitus (DM), and amyotrophic lateral sclerosis (ALS).

MTP-CA's commitment to patients and their communities continues with a robust late-stage pipeline of investigational treatments for difficult-to-treat diseases and commercializing products with significant unmet medical needs in Canadian markets. The company handles sales, marketing, market access, and business development functions. MTP-CA is dedicated to improving the treatment environment for those with debilitating diseases, researching on real-world evidence, and creating hope for all facing illness and constantly seeking motivated professionals who share our vision of scientific excellence, innovation, and unwavering dedication to improving the lives of patients.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

MTP-CA is a critical driver in the advancement of essential therapies for rare diseases – committed to uniting the communities of patients, caregivers, and healthcare professionals (HCPs) who are courageously managing these conditions, while we celebrate each other in recognition of our genuine commitment to care.

We invest heavily in research and development projects, including forward-thinking health solutions so that patients may access therapies earlier on in their disease, collaborations with partners in the ecosystem to generate real-world evidence (RWE) and one-of-a-kind solutions to help advance the clinical practices of HCPs.

BARRIERS TO SUCCESS

ALS is highly heterogeneous and difficult to diagnose. Early symptoms can present like other, more common diseases. Access to diagnostic tests and neurologists vary across the country and can impact time to diagnosis. This means patients are losing precious time to best manage their disease, including facing the risk to no longer be eligible for treatment coverage.

Forced vital capacity (FVC) is one of the primary required tests to assess qualification for drug reimbursement in ALS. Because the disease can progress quickly, having rapid access to FVC test results can make a difference in a patient qualifying for new, innovative therapies.

MTP-CA has been working with respirologists and respiratory therapists (RT), who focus on ALS patients, on a virtual Forced Vital Capacity (vFVC) test program as an option for patients living in remote communities, or who may not be able to travel to access an in-person FVC test. This innovative approach enables patients to perform spirometry tests at home, using a mobile spirometer, all under the real-time supervision of an RT through an online video call.

KEY WINS

A key milestone in MTP-CA's legacy in Canada was the 2018 Health Canada approval of the first new treatment option for patients with ALS in nearly 20 years. In 2022, following a Priority Review by Health Canada, MTP-CA introduced an oral suspension version of its drug that is formulated with the challenges of people living with ALS in mind.

We have a strong history of supporting the ALS community through participation in local fundraising events and sponsoring important initiatives, including the ALS Research Forum Fellowship program and the ReferALS tool, aimed to help improve time to diagnosis.

MTP-CA invests steadily in one-of-a-kind solutions to help advance the clinical practices of HCPs – such as How to Break the News in ALS/MND: A Primer for Physicians and Allied Health Professionals – a program that aims to help HCPs better understand the impact that delivering news of an ALS or motor neuron disease (MND) diagnosis can have on patients, caregivers, and on HCPs themselves. We also collaborate with partners in the rare disease ecosystem to generate RWE.

LOOKING FORWARD

Our experience in bringing our therapies to Canada has shaped our perspective on the gaps in Canada's approach to ensuring access to necessary treatments for rare disease patients and reinforced our commitment to put the patients first. As we look to the future, MTP-CA is committed to working with our stakeholder partners to advocate for the best care for patients, while maintaining an open line of communication with government agencies to ensure equitable access to care. With patient groups, MTP-CA will continue to advocate for the implementation of early detection services across the country, whether it's via enhanced physician education or access to more testing centres.

We remain dedicated to driving scientific discovery to meet the needs of people suffering from serious and often life-threatening illnesses. Our pipeline is focused on research in therapeutic areas where we believe we have the best opportunity to address the challenges of complex and debilitating conditions.

Neuro Spinal Innovation
https://sonik.health

Sector: Med Tech
Countries/ markets of focus: North America
Year founded: 2019
Number of employees: 8
Projected number of employees in 3-5 years: 20

COMPANY OVERVIEW

At Neuro Spinal Innovation, we are dedicated to transforming the treatment of spinal conditions through our breakthrough technology, SONIK. Our innovative approach uses sound waves to repair and restore the human spine, considerably reducing the need for invasive surgery or addictive medications. By addressing the root causes of spinal pain, such as disc and joint damage, our technology provides immediate relief and promotes long-term recovery. SONIK effectively treats a wide range of conditions, including low back pain and neck pain. With this solution, patients can experience significant improvement without the risks and recovery time associated with traditional treatments. We are proud to have already brought relief to patients in 14 countries, demonstrating the global potential of this transformative solution.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Neuro Spinal Innovation is redefining the standard of care for chronic spinal pain by bridging the gap between conventional therapies—such as physiotherapy, acupuncture, chiropractic, and massage—and more invasive options like surgery. Traditionally, patients suffering from untreated pain have faced limited options: undergoing invasive surgery with variable outcomes, relying on injections to mask the pain, or depending on long-term use of pain medications, which carry the risk of addiction. Our SONIK technology fills this critical gap by providing a non-invasive alternative that realigns the spine and improves tissue health at the cellular level.

Through advanced 3D analysis, we personalize each treatment to ensure the best possible outcomes for our patients. We are not just alleviating pain; we are preventing the serious complications that can arise from untreated spinal conditions. Our technology empowers patients to recover without the potential need for surgery, reducing the risk of medication dependence and significantly improving their quality of life. The benefits extend beyond our patients—by offering a safer, effective treatment option that can be seamlessly integrated into existing clinical facilities, we are helping to alleviate the burden on healthcare systems and contributing to a healthier, more sustainable future.

BARRIERS TO SUCCESS

One of our biggest challenges has been gaining acceptance for our technology in regions where there is skepticism towards non-traditional treatments. Introducing a new method like SONIK requires us to invest heavily in educating and training healthcare professionals. In several countries, we initially faced resistance because our results seemed almost too good to be true. Many doctors found it difficult to believe that such significant outcomes could be achieved without surgery or medication. However, as healthcare professionals witnessed consistent positive outcomes and genuine patient relief, this firsthand evidence quickly built trust and credibility in the technology.

Looking ahead, we anticipate possible challenges in meeting the growing global demand for SONIK. Training enough clinicians and ensuring they are fully equipped to deliver our treatments will be crucial. Additionally, navigating the complex regulatory environments of new markets will continue to require careful planning and collaboration with local healthcare authorities. Our goal is to make SONIK accessible in every major city worldwide, and we are committed to overcoming these hurdles to achieve this vision.

KEY WINS

Our journey has been marked by several key achievements that have solidified our position as leaders in non-invasive spinal care. We have successfully delivered over two million treatments worldwide, helping countless individuals overcome chronic pain while restoring their functionality and quality of life. The immediate and visible patient outcomes we achieve—often within minutes of treatment—are a testament to the efficacy of our technology.

Our success is driven by our commitment to rigorous research and development. We have validated the effectiveness of SONIK through extensive clinical trials, demonstrating its ability to realign the spine and improve the health of associated tissues. These findings have not only earned us the trust of patients and clinicians alike but have also paved the way for broader applications of our technology. Additionally, being part of the TechPlace community has immersed us in an environment that fosters innovation and collaboration, providing access to world-class talent, valuable resources, and mentorship. This support has allowed us to further enhance our technology and scale our operations to serve new markets.

LOOKING FORWARD

In the next five years, Neuro Spinal Innovation aims to become a global leader in non-invasive spinal care, establishing SONIK as a widely recognized solution for spinal and other associated health concerns. Our goal is to expand the reach of our technology to every major city worldwide, ensuring that patients everywhere have access to our technology in addition to other familiar alternatives. We are also exploring new applications of our sound wave technology beyond spinal health. Our research is focused on expanding its use to treat conditions affecting the brain and joints, allowing us to address a broader range of health issues and provide relief to even more individuals suffering from chronic pain and mobility challenges.

Leveraging our data-driven approach, we strive to enhance our personalized treatment application, making spinal care even more precise and effective. By integrating the latest advancements in technology and research, we will continue to push the boundaries of what is possible in non-invasive treatment.

Our vision is a world where chronic spinal pain no longer limits people's lives. With our journey just beginning, Neuro Spinal Innovation is excited to transform the future of healthcare for millions worldwide.

Novartis Canada
https://www.novartis.com/ca-en/

Sector: Pharmaceuticals
Countries/ markets of focus: Global (operations in more than 140 countries)
Year founded: 1996
Number of employees: 600+ (78,000 globally)

Ministers Dunlop, Tangri, and Thompson tour a Novartis facility in Indianapolis, Indiana in May 2024.

COMPANY OVERVIEW

As a world-leading pharmaceutical company, Novartis provides patients with medicines to improve their health and quality of life. We are reimagining medicine to improve and extend people's lives so that patients, healthcare professionals, and societies are empowered in the face of serious disease. Our medicines have reached more than 284 million people worldwide.

Within Canada, Novartis is committed to working with all stakeholders in the healthcare system to ensure that every Canadian has equitable access to the medicines they need. This includes supporting patients and caregivers through the entire care journey – from drug development, to diagnosis, to access and beyond.

We focus on four core therapeutic areas with high unmet patient needs: Cardiovascular, Renal, and Metabolic (CRM), Immunology, Neuroscience, and Oncology. In 2023 alone, our medicines helped more than 1.2 million Canadians. On average, every year we invest $30 million in Canada on research and development, including clinical trial research that takes place in every region across the country.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

We use innovative science and technology to address some of society's most challenging healthcare issues. We discover and develop breakthrough treatments and find new ways to deliver them to as many people as possible.

This innovation includes cell and gene therapy, as well as the use of medical isotopes through radioligand therapy (RLT) to treat patients with cancer. And with Ontario's world leadership in medical isotopes, Novartis' role in utilizing these technologies is having a major impact on patients around the world.

We are also investing in opportunities for future commercialization within Canada. Novartis was a founding investor in Canada's own AbCellera, and just recently we invested in Borealis Biosciences, a Canadian-based biotech company focusing on breakthroughs in the field of RNA medicines.

BARRIERS TO SUCCESS

One of our primary challenges has been ensuring policymakers understand the full value of innovative treatments and what it means for patients to receive them sooner, as well as the benefit to the economy and society at large. Currently, Canadians wait two years or longer before getting access to Health Canada-approved medicines. This is the slowest in the G7. To ensure Ontario can get ahead of the curve and be prepared for the future of healthcare, policymakers need to help bring these treatments to patients faster.

KEY WINS

Novartis is a company of firsts. We were the first to globally launch CAR-T cell therapy. We were the first to launch a gene therapy for children with spinal muscular atrophy. We were the first to launch a gene therapy for those impacted by genetic eye diseases that cause vision loss. And we were the first company to bring RLT – what many doctors are calling a new pillar in cancer care treatment – to patients around the world, including here in Ontario.

Thanks in part to the continued growth and strength of Ontario's life sciences sector, Novartis recently opened a larger office in Toronto. Located in the new University of Toronto Schwartz Reisman Innovation Campus building, we see this as an opportunity for our associates to connect and collaborate with academia, industry experts, government, clinicians and the entire life sciences sector, while also building our company's footprint in the province.

LOOKING FORWARD

As a global medicines company, Novartis continues to look for more opportunities to grow in world-leading therapies. In Ontario, that means we're fully committed to collaborating and partnering with stakeholders from across the healthcare ecosystem, including government, in delivering that care.

OBIO®
www.OBIO.ca

Sector: Innovation & Research
Countries/ markets of focus: International
Year founded: 2009
Number of employees: 14
Projected number of employees in 3-5 years: 15

COMPANY OVERVIEW

Founded in 2009, OBIO® is a not-for-profit, membership-based innovation hub engaged in strategy, programming, policy development and advocacy to address the needs of the next generation of companies developing innovative human health products. OBIO® supports early-stage and venture-backed companies across therapeutic, medtech, digital & consumer health sectors, enabling them to raise capital, hire and train industry-ready talent, and facilitate the commercialization and adoption of their technologies in health systems. Over the past fifteen years, OBIO® has worked tirelessly to develop programs for the life sciences and health tech sector, build resilience and create high-paying jobs.

Our focus is on the challenges faced by small-medium enterprises (SMEs), helping them grow provincially in order to stay in Canada, build their workforces, have their technologies procured in Canadian healthcare systems, and attract much needed investment to grow the sector and support the province's economic development. OBIO® has helped over 1,000 Canadians gain jobs. We have supported SMEs through introductions to over 600 investors. We have vetted over 250 innovative technologies to facilitate adoption into healthcare organizations through Canada's largest health innovation healthcare network.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

OBIO® is the only life sciences and health tech-specific, membership-based organization in Canada offering infrastructure and programming in commercialization, skills development & training and market adoption to the full gamut of SMEs in our sector including therapeutics, medtech, diagnostics, digital health and consumer health companies. We target the practical needs of SMEs through our best-in-class programming.

BARRIERS TO SUCCESS

Raising capital remains the number one issue for our members and we are continuing to evolve our Commercialization programming as their needs become more complex. We would welcome policy initiatives to expand the pool of investors in Ontario and Canada at both the individual level, including Angel investors, and the institutional level, namely pension funds.

Our medtech and digital health members face significant barriers to market adoption of their products by the provincial healthcare systems across Canada. OBIO's Early Adopter Health Network (EAHN™) matches Canadian health technology companies with a national network of over 70 healthcare organizations to evaluate technologies in the real-world setting and to facilitate their broad adoption into the health system but there remains a lack of funding for procuring innovations by healthcare organizations. We ask the Government of Ontario to continue to implement its Health Technology Accelerator Fund to help health care service providers buy and use promising new technologies to improve patient care.

Access to wet lab space is a concern to scaling biotech companies and there is very little availability across Ontario. OBIO® is working with the Wet Lab Coalition to advocate for public and private investment in this critical area.

KEY WINS

Since 2018, the OBIO® Investment Summit has presented high-quality, pre-vetted deal flow to global investors. Companies that have presented at the Summit have raised more than $1.6B through investments and acquisition.

In 2022, OBIO® launched the Women in Health Initiative (WiHI) funded by FedDev Ontario. WiHI was designed to increase the participation and advancement of women in the sector in Ontario. We have connected over 700 women through networking events, 200 women have benefited from training programs & workshops, and 175 women received financial support for experiential learning opportunities and upskilling.

In 2023, OBIO® was awarded up to $9.7 million by the Government of Ontario to help companies in the life sciences sector to adopt, develop and bring to market critical technologies: 5G and advanced networks, ethical artificial intelligence, blockchain, cybersecurity, quantum and robotics.

2024 saw the most recent cohorts of OBIO's Early Adopter Health Network (EAHN™) and Capital Access Advisory Program (CAAP®) achieve great success. With funding from FedDev Ontario, OBIO® has supported over 300 SMEs, and participated in projects that generated over $140 million in sales by SMEs and over $175 million in foreign direct investment. The projects contributed to the creation and retention of over 1,000 jobs.

LOOKING FORWARD

In the next five years, OBIO® will continue to expand its programming in Commercialization, Skills Development & Training and Market Adoption and we will provide infrastructure support for our members. We will engage more investors, corporate partners, academic institutions and healthcare organizations to help our members reach their business goals. We will also continue to advocate for an increased inventory of wet lab space in Ontario.

OmniaBio Inc.
www.omniabio.com

Sector: Biopharma SME
Countries/ markets of focus: North America and global; Pharma/Biotech
Year founded: 2022
Number of employees: 150+ at Hamilton location and rapidly growing
Projected number of employees in 3-5 years: 500
Recent Major Investments/Acquisition: LineaBio Inc.

COMPANY OVERVIEW

OmniaBio Inc. is a technology-focused, global cell and gene therapy (CGT) contract development and manufacturing organization (CDMO) committed to accelerating commercialization and enabling access of advanced therapies to patients in need worldwide.

As a subsidiary of CCRM, a leader in developing and commercializing regenerative medicine-based technologies and cell and gene therapies, OmniaBio harnesses more than a decade of expertise in this exciting field, which is the future of medicine.

Offering comprehensive and tailored CDMO services, cutting-edge development and reliable and compliant Good Manufacturing Practices (GMP) capabilities, OmniaBio specializes in immune cell-based therapies, induced pluripotent stem cell therapies and lentiviral vectors, driving advancements in the field and bringing maturity to cell and gene therapy. (GMP refers to the manufacturing guidelines and standards governing the CGT industry that help ensure that products are compliant with international regulatory agencies.) With clinical manufacturing capabilities in Toronto and a newly opened, state-of-the-art commercial facility in Hamilton, Ontario, OmniaBio is poised to meet the surging global manufacturing demand, enabling access to transformative treatments for patients in North America and around the world.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Due to limited global specialized expertise and infrastructure for CGT manufacturing, CGT developers face manufacturing bottlenecks and industry challenges, especially as they scale up. Harnessing the power of artificial intelligence (AI) and robotics/automation in ways beyond the capabilities of conventional cell-based CDMOs, OmniaBio is increasing efficiency and precision in manufacturing, with the end result being cost reductions, higher product quality and productivity gains for CGT developers in North America and beyond.

Alongside our parent company CCRM, OmniaBio is one of the major players actively positioning Ontario as a global leader in biotech and life sciences by nurturing a thriving CGT ecosystem built around manufacturing.

OmniaBio is developing and expanding our domestic biomanufacturing capacity and workforce through specialized job creation and training. OmniaBio has collaborated with the Canadian Advanced Therapies Training Institute (CATTI), established by CCRM and Montreal-based CellCAN, to build a comprehensive training system to upskill and maintain its GMP workforce and avoid the shortage of trained workers that is anticipated in the coming decade.

The future of medicine is full of unknowns. What we do know is that OmniaBio leaves Canada in a much better position to respond to the biotherapeutic manufacturing needs of the future.

BARRIERS TO SUCCESS

One of the biggest challenges facing the CGT world, OmniaBio included, is the industry-wide skills and talent shortage. As mentioned, OmniaBio is facing this challenge head-on by proactively developing Ontario's CGT workforce through its partnership with CATTI. OmniaBio and CATTI are co-developing a comprehensive, standardized and scalable training system to establish a highly skilled GMP workforce. OmniaBio's GMP operations team undergoes ongoing skills refreshment and standardization in collaboration with CATTI and in alignment with OmniaBio's commitment to biomanufacturing excellence, best practices and continuous improvement. Beyond the walls of OmniaBio, the training system will be made widely available to support the growth of an ecosystem of GMP-trained and experienced personnel.

KEY WINS

OmniaBio is leading the development of domestic biomanufacturing capacity and a uniquely skilled workforce, creating 500 advanced manufacturing jobs through its new facility. The company is scaling its CGT manufacturing business to become Canada's largest CDMO specializing in advanced therapy production. Its 120,000 ft² manufacturing centre of excellence in Hamilton, at McMaster Innovation Park, supports cell and viral vector-based therapeutic developers from process and analytical development to commercial scale manufacturing.

One notable success is OmniaBio's collaboration with MEDIPOST Co. Ltd., a South Korean CGT organization, aiming to commercialize its lead product in North America using OmniaBio's Hamilton facility. Several earlier stage programs, such as Somite Therapeutics' cell therapy flagship program, are also underway at OmniaBio's Toronto location, in collaboration with CCRM.

Moreover, OmniaBio is advancing the CGT industry through its spin-out, LineaBio. In 2023, OmniaBio and CCRM launched LineaBio, a company providing the CGT industry with high-quality, off-the-shelf, induced pluripotent stem cell (iPSC) lines manufactured under GMP, simplifying drug product manufacturing.

LOOKING FORWARD

OmniaBio's mission is to be an industry-leading CDMO, supporting clients in delivering CGTs to patients globally. Its new commercial facility completes a plan to offer services from preclinical process and analytical development to commercial supply across three key manufacturing platforms: induced pluripotent stem cell-based therapies, immune cell-based therapies, and lentiviral vectors. Future expansions in new geographies will be considered once the facility is fully operational.

OmniaBio is integrating advanced robotics, biosensors, and AI models to intensify manufacturing, aiming to reduce costs and significantly increase production rates compared to conventional CDMO methods. The initial focus is on implementing strategies for cellular immunotherapies, specifically CAR-T cell therapies, by deploying automation and AI to intensify manufacturing processes. This approach seeks to expand access to CAR-T therapies for patients. By establishing an end-to-end AI-enabled automation platform for CAR-T batches, OmniaBio aims to become an industry-leading CAR-T manufacturing facility.

These efforts are expected to increase the accessibility and affordability of life-saving medicines for patients worldwide.

Ontario Genomics - BioCreate
www.ontariogenomics.ca, www.BioCreate.ca

Sector: Genomics
Countries/ markets of focus: Ontario
Year founded: 2022
Number of employees: 5
Projected number of employees in 3-5 years: 5

COMPANY OVERVIEW

BioCreate is a five-year, $11.6-million accelerator funded by Ontario Genomics and the Government of Canada through the Federal Economic Development Agency for Southern Ontario (FedDev Ontario), providing financial support and business guidance to start-ups to help move the province's biotechnology scene forward.

The main goal of BioCreate is to support start-ups in the health, food and agriculture, and cleantech sectors to bring new products and technologies to market. This includes funding, connecting them with potential investors and providing access to the kind of infrastructure and guidance they need to expand on their work.

Ontario Genomics is a not-for-profit organization funded by the Government of Ontario and other partners. Since 2000, we've been involved with cutting-edge science to find homegrown solutions to challenges the world faces like climate change, food insecurity and in healthcare.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

BioCreate is proof Ontario is an active participant in the "Bio Revolution." In the past year, nearly 200 biotech companies have applied, illustrating the need for accelerator supports like ours. What sets BioCreate apart is more than the $150,000 in funding. It's the 18-months of wide-ranging business development mentorship and access to critical infrastructure, along with networking with potential investors.

In our first year, 65 jobs have been created/maintained and $9.2 million in funding has been raised by BioCreate companies. As of 2024, nine of the 16 start-ups accepted into the program have women in CEO and other leadership positions. The 16 companies include one cleantech, six health and nine food and agriculture SMEs. Since their time with BioCreate, these companies have:

- Attained patents and regulatory approvals for their innovations.
- Set-up and improved their lab spaces and manufacturing facilities.
- Further perfected their products through experimentation, quality control studies and field trials.
- Secured follow-on funding from private investors and through federal government partnerships.

While the BioCreate team has specific mentorship offerings, we're also adaptable and strive to meet the needs of our companies to give them the extra boost they need so they can thrive.

BARRIERS TO SUCCESS

Over the past 24 years, Ontario Genomics has supported over 330 projects and formed more than 500 partnerships, and during this time, we saw a glaring gap in commercialization that needed to be filled. That's the reason behind BioCreate and judging by the number of applicants we get, there is significant demand for this kind of support:

- 2023: 97 companies applied – 12 were chosen
- 2024: 101 companies applied – 12 were chosen* (eight to be announced this fall)

Our accelerator program would be able to do so much more with increased and long-term federal funding to propel burgeoning SMEs to greater heights. Nurturing companies to scale up their innovations through meaningful mentorship, as well as access to lab space and infrastructure, will continue to be a major factor in retaining companies in Canada and enabling them to branch out globally with their game changing technologies and processes.

KEY WINS

It's no secret start-ups have a high failure rate, and given the current investment market, biotech SMEs have been struggling around the world to stay afloat. Even so, the BioCreate accelerator has a near perfect record at choosing winners with 15 of the 16 companies we're currently supporting well on their way to incredible success. Here are a few highlights:

- At-home endometriosis test makers Afynia (Hamilton) recently raised $1.7 million in investments and grants and have set up their lab to run 50 thousand tests per year.
- Plant probiotic creator Ceragen (Kitchener) secured $2.7 million in their most recent fundraising. Their tomato inoculant obtained regulatory approval in Canada, and their FerraGrow product got regulatory approval in the USA, where they have also completed large trials with successful results.
- Performance Plants (Kingston) is using their climate-change resistant crop gene editing techniques in a four-year, $2.3 million partnership with the Canadian government to develop more resilient and high-yielding soybeans.
- Protein-based sugar substitute makers Biofect (Toronto) recently secured additional non-dilutive funding (to be announced). They also came in second out of 70 companies at the Collision tech conference's pitch competition this summer.

LOOKING FORWARD

It's our goal to continue providing the kind of invaluable mentorship, financial and infrastructure support biotech start-ups need. Our planet is in a state of upheaval and changing before our very eyes; the time to act is now. Genomics-based science holds the keys to improving our way of life and our way of doing things for the benefit of not just every living being, but also for our environment and numerous industries. The BioCreate program gets groundbreaking technologies and products into the world so they can be put to use that much quicker, which is why we intend to apply for further funding from FedDev Ontario to keep this program going for years to come. Our accelerator is taking high-potential SMEs to the next level so their homegrown in Ontario solutions can benefit the rest of the country and even the rest of the world!

Ontario Institute for Cancer Research
https://oicr.on.ca/

Sector: Innovation & Research
Countries/ markets of focus: Ontario, Canada, International
Year founded: 2005
Number of employees: ~350

COMPANY OVERVIEW

The Ontario Institute for Cancer Research (OICR) delivers real-world solutions that improve the lives of people affected by cancer. We are a hub for world-class cancer research, working collaboratively with partners locally and internationally to develop new ways to find cancer earlier, treat it more effectively and ensure it doesn't return.

As Ontario's cancer research institute, we support researchers at organizations across the province and at our headquarters in the MaRS Discovery District in Toronto. These researchers, along with our partners such as patients, clinicians and others, are delivering solutions by bridging the gap between research and healthcare.

OICR's discoveries also provide significant economic benefit to Ontario. Numerous OICR discoveries have been spun out into companies that have created jobs and investment in the life sciences sector, all while ensuring that made-in-Ontario innovations result in Ontario-based companies.

Since 2005, OICR has strengthened Ontario's position as a world leader in cancer research and brought life-changing improvements in cancer screening, diagnosis and care to thousands of patients across the province and around the world.

OICR is funded by the Government of Ontario.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Beyond performing world class cancer research at our labs in Toronto, OICR is also building up and connecting the province's cancer research infrastructure and creating the systems and collaborations needed to bring scientific advances to patients. In Toronto and 18 communities across Ontario, researchers and clinician-scientists are receiving vital support from OICR that is allowing them to generate new ways to detect cancer earlier and treat it with greater precision.

Thanks to OICR's research networks and capacity building in areas such as data sharing and genomic sequencing, scientists are better connected with one another and with the clinic. Initiatives such as the OICR Genomics Program, the Ontario Hereditary Cancer Research Network and the Canadian Cancer Clinical Trials Network are expanding the availability of next-generation technologies and treatments by helping launch clinical trials and matching patients to those that may be of benefit. More than 3,400 patients were recruited to 122 OICR-supported clinical trials last year.

OICR is also working with its strategic partner FACIT to accelerate the growth of Ontario's life sciences economy. OICR and FACIT have supported the creation of 35 start-up companies, which currently support 848 jobs in the province.

BARRIERS TO SUCCESS

As our society ages, the burden of cancer on our families and communities is poised to grow. This has increased the urgency of OICR's work, which must be performed in the face of systemic challenges in the life sciences sector and growing pressures in the biotech sector for seed-stage financing. Newer technologies are being brought to bear against cancer, but many are costly to implement. Retaining and attracting top talent also remains a significant challenge as the marketplace for high-skill individuals in areas such as AI, informatics, genomics and other disciplines is highly competitive and international. Also, significant challenges related to privacy, security and the siloed nature of databases can limit data sharing and inhibit collaboration. OICR and its partners have made significant inroads in addressing these issues by identifying their underlying drivers and working towards long-term solutions.

KEY WINS

OICR has changed the landscape of cancer research in Ontario and created significant benefits for the province's research and healthcare systems and its economy. Highlights include:

- AstraZeneca's acquisition of Hamilton-based Fusion Pharmaceuticals for up to US $2.4 billion marked a major milestone for precision medicine and for Ontario's life sciences sector. Fusion is a spinout company of the Centre for Probe Development and Commercialization, which OICR launched with the Government of Canada and McMaster University over 10 years ago.
- A clinical trial connected more than 4,300 Ontarians with next-generation genomic sequencing to match them to precision treatments. The more than 7,000 samples collected are now being harnessed by researchers to make a range of cancer discoveries.
- OICR, with FACIT, secured an investment with Triphase Accelerator and Celgene Corporation worth up to US $1 billion in post-marketing downstream returns to further research and development and clinical trials of a first-in-class 'small molecule inhibitor' targeting a protein called WDR5 for the treatment of blood cancers.
- An OICR-supported collaboration led to the development of a novel oncolytic viral immunotherapy, which was spun out into Ottawa-based Turnstone Biologics that has attracted more than $490 million of investment.

LOOKING FORWARD

OICR will continue to pursue game changing discoveries in the early detection and precision treatment of cancer and deliver solutions to help Ontarians live longer, healthier lives. To achieve this, the Institute will persist in improving Ontario's cancer research infrastructure in areas such as genomics, diagnostics development and imaging technologies. We will also continue our work on innovative systems biology and informatic tools linked to integrated data sharing. As always, attracting leading researchers to the province and training the next generation of cancer scientists will remain key areas of focus for us. OICR will continue do this in concert with our partners to ensure that our efforts are responsive to the healthcare system and those it serves. We will continue to pursue the realization of our vision of Cancer Solved Together and a stronger, healthier Ontario.

Pacer Air Freight Ltd.
https://www.pacerair.com/

Sector: Logistics Supply Chain
Countries/ markets of focus: Canada
Year founded: 1981
Number of employees: 18
Projected number of employees in 3-5 years: 25-30

COMPANY OVERVIEW

Pacer Air Freight is a family-owned logistics company based in Toronto, Canada, which specializes in time-critical and customized delivery solutions for healthcare, radioactive, manufacturing, and entertainment industries. Pacer provides air and road freight, warehousing, and hazardous materials handling services. Globally, we deliver urgent shipments, such as medical isotopes and high-value equipment, in a timely and safe manner.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

1. Unique Differentiation –
   a) Innovative Technology Use: Specialized Services
   b) Partnerships and Alliances
2. Problems Being Solved –
   a) Supply Chain Bottlenecks
   b) Sustainability in Freight
   c) Customs and Regulatory Compliance
   d) Last-Mile Delivery Coordination
   e) Improving Transparency
3. Impact Beyond the Company –
   a) Environmental Impact
   b) Helping to Save Lives
   c) Supporting Local Economies
   d) Thought Leadership

BARRIERS TO SUCCESS

Pacer faces several challenges, especially since it specializes in time-critical and sensitive shipments like danger goods and medical isotopes. Regulatory compliance is a big deal, since radioactive and dangerous goods require strict adherence to evolving safety standards. Time-critical deliveries, especially in healthcare, add pressure since delays can have serious consequences.

Supply chain disruptions, rising costs, and labor shortages complicate logistics. COVID-19 and inflation have made maintaining timely and cost-efficient services harder.

There will be more pressure for Pacer to adopt more sustainable transportation methods because of environmental concerns. Global supply chains and technological disruptions could also pose challenges in the future. Pacer is committed to investing in technology, keeping operations flexible, and developing its workforce.

KEY WINS

Our organization has undergone significant reorganization in the past two years, and we continue to find ways to evolve as a Global Time Critical Logistics for the Nuclear Medicine Industry. In September 2021, we created the QA Manager position and hired Giovanna Ippolito. We received ISO certification on October 13, 2022, and became a Regulated Agent on December 20, 2022. Pacer Air Freight operates a 10,000 sq. ft. temperature-controlled warehouse with in-house freezers and fridges for pre-conditioning packaging. We moved into our new 85,000 square foot facility in early 2024. Currently, we are building out our 10,000 square foot cold storage facility for early 2025 into our new building. Our operations run 24/7, ensuring global shift coverage and peace of mind for our customers, with a high priority on individual treatment needs. We are capable of transporting both domestic and international DG goods, including Class 7, with DG-certified drivers and operation team members. As part of our network support, we offer training and certification to ensure adherence to established standards. Our company is a proud member of several key organizations, including Neutral Air Partner, WCA Pharma, OCNI, CIFFA, IATA, CLDA, WIN, and CNSC.

LOOKING FORWARD

Pacer Air Freight wants to expand globally, enhance technology integration, and become a leader in time-critical logistics with a focus on the life sciences. A key goal is to offer seamless air and road freight solutions worldwide. This is especially true for industries that require urgent deliveries, such as healthcare and medical equipment. Pacer will invest in workforce development to make sure their team is ready for deadlines. It aims to be a top-tier provider in the life sciences logistics industry by focusing on innovation, sustainability, and customer service.

Pfizer Canada ULC
www.pfizer.ca/en

Sector: Pharmaceuticals
Countries/ markets of focus: 180+ countries have access to Pfizer medicines
Year founded: 1953 in Canada, 1849 in the U.S.
Number of employees: 83,000 colleagues worldwide, more than 950 colleagues in Canada

Pfizer Canada's investment of $500,000 to McMaster's Global Nexus is aimed at supporting the university's commitment to inclusive excellence in research. (Credit:Brandon Kaiser, McMaster University)

COMPANY OVERVIEW

Pfizer Canada ULC is the Canadian operation of Pfizer Inc., one of the world's leading biopharmaceutical companies. Our diversified health care portfolio includes some of the world's best known and most prescribed medicines and vaccines. Consistent with our responsibility as one of the world's premier innovative biopharmaceutical companies, we collaborate with health care providers, governments, and local communities to support and expand access to reliable, innovative health care around the world. Pfizer's Canadian footprint includes its headquarters in Kirkland, Quebec and a manufacturing site in Brandon, Manitoba. To learn more about Pfizer Canada, visit pfizer.ca or you can follow us on LinkedIn, Facebook, X, Instagram or YouTube.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

We strive to profoundly impact the health of Canadians through the discovery, development and delivery of medicines and vaccines. Our diverse portfolio offers a broad range of benefits and solutions to meet the needs of Canadians. Pfizer's innovative portfolio focuses on the discovery and development of new medicines and vaccines. By focusing on the best science and patient experience, Pfizer's leadership and significant investments support faster delivery of breakthrough medicines that can fulfill unmet needs.

At Pfizer, we operate with integrity and abide by the most stringent code of ethics and compliance. We support the Canadian economy and are committed to giving back to the communities where we work and live. Ultimately, our goal is to ensure that all Canadians have timely access to best-in-class treatments and quality health care.

At Pfizer, we believe it is our responsibility as a biopharmaceutical company, to drive innovation forward. By engaging with partners and collaborators, we aim to mobilize our combined strengths and talents to deliver for patients in Canada. Our support of academic institutions and community initiatives, demonstrates a commitment to being part of broad-based solutions in healthcare.

BARRIERS TO SUCCESS

Patients deserve faster access to novel medications. Canada currently ranks last out of the G7 on timely access to new medicines as it takes on average around two years for patients to access publicly funded medicines in Ontario and across Canada. At issue is Canada's multi-layered, duplicative, and sequential system for public reimbursement which is complex and slow. This ongoing access issue has a significant impact on Canada's ability to attract Life Sciences investments, including critical research studies. Therefore, we were pleased to see that Premier Ford and his peers at the Council of Federation have indicated that it will be a top priority to accelerate access to medicines, an initiative that Pfizer and the innovative biopharmaceutical industry have advocated for over many years.

KEY WINS

In 2024, Pfizer announced a $4.9M investment in Ontario's McMaster University's study to help improve care for multiple myeloma patients in Canada. This University-led study, through the Ontario Clinical Oncology Group, will aim to improve care for Canadians living with multiple myeloma. The EMBRACE study will evaluate how adult patients with relapsed or refractory multiple myeloma (RRMM) can receive treatment safely at home using remote patient monitoring as one of the measures. Remote monitoring will help reduce the time patients spend travelling to treatment appointments and time in hospital, which can help improve their quality of life. This also has the potential to help reduce overall hospital appointments for patients and strain on the healthcare system.

Also, in partnership with McMaster University Pfizer announced a significant project aimed at addressing critical gaps in health equity in the development and delivery of vaccines. Pfizer Canada's investment of $500,000 to McMaster's Global Nexus is aimed at supporting the University's commitment to inclusive excellence in research by training emerging scholars from equity-deserving groups in the field of vaccinology, as well as students conducting vaccine research focused on populations who are especially vulnerable to infectious diseases.

We believe that it is through fostering the interaction of different actors, including large companies like ours, universities, research centers, startups, and more, that innovation can flourish.

LOOKING FORWARD

At Pfizer, our Purpose is rooted in achieving social good. We know that when we succeed, our innovations can potentially have life-changing effects. We aim to address illnesses from widespread infectious diseases to conditions with historically unmet need.

Pfizer is mindful of the urgency of our mission, as the world fights against the spread of deadly new diseases and struggles with inequities in health outcomes among populations. Our goal is to leverage partnerships and programs to allow quick and widespread access to our breakthrough medicines and vaccines around the world.

ProteinQure

ProteinQure Inc
www.proteinqure.com

Sector: Biopharma SME
Countries/ markets of focus: All
Year founded: 2017
Number of employees: 23
Projected number of employees in 3-5 years: 45

COMPANY OVERVIEW

We use AI to design small protein therapeutics. Our first drug candidate is tumor targeting therapeutic for the most deadly form of breast cancer and will be in clinical trials in 2025.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

We have the only computational platform capable of predicting/modelling exotic peptide drug conjugates. Our first drug candidate is for patients who have no current treatment option in a specific subtype of breast cancer.

BARRIERS TO SUCCESS

- Attracting capital in Toronto.
- Hiring drug development talent in Toronto.
- Managing a multi-national clinical trial.

KEY WINS

- Major partnerships with many top companies including 3 of the top 25 pharma companies.
- Lead program on track for first human dosed in Q3 - 2025, with the best cancer hospitals in North America
- Worked with Princess Margaret Cancer Centre to validate our drug

LOOKING FORWARD

- Toronto's first AI drug discovery company to have a drug in clinical trials.
- Completed Phase I clinical trial (2027), achieved breakthrough FDA status, close to a drug approval (2030).
- One new R&D collaboration (2025)
- Two additional drug candidates. (2026)
- The largest Biopharma in Toronto.
- To continue to be the best computational peptide company in the world.

Psigryph Inc.
www.cholestello.com; www.psigryph.com

Sector: Agri-Food
Countries/ markets of focus: United States, Canada, EU, Japan, China, India, Brazil
Year founded: 2018
Number of employees: 8
Projected number of employees in 3-5 years: 50

A Psigryph meeting with members of NRC-IRAP on campus at the University of Guelph in November 2023.

From Left:

Vas Paliyath, B.Sc., MBET - Director Quality and Business Development

Sean Thompson, B.Sc., - CEO

Brooke Thompson, B.A. - Environmental Projects Analyst

Vighnesh Sukhu, Ph.D Candidate, U of Guelph Plant Ag, Nanopect Advanced Fertilizer Researcher

COMPANY OVERVIEW

Psigryph is an agrifoodtech biotech company spun out from the University of Guelph that owns Nanopect™, a patented, plant-derived highly efficient delivery vehicle for all living cells that is derived from sour cherries. Its basic premise is that all living things are part of an interdependent biological ecosystem, a concept known as One Health, such that the health of all plants, animals and humans is closely related. Thus, the science of food can provide solutions to many health problems of any living thing.

Our first product Cholestello™, launched in the US in September 2024, offering a nutrient dense food powder that is shown to support healthy levels of cholesterol. It is available online to US consumers on our website.

We have several environmentally friendly pipeline projects in agriculture to aid food production without environmental pollution.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Nanopect™ is a plant-derived nanotechnology that delivers bioactive molecules to cells. It is comprised of spherical nanoparticles and string-like nanofibres that are isolated from a proprietary, patented process developed at the U of Guelph.

The 1st application is Cholestello, a dietary supplement that dramatically improves health promoting nutrient uptake. The technology is being developed to deliver active payload molecules for human and animal nutrition, fertilizers and RNA and small molecule pesticides in agriculture.

We have in vitro and in vivo data showing greatly increased intracellular delivery of small molecules. We have also demonstrated uptake of RNA by Nanopect™ with high efficiency. In vivo data in potatoes proving proof of concept of siRNA against the fungus fusarium, became available in mid-2023.

Agriculture is the main beneficiary sector because food production could be improved with far less environmental pollution such as N_2O. Human health and nutrition are the secondary beneficiaries due to improved nutrition and decreased input manufacturing requirements respectively.

In the future, Nanopect™ can be applied to oral and nasal delivery of RNA in the pharmaceutical industry.

BARRIERS TO SUCCESS

The biggest challenge is raising capital. There really is no investor market for companies like ours in Canada. So, we are forced to compete as a foreign company in other markets or move to be seen as a domestic company.

Capital formation will continue to be the biggest barrier. Talent, equipment and other resources are not barriers. Paying for them is and finding visionary investors to support growth is THE problem.

KEY WINS

We have 4 issued patents in the the USA, Japan and India with 16 more in review.

The launch of Cholestello is a major milestone for the company and we are very focused on growing sales to fund development of even higher margin products in the future.

We also got accepted into the HudsonAlpha AgTech Investment Accelerator in Huntsville, Alabama. This comes with a US$100,000 investment, massive exposure to the investor and partner ecosystem here and matching State of Alabama investment up to US$1M."

LOOKING FORWARD

Our goal is simply to deploy our Nanopect technology to solve major problems in agriculture, food and healthcare globally. These are all inextricably linked problems in our view. I see Psigryph as a major company operating in partnerships across the Ag, Food and Pharma sectors.

The biggest question is where will that corporate growth occur? Canada, the USA, Switzerland or somewhere else. We are a global company currently based in Canada.

QReserve
https://get.qreserve.com/

Sector: Tech, Software
Countries/ markets of focus: North America, Europe
Year founded: 2014
Number of employees: 10

COMPANY OVERVIEW

QReserve is an advanced scheduling and resource management platform. We modernize processes for scheduling valuable equipment, consumables, spaces, services and people. Organizations are turning to our cloud-based software when they need more advanced tools to manage resources and get useful insights from their usage data.

Originally created in 2014 to handle the complexities of scientific research facilities, QReserve's software and expertise in resource management has grown and advanced over the past decade. We have been shaped by the needs and insights of our large, globally recognized customer base. QReserve has become a comprehensive, secure, and scalable software solution used across a wide range of environments. We have been successfully implemented in settings such as small private laboratories, top-ranked universities and colleges, hospitals, publicly traded life science companies, government research facilities, offices, regional innovation centers, makerspaces, and more.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

QReserve helps organizations modernize and simplify how their teams and customers access and use resources. Our platform allows customers to set custom rules, requirements, and costs for their spaces, equipment, and staff based on each user's access level.

QReserve's unique custom rules and workflow engines provide unparalleled customization to meet a wide range of customer requirements without significant development overhead. We minimize or eliminate time consuming processes that are required when using more basic tools such as paper calendars, Excel spreadsheets, or numerous Google and Outlook calendars.

Common problems QReserve solves include:

- Adding transparency and automation in how diverse groups of people view, request access to, and schedule valuable resources.
- Standardizing processes and procedures relating to resource management across locations, departments, faculties, and global business units.
- Creating internally managed marketplaces of equipment, rooms, desks, consumables and services that can generate revenue or value from underutilized resources.
- Revealing valuable usage data to support operational decisions and help build business cases for investing in or retiring facilities and equipment. We offer clear insights into resource and facility productivity, benefiting both organizations and funding agencies.

BARRIERS TO SUCCESS

Our customers often start with unique and minimally defined scopes of work that require significant planning and implementation strategies. We have historically taken a bespoke approach for every organization, which has impacted scalability; however, this has enabled us to gain a greater understanding of the unique challenges and requirements of our customers. With over 100 globally recognizable organizations as customers, we are now able to identify common patterns and develop strategies to address these diverse requirements through a standardized approach. We provide our customers with the aggregate insights from years of experience working with their peers and supply a variety of tried and tested pathways they can follow.

KEY WINS

QReserve has been adopted by numerous globally recognized organizations, often through word-of-mouth recognition of our expertise. These organizations have realized the value of our software's key features, particularly as they seek to enhance collaboration and resource sharing across departments. Our ability to identify and address the challenges of siloed resources has been instrumental in our success. We have helped clients evolve their resource management practices, from the initial implementation to continuous growth. Key achievements include onboarding clients at an enterprise level, including Ontario based institutions such as the University of Toronto and SickKids Research Institute. Today, we're more equipped than ever to assist organizations in making impactful changes, offering a clear and intuitive structure to guide them through the process.

LOOKING FORWARD:

Our goal is to help all organizations better manage their resources, regardless of size or industry. We aspire to enable a more connected ecosystem of organizations and individuals, where members can easily find the resources they need, whether it's down their hall or through aligned partners, and for that transaction to be as simple as possible. Our vision is to facilitate efficient, seamless resource management that empowers organizations to achieve their objectives.

We firmly believe that comprehensive resource management systems will be powering connected ecosystems of universities, colleges, hospitals, private sector organizations and government entities. We intend to be a global leader in these initiatives and for Canadian jurisdictions to be the first to launch and benefit from the competitive advantages that the enhanced connectivity enables.

Pharmaceutical and Healthcare Management and Innovation

Queen's University - Graduate Diploma in Pharmaceutical & Healthcare Management and Innovation (PHMI)
https://bit.ly/phmi-dip

Sector: Academia
Countries/ markets of focus: Canada
Year founded: 2018
Number of employees: 20

PHMI Class of 2023 with Dean Jane Philpott.

Graduates from the Class of 2023.

COMPANY OVERVIEW

In 2018, PHMI launched with the goal of providing academic pathway into medical affairs for advanced health professionals across Canada. Its one-of-a-kind curriculum boasts flexible online coursework curated by industry experts, a six-month paid internship within a healthcare organization, and multiple mentorship and networking opportunities, among other features fostering student success.

Queen's University is based in Kingston, Ontario, and although it is a nationwide program, most of our internships are based in the Greater Toronto Area.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Advanced health professionals, meaning individuals holding either a PhD, MD, or PharmD, traditionally have no academic pathways into healthcare industry. Their only option is to apply for jobs, at which point they are competing with candidates who are already working in industry, often for several years. Getting such hands-on experience from a Canadian university is limited to degree programs lasting two years or more.

This does not mean healthcare organizations are uninterested in such individuals; there is, in fact, a major need for early talent with strong scientific and clinical backgrounds, particularly in Medical Affairs. However, companies struggle to find such talent possessing a foundational understanding of healthcare industry in Canada.

PHMI solves the problem in both fronts: a) over a ten-month period, postgraduate professionals receive a holistic learning experience that includes a comprehensive understanding of pharmaceutical development and commercialization, real-work experience, mentorship, and professional development opportunities to ensure their continued success beyond graduation b) internship hosts provide an environment that fosters students' growth while serving as a talent pipeline for the industry and, in many cases, hiring their own interns after graduation.

PHMI's continued growth shows its impact. Many partners return to offer internships annually. As our alumni are promoted or join new organizations, they generate more interest and new leads, allowing us to increase enrollment to meet the increased student demand.

BARRIERS TO SUCCESS

Initially, the program had no graduates, and therefore no credibility. It was difficult to attract prospective students, as well as to secure internships based on a curriculum alone. The continued success of our alumni has addressed these issues, and PHMI's reputation is established. The diploma is now a mark of academic excellence and a legitimate career advancement pathway for life scientists.

The most recent challenge has been the program's scalability. With a growing list of enrollments, industry partnerships, and actionable feedback, supporting the program part-time is no longer sustainable. To address this, we have hired an Associate Director to support the program full-time.

One remaining hurdle is the eligibility of domestic students without Permanent Residency or Canadian Citizenship. Equity in academics is a core value at Queen's University, and we are working diligently to find solutions that will allow non-residents to complete internships in Canada as part of this diploma program, hopefully in time for our 2025-2026 offering.

KEY WINS

Today, PHMI has grown from a humble, five-student cohort to nearly a hundred graduates, partnering with dozens of healthcare organizations and counting. Our alumni, who continuously excel at their internships and progress in their careers, are our strongest advocates. Through their achievements, PHMI has established itself as Canada's leading academic program for postgraduates in the life sciences seeking to enter the industry.

LOOKING FORWARD

The future is bright for PHMI with the recent hiring of Dr. Tomás Baldassarre as Associate Director. Under his leadership, we are piloting a Global Stream to partner with organizations outside of Canada and are set to offer a Certificate Program in 2025 for life science professionals interested exclusively in the course material. We are also looking beyond pharmaceutical industry, to fill unmet needs in academic programming for other life sciences sectors using the tried-and-true PHMI formula.

RAN BIOLINKS
https://www.ranbiolinks.com/

Sector: Innovation & Research
Countries/ markets of focus: USA, Canada, Kenya, Tunisia
Year founded: 2021
Number of employees: 3
Projected number of employees in 3-5 years: 20

Rad Aniba (left) Co-Founder, CEO @RAN BioLinks Canada Ltd; Rym Ben-Othman (right) Co-founder and CSO @RAN BioLinks Canada Ltd, attending Small Business Show at Metro Toronto Convention Centre in June 2024.

COMPANY OVERVIEW

RAN BioLinks is an Ontario-based biotechnology research accelerator focused on enhancing and expediting clinical research through technology-driven solutions. We specialize in data solutions that help scientists and clinical trial professionals implement standardized, reproducible studies cost-effectively. The platform automates workflows, helps organize clinical trial files for inspection readiness, provides immediate data access, and enables real-time analytics, allowing researchers to generate insights faster and more efficiently. By leveraging advanced tools, we ensure accuracy, compliance, and collaboration, transforming clinical research processes for data-driven results.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

At RAN BioLinks, we offer something truly unique: a platform created by researchers, for researchers. Our team understands the intricate challenges scientists face, and we've built an all-in-one solution that spans every step of the research process—from study design through to data analysis and insight generation. Our technology automates processes and boost efficiency and reproducibility. We solve critical issues of inefficiency, high expenses, and data fragmentation, helping researchers produce reliable, reproducible studies.

But our impact extends further: by accelerating the pace of discovery and supporting research excellence, we're contributing to advancements that benefit both the scientific community and public health. We empower researchers to focus on the science, unlocking innovations that lead to life-changing breakthroughs.

BARRIERS TO SUCCESS

One of our primary challenges has been establishing a strong presence and gaining visibility within the local research community. Building trust and credibility takes time and requires us to consistently prove the value of our platform. Additionally, expanding our network to reach a wider audience and integrating advanced technology into established research workflows can be difficult. This integration often requires researchers and institutions to adapt to new ways of working, which can be a slow process due to the cultural shift it demands.

KEY WINS

Since its launch, RAN BioLinks has achieved several impactful milestones that extend beyond our organization:

- Provided resources, automated pipelines, and technology to enhance research capabilities for teams in East Africa.
- Partnered with the European Plotkin Institute for Vaccinology and The Human Immunome Project on an African-initiated COVID-19 vaccine study for people living with HIV.
- Collaborated with UHN researchers to optimize their processes by leveraging data-driven metrics and demonstrable outcomes in their research.
- Collaborated with researchers at Dalhousie University on projects aimed at empowering mothers and enhancing newborn immune resilience.
- Delivered accessible data education through podcasts, webinars and other channels, helping to bridge knowledge gaps in low-resource settings.
- Made a strategic partnership with data solutions leaders like Dataiku to enhance our platform's capabilities and offer advanced solutions to our clients, keeping us at the forefront of innovation.

LOOKING FORWARD

- **Expanding Local and International Reach:** Increasing our presence, especially in low-resource areas, through strategic partnerships and outreach to broaden our impact.
- **Embracing Emerging Technologies:** Continuously integrating new technologies to enhance our platform and remain at the forefront of innovation.
- **Scaling Efficiently:** Maintaining high standards of quality and efficiency as we scale, supported by robust systems and processes.
- **Navigating Regulatory Landscapes:** Adapting our solutions to meet diverse regulatory requirements across countries, ensuring compliance with the evolving clinical trial landscape
- **Securing Funding and Sustainability:** Ensuring financial sustainability and finding resources to support underfunded initiatives for long-term success.

Ripple Therapeutics
www.rippletherapeutics.com

Sector: Biopharma SME
Countries/ markets of focus: US, EU, China, Canada
Year founded: 2020
Number of employees: 27
Projected number of employees in 3-5 years: 35-40

COMPANY OVERVIEW

Ripple Therapeutics is a privately held ophthalmic clinical stage biotech company that designs drug delivery implants. Ripple's patented technology platform simplifies treatment for the patients and the providers by eliminating the need for daily drops or monthly injections. The technology is based on a discovery that drugs can be chemically engineered into controlled release pharmaceuticals without the use of polymers or excipients, meaning once the drug is gone, the implant is gone without any inflammatory degradation products. These "prodrugs" are highly customized to tailor both the drug dose and duration, resulting in an improved safety profile, extended therapeutic benefit and reduced treatment burden for both the patient and their physician.

Ripple recently announced a collaboration and option-to-license agreement with AbbVie (NYSE:ABBV) to develop a next generation, fully biodegradable, sustained release drug delivery implant with potential repeat dosing capabilities to reduce intraocular pressure (IOP) in patients with open-angle glaucoma or ocular hypertension. This collaboration leverages AbbVie's expertise in eye care and Ripple's innovative drug delivery platform, with the potential to deliver a meaningful impact on the lives of people living with glaucoma. Under terms of this agreement, Ripple will receive an upfront payment of $21.8M USD and is eligible to receive up to $290M USD in aggregate option fees and milestones, as well as tiered royalties on net sales.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Millions of people are living with glaucoma, retinal disease and other causes of blindness. New treatment options are needed to help patients challenged with topical drops or who are at risk for vision loss and looking for alternative treatment options. In addition to our own proprietary products, Ripple is partnering with a number of eye care companies that will use Ripple's technology platform in concert with their APIs to create sustained release implants which will benefit patients with extended duration and improved safety, thereby reducing the treatment burden.

BARRIERS TO SUCCESS

Our greatest challenge over the last few years has been raising additional equity capital after our $20M Series A which we closed in 2020. The lack of public exit options for early-stage biotech companies combined with rising interest rates and a more conservative approach to capital deployment has made it difficult to raise capital for Ripple and other companies in our position. Fortunately, we have been very successful in attracting funding both from strategic partners as well as non-dilutive funding and grants which has provided us significant future financial runway.

While the market conditions are improving, we still expect that equity financing will remain a challenge over the next 12-18 months but we're confident that with the AbbVie deal in hand and our product pipeline and platform expansion opportunities we will be successful.

KEY WINS

We were able to move from fundamental discovery in 2017 to our first product in patients in 2021.

In the true spirit of invention, Ripple's technology, Epidel, was borne out of constraint. In the mid-1990s, the Controlled Release Field was focused on conjugating drugs into polymer backbones as a way of controlling drug release. While the science was conceptually appealing, the lack of reproducible manufacturing and the complexity of a polydisperse polymeric breakdown profile limited the translation into approval products.

In our Toronto laboratories, these constraints inspired a minimalistic approach to re-think how controlled drug delivery could be achieved. A novel prodrug approach was discovered which provided a simple, highly predictable, and tunable way to achieve sustained drug release without the use of polymers or excipients.

LOOKING FORWARD

Our five-year goals include:

1. Getting multiple products (both proprietary and partnered) into clinical trials and being able to demonstrate the benefit of our sustained release approach with improved vision and quality of life for patients and decreased treatment burden for both patients and their physicians
2. Expanding our product focus to "new" ophthalmology opportunities such as dry AMD and geographic atrophy
3. Expanding our product focus outside of ophthalmology where sustained local or systemic delivery can have a meaningful impact on patient's lives
4. Adopting AI to more rapidly design and iterate the base chemistry/material science properties for future product development
5. Securing a meaningful exit for our shareholders either through a public offering or an M&A transaction

Sanofi Canada

https://www.sanofi.com/en/canada

Sector: Pharmaceuticals/vaccines
Countries/ markets of focus: Canada and export to 60 countries
Year founded: 1914
Number of employees: 2000+

COMPANY OVERVIEW

We are Sanofi, an innovative global healthcare company, driven by one purpose: we chase the miracles of science to improve people's lives. Our team, across the world, is dedicated to transforming the practice of medicine by working to turn the impossible into the possible. We provide potentially life-changing treatment options and life-saving vaccine protection to millions of people globally, while putting sustainability and social responsibility at the center of our ambitions.

In Canada, we employ over 2,000 people. We invest 20% of our revenue annually in biopharma research (representing $1.2 billion CAD in R&D investment over the last decade) creating jobs, business, and opportunities throughout the country. We are also on track to deliver over $2 billion CAD in new infrastructure investments by 2028.

In 2024, we celebrate 110 years of heritage dedicated to developing innovative health solutions for Canadians. What started as a small laboratory in May of 1914, recognized for having advanced some of the greatest contributions to public health, both nationally and globally, has evolved to become the largest biomanufacturing facility in Canada.

BARRIERS TO SUCCESS

We welcomed last year's federal government announcement of a National Rare Disease Drug Strategy, which included a funding commitment of $1.4 billion to help provinces and territories pay for rare disease drugs. However, one year later, there has been no money spent to help fund rare disease drugs.

With one child dying from a rare disease in Canada every 18 minutes and over 3 million Canadians of all ages dealing with years before diagnosis or access to new therapies, our lives are on the line, and nothing is more urgent.

The approach to rare diseases is fragmented across the country and this means Canadian families with rare illnesses are facing extraordinary challenges. These include misdiagnosis, unnecessary surgeries, social isolation, financial hardship, lack of treatment options and early death.

Right now, only 60% of treatments for rare disorders make it into Canada and most get approved up to six years later than in the USA and Europe. Sanofi continues to work with the Federal Government and the Province of Ontario, along with private payers, to ensure Canadians have timely access to new innovative medicines and vaccines and that Canada has a globally competitive health technology assessment process which recognizes the value of innovation across the healthcare system and economy.

KEY WINS

With approximately $2 billion (CAD) invested in our Toronto site over the last 5 years, including significant public sector funding contributions, we are expanding our manufacturing footprint and jobs to make more lifesaving vaccines and medicines available to Canadians and people worldwide. Our heritage in Canada goes back to 1914. This is where insulin was first produced on a mass scale, as well as playing key roles in the fight against diphtheria, tetanus, pertussis and the eradication of polio in North America and smallpox globally. As a pioneer of the early biotechnology movement in the 1980s, we also advanced early therapies in rare diseases and specialty care. Today, we are continuing to advance healthcare, employment and our economy across our four business units. We are passionate about making life in Canada healthier and more prosperous.

LOOKING FORWARD

By redefining immunology, we will change the lives of millions of people with difficult diseases such as COPD, multiple sclerosis, asthma, atopic dermatitis, RSV, Acne, T1 diabetes, and hopefully many more in the future.

Our rich heritage in public health is still the foundation of our organization and is core to what we do every day. We've focused our efforts as an organization to become the industry leader in immunology. That is why we have doubled down on our R&D investment and are on track to deliver life-changing medications and vaccines through our promising pipeline of products. We have 88 ongoing clinical studies operating across 461 research institutions in Canada.

SickKids®

Industry Partnerships & Commercialization

SickKids Industry Partnerships & Commercialization
https://ipc.sickkids.ca/

Sector: Innovation & Research
Countries/ markets of focus: Worldwide
Year founded: The Hospital for Sick Children – 1875
Number of employees: SickKids Industry Partnerships & Commercialization – 12

COMPANY OVERVIEW

As the commercialization hub at The Hospital for Sick Children (SickKids), the Industry Partnerships & Commercialization (IP&C) office drives cutting-edge innovations from our institution toward impactful health-care solutions. SickKids is a world leader in paediatric health-care and research, ranked second in the World's Best Specialized Hospitals 2025 by Newsweek among paediatric hospitals.

IP&C works closely with SickKids researchers and clinicians to guide discoveries toward real-world impact. We specialize in identifying valuable novelty, protecting intellectual property, and translating SickKids innovations into viable products and services, forming the basis of start-up companies, licensing agreements and strategic partnerships. By providing the expertise, resources and funding opportunities to bring innovations to market, our team helps the groundbreaking work at SickKids reach patients worldwide.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

As the #1 research-intensive hospital in Canada, with over 3,000 scientists, researchers, and technicians, SickKids produces a wealth of pioneering discoveries. IP&C ensures that these innovations are positioned to succeed, helping to bridge the significant resource gap that often hinders the commercialization of research discoveries.

IP&C is proactive in our approach to catalyzing innovation; unlike the traditional tech transfer model, we go beyond intellectual property management and marketing to facilitate the analysis, de-risking and strategic development of promising technologies toward start-up company creation or high-value licensing. Our efforts place SickKids at the forefront of turning scientific discoveries into transformative health-care solutions.

RECENT HIGHLIGHTS:

- 55 new licenses executed in 2022/2023 fiscal year
- $11.8M in research expenditures from industrial sources in 2022/2023 fiscal year
- 210 issued patents in the 2022/2023 fiscal year
- Approximately 500 active patents
- $3.5M annual gross revenue (5-year average)
- Over $2M in gap funding awarded through our in-house SickKids Commercial Proof of Principal Grant Competition

BARRIERS TO SUCCESS

The journey from discovery to impact is complex and resource-intensive, especially for pharmaceutical technologies. Our primary challenges lie in securing strategic gap funding and experienced advisory support and mentorship. SickKids IP&C strives to address these obstacles through dedicated innovation and commercialization funding, specialized programs to accelerate top technologies and a commitment to support SickKids startups.

KEY WINS

At IP&C, our success is measured by the SickKids innovations we bring to market and their impact on health care and the economy. The tools, therapies, diagnostics and devices we commercialize drive research, create jobs, and improve global health. Here are some key examples:

Radiant BioTherapeutics: SickKids scientist Dr. Jean-Philippe Julien's Multabody technology is a multi-specific and multi-affinity antibody platform for next-gen treatments. With internal expertise and a $150k Proof-of-Principle Grant from IP&C, as well as external funding, the technology enabled the creation of Radiant Biotherapeutics, which secured $8M in seed funding and $35M in Series A financing for Multabody-based cancer therapies in 2024. During the COVID-19 pandemic, $590k from SickKids Foundation, $500k from the Ontario Research Fund and $4M from the Gates Foundation was also granted to develop early-stage therapies for coronavirus, HIV and malaria.

Simulare Medical: Simulare Medical, a SickKids startup, offered affordable training for cleft lip, palate and rhinoplasty surgeries. Its 2020 acquisition by SmileTrain expanded access to its training to over 2,100 medical partners globally. Continued innovation by Dr. Dale Podolsky of SickKids led to the creation of the first Bilateral Cleft Lip Simulator (2022), Cleft Palate Simulator (2022) and Alveolar Bone Graft Simulator (2023).

PhenoTips: Co-founded by Dr. Michael Brudno of SickKids and the University of Toronto, PhenoTips standardizes genomic health records to enable precision medicine in Canadian health systems, UK NHS Trusts and leading US hospitals. In 2024, PhenoTips was named one of Canada's Best Startup Employers and won the Human Resources Director Award for one of the best workplaces in the country.

LOOKING FORWARD

Our goal is to transform health science innovations into impactful services and products that improve lives worldwide. To achieve this, we are expanding our support infrastructure by strengthening our network of industry partnerships and advisory resources, ensuring emerging technologies receive the strategic guidance they need. We also aim to significantly increase the number of start-ups launched from SickKids research, building a dynamic pipeline of ventures that advance breakthrough technologies. Join us in building a healthier future - connect with us to make an impact.

SPEC Labs Centre for Advancement of Biomedical Innovation
https://www.speclabs.ca

Sector: Life Sciences Infrastructure
Countries/ markets of focus: Canada
Year founded: 2023
Number of employees: 3

COMPANY OVERVIEW

SPEC Labs is a not-for-profit organization located in Mississauga Ontario, dedicated to empowering life sciences ventures by providing a state-of-the-art co-working wet lab facilities. SPEC Labs serves as a critical bridge for graduating incubator companies, helping them scale from initial research to market-ready solutions without the high costs and logistical burdens of building individual laboratory spaces.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

SPEC Labs is solving a fundamental problem for emerging life sciences companies in Ontario: access to affordable, high-quality ready-to-use laboratory space. We provide private and shared CL2 labs that support diverse life sciences research, including biotechnology, pharmaceuticals, diagnostics, and medical devices. By offering a shared infrastructure, SPEC Labs enables ventures to focus on their core research and development activities without worrying about the overhead and operational complexities of setting up and maintaining their own labs.

SPEC Labs addresses the critical gap between incubators and full-scale commercial facilities. By offering a collaborative space, we allow multiple ventures to coexist, fostering a culture of innovation, shared knowledge, and resource efficiency. This unique model not only reduces operational costs for individual companies but also creates a vibrant ecosystem that accelerates the commercialization of life sciences innovations in Ontario.

Our impact extends beyond providing lab space; we are actively building a community where life sciences ventures can thrive. Our partnerships with academic institutions, industry leaders, and investors help bridge the gap between research and commercial success.

BARRIERS TO SUCCESS

Our biggest challenge to date has been securing sustainable funding to build and scale our operations rapidly enough to meet the high demand for lab space. Additionally, navigating regulatory and logistical complexities related to setting up and operating a co-working CL2 lab facility has required careful planning and resources.

SPEC Labs anticipates several challenges as it grows:

- Regulatory Changes: Stricter environmental regulations and zoning laws may increase costs and restrict facility expansion.
- Economic Downturns: Economic instability could limit funding for startups and raise operational costs, affecting demand for lab spaces.
- Technological Disruptions: Advances in remote research and lab automation may reduce the need for physical lab space.
- Competitive Landscape: New and existing competitors offering similar or better facilities at competitive prices could impact SPEC Labs' market share.
- Operational Risks: Facility management inefficiencies or safety incidents could cause financial losses, while low tenant retention could impact revenue stability.

KEY WINS

In 2024, SPEC Labs reached key milestones to advance Ontario's life sciences sector:

- $5 Million in Funding from FedDev Ontario: This funding will expand SPEC Labs' capacity to support more biotech ventures transitioning from research to commercialization, reinforcing our role in the regional innovation ecosystem.
- Lease of a 20,000 SF Innovation Lab Facility: SPEC Labs secured its first lease at 2599 Speakman Drive, Mississauga, to develop a state-of-the-art 20,000-square-foot facility. Designed to support graduating biotech companies, the facility offers co-working CL2 labs, collaborative workspaces, and advanced research equipment, providing the ideal environment for scaling up operations.
- Strong Sponsorship Network: We have established a robust sponsorship network, including partnerships with academic institutions, industry leaders, and investors. This network offers our tenant companies access to vital resources, mentorship, and funding opportunities, fostering a collaborative ecosystem that accelerates commercialization.

These achievements position SPEC Labs as a key driver of growth and innovation in Ontario's life sciences sector, helping transform cutting-edge research into market-ready solutions.

LOOKING FORWARD

Opening in June 2025, our goal is to support 10-15 companies that will create 50-100 high-skilled jobs in Ontario over the next five years. SPEC Labs is committed to expanding its facilities and services to support more companies and foster a thriving life sciences ecosystem in Ontario. Our next steps include doubling our lab space to accommodate an additional 20-25 companies by 2030 and launching specialized programs to support companies focusing on critical areas such as oncology, neurology, and regenerative medicine.

By continuing to provide essential infrastructure, resources, and community support, SPEC Labs aims to be a cornerstone of Ontario's life sciences landscape, driving innovation and economic growth for years to come.

Specific Biologics Inc.
www.specificbiologics.com

Sector: Biopharma SME
Countries/ markets of focus: Canada, US & EU
Year founded: 2017
Number of employees: 20

COMPANY OVERVIEW

Specific Biologics is a venture-backed preclinical company dedicated to developing genetic medicines to treat or cure diseases inside the body using efficient and precise genome editing. Our proprietary and versatile Dualase® gene editors have a unique two site mechanism that accurately corrects many different mutation types, allowing us to unlock new therapeutic targets in areas of high unmet need for patients. Unlike many other genome editing technologies, Dualase gene editors are small and fit into clinically validated delivery vehicles to target our editors to the right tissue in the body. We have built a pipeline of potential Dualase-based therapeutics in lung, liver, CNS, skeletal muscle and ocular disorders and have demonstrated these potential medicines can correct disease-causing mutations in relevant preclinical cell and animal models.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Rapid advances in genome editing technologies in the past decade have enabled the development of medicines for patients who previously had few or no therapeutic options. These technologies work by directly modifying the genome (or the genetic blueprint) of our cells to make a lasting correcting change in DNA. Despite the incredible advances in these technologies, the therapeutic potential of current gene editors is limited by their efficiency, precision, specificity and deliverability for many mutations and tissue targets in the body.

Specific Biologics' Dualase gene editors overcome these challenges with their unique two-site mechanism and compact size. When Dualase editors modify the right DNA target site they leave unique DNA ends. Naturally occurring repair mechanisms inside our cells use these DNA ends to efficiently and precisely remove or correct the targeted DNA and nowhere else in the genome. We have also developed proprietary lipid nanoparticles to deliver our gene editors as single RNA molecules and have also developed single adeno-associated viral vectors (AAVs), two important technologies to target the right tissue in the body. The Dualase-based medicines we are developing have the potential as one-time treatments for patients who often have limited or no therapeutic options for serious genetic disease.

BARRIERS TO SUCCESS

The general market challenges driven by high interest rates continue to create a challenging market for early stage venture investments, particularly for platforms. Additionally, other gene editing companies have faced issues, creating a weakened sentiment for the sector, but we are well poised to overcome these challenges. However, companies who have demonstrated an ability to be efficient with capital with focused development plans, coupled with compelling and unique technologies, continue to attract investment. Many successful companies have also secured alternative sources of financing, such as non-dilutive financing through grants and other sources, to continue to de-risk platform technologies and advance pipeline products. As a testament to the unique value of our Dualase gene editors, differentiated products in our pipeline and the team developing the technology, we are proud that we have raised additional capital and secured significant non-dilutive financing to fund platform and product development. Our technology and pipeline development are focused on the unique features of our Dualase gene editors, which has also enabled us to demonstrate the breadth of our technology's capabilities.

KEY WINS

Specific Biologics' success to date is driven by our team of dedicated researchers and drug developers, support from leading life science investors and funders, and differentiated technology. To highlight a few key milestones:

2019: Specific Biologics is accepted to JLABS @ Toronto incubator and established its research and development labs.

2021: Initial Seed financing raised from leading life sciences investors Lumira Ventures and adMare BioInnovations. Awarded a grant from the US Cystic Fibrosis Foundation to fund preclinical studies using our gene editors for multiple CF-causing mutations.

2023: Awarded a US$1 million grant to study lung delivery of gene editors as potential programmable rapid response therapeutics from BLUE KNIGHT™, a joint initiative created between Johnson & Johnson Innovation and the Biomedical Advanced Research and Development Authority (BARDA). Issued US Patent for key Dualase compositions and methods of use. Completed in cell and preclinical animal model studies at third parties which demonstrated Dualase gene editors' unique advantage in correcting lung, liver, CNS, skeletal muscular and ocular disease-causing mutations.

2024: Built out a world-class team of 20 who are experienced drug developers and genome editing experts. Launched Series A raise based on compelling preclinical data package to advance Dualase medicines toward the clinic.

LOOKING FORWARD

Driven by our mission to bring genome editing medicines to patients suffering from serious genetic diseases, we have built best-in-class gene editors and a world-class team to continue to develop the technology and pipeline of Dualase-based therapeutics. In the next few years, we are poised to realize the potential of our gene editors as medicines as we advance drug candidates into IND-enabling studies and clinical trials in several therapeutic areas. We are also developing new Dualases in new therapeutic areas of high unmet medical need that, together with partners, we will continue to advance to the clinic to patients in need. Over the next 5 years, we will continue our journey as a leading genome editing company.

Stem Cell Network
www.stemcellnetwork.ca

Sector: Innovation & Research
Countries/ markets of focus: Canada
Year founded: 2001
Number of employees: 19

COMPANY OVERVIEW

The Stem Cell Network (SCN) is a national not-for-profit that supports four main objectives: funding stem cell and regenerative medicine (RM) research; training the next generation of highly qualified personnel; enabling knowledge mobilization of research; and enhancing the commercialization readiness of stem cell and RM innovations.

Created in 2001, with support from the Government of Canada, the Network has grown from a few dozen labs to more than 270 worldclass research groups, supporting over 250 research projects and 30 clinical trials. Since its inception, over 25 biotech companies have been catalyzed or enhanced and more than 7,000 highly qualified personnel have been trained. In 2023, the Government of Canada announced additional funding for SCN through the Strategic Science Fund that will support SCN activities and research through to the end of the decade.

KEY WINS

During this past year alone, SCN-funded investigators from coast to coast have made important advancements in areas such as diabetes, cardiac disease, high-risk blood cancers, lung and liver repair, muscular dystrophy, and neurodegenerative diseases. This past year also saw the enhancement of several Canadian regenerative medicine and biotechnology companies such as Satellos Bioscience, Morphocell Technologies, ExCellThera Inc., Notch Therapeutics, Aspect Biosystems, and Axolotl Biosciences.

In the last two years, SCN has invested a total of $28.4 million in funding dollars into the stem cell and regenerative medicine sector, with $31.8 million in partner funding for 56 projects in 26 disease areas, involving more than 550 researchers, clinicians, and trainees. This is by far the largest injection of funding in SCN history.

With over $148M invested into research projects and clinical trials across the country since its inception, SCN has advanced approximately two dozen biotech companies through research funding — funding that has either enhanced an existing company or resulted in the spin-out of a new company. A 2024 internal analysis of SCN-supported companies shows that for every dollar SCN has provided, $30 has been raised in private investment.

Most recently, in July 2024, SCN launched new national research funding competition for the 2025-2029 period. This competition will support world-class, translational, regenerative medicine research, across the research continuum to facilitate health, social and economic benefits for Canadians.

LOOKING FORWARD

Powered by two decades of success, SCN is a central driver of Canada's life sciences ecosystem, and the only national network with a proven track record for continued excellence and impact in regenerative medicine. At the start of the decade, the Stem Cell Network's objective was to 'ignite' Canada's true potential in regenerative medicine. In the years ahead, armed with its new Strategic Plan, Accelerate 2025-2029, the Network's focus is squarely on 'accelerating' this momentum to deliver life-saving innovations to Canadians. As it has throughout its history, SCN will continue fostering a strong, diverse, pan-Canadian research community – a community that is connected by a common vision: to transform lives through regenerative medicine.

Courtesy of Aspect Biosystems

Courtesy of Satellos Bioscience

Stem Cell Network researchers gather in Ottawa

SteriLabs Canada

https://sterilabs.ca/

Sector: Med Tech

Countries/ markets of focus: Canada and the U.S.

Year founded: 2016

Number of employees: 10

Projected number of employees in 3-5 years: 20

COMPANY OVERVIEW

Established in 2016, SteriLabs is a trusted provider of laboratory testing and advisory services, specializing in microbiology and analytical chemistry for the medical device and pharmaceutical industries. Operating within a state-of-the-art, 20,000-square-foot facility, the company utilizes FDA and Health Canada-approved equipment to conduct rigorous testing. SteriLabs' laboratory is accredited to ISO/IEC 17025 standards and licensed by the Public Health Agency of Canada, ensuring the highest levels of quality and safety.

SteriLabs has worked on a wide range of complex medical devices, validating cleaning, disinfection, sterilization, and packaging procedures. Their expertise includes simulating use cycles and assessing the effects of repeated reprocessing on device performance. These studies are crucial for manufacturers to demonstrate to regulatory bodies, including the FDA and Health Canada, that their devices are safe for patient use.

The company supports device manufacturers and research institutions through every stage of the product lifecycle, from design and validation to regulatory approval. Each test is customized to the specific device and complies with the latest global standards. SteriLabs is dedicated to delivering precise, reliable results, recognizing that the accuracy of every test is essential to ensuring the safety and efficacy of products entering the market.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Before the establishment of SteriLabs, Canadian medical device manufacturers had to rely on U.S.-based laboratories for specialized testing in cleaning, disinfection, and sterilization validation. This created challenges, including the logistical complexity of shipping devices across the border, lengthy turnaround times, and limited collaboration opportunities. Manufacturers often found it difficult to effectively engage with U.S. labs when issues arose, as they could not easily visit the facilities to contribute to problem-solving.

SteriLabs addressed these challenges by creating a world-class, ISO 17025-accredited testing laboratory in Canada, specialized in medical device testing. This has provided Canadian manufacturers with the ability to conduct validation studies locally, reducing costs, shortening turnaround times, and enabling direct collaboration with SteriLabs' team of scientists, engineers, and consultants. By offering faster, more accessible testing services, SteriLabs has significantly streamlined the validation process for Canadian companies, fostering innovation and efficiency within the industry.

BARRIERS TO SUCCESS

One of the biggest challenges SteriLabs faces is engaging medical device manufacturers that have traditionally worked with overseas laboratories. While organizations often resist change, SteriLabs has maintained a 100% customer return rate. Once manufacturers experience the lab's efficient and effective processes, they consistently choose to return for future testing and validation services.

Another significant barrier is the limited number of Canadian-based MedTech conferences since the pandemic, which makes it harder to network with potential clients in the local industry.

Looking ahead, the increasing complexity of medical devices—combined with more stringent regulatory requirements—will likely raise the costs of testing and validation. This is particularly challenging for startups with limited funding, who may struggle to afford the comprehensive testing necessary to gain market access

KEY WINS

SteriLabs has successfully collaborated with numerous medical device manufacturers, helping them complete critical testing and validation studies. The company has built strong relationships with key partners in the Canadian MedTech ecosystem and has been invited by incubators and industry organizations to connect with emerging MedTech startups and manufacturers.

The SteriLabs team is actively involved in the development of standards and guidance documents published by AAMI, ISO, and ASTM, which regulate the industry. In addition, SteriLabs has expanded its ISO 17025 accreditation to include new, in-demand testing methods, further broadening its service offerings. The company continues to grow, bringing in scientists, engineers, consultants, and interns from diverse backgrounds to strengthen its expertise and capabilities.

LOOKING FORWARD

SteriLabs aims to become the first choice for all Canadian medical device manufacturers seeking microbiology and analytical testing, as well as validation services, to meet regulatory requirements in the Canadian, U.S., and European markets. By continuing to expand its capabilities and services, SteriLabs is committed to playing a pivotal role in strengthening the Canadian MedTech ecosystem.

Over the next five years, the company plans to deepen its relationships with key industry players, both locally and internationally, while staying at the forefront of evolving regulatory standards. SteriLabs envisions becoming a go-to partner for manufacturers, not only for testing and validation but also for offering expert guidance throughout the entire product lifecycle—from research and development to regulatory approval and market launch.

Additionally, SteriLabs is dedicated to continuous innovation, expanding its scope of services, and investing in new technologies to support the testing of increasingly complex medical devices. By doing so, the company seeks to provide manufacturers with viable, cost-effective options that accelerate their path to market, fostering greater innovation within the MedTech sector and ensuring Canadian companies remain competitive on the global stage.

Swift Medical
www.swiftmedical.com

Sector: Med Tech
Countries/ markets of focus: US and Canada
Year founded: 2015
Number of employees: 65+
Recent Major Investment/Acquisition: In 2024, Swift Medical raised $US8M in financing and was awarded more than $3.5M in co-investments with DIGITAL.

COMPANY OVERVIEW

Swift Medical provides digital wound care management solutions for healthcare organizations in the US and Canada. Our inception in 2015 created a brand-new market segment for digital wound care and since then we have remained the market leader. We have a strong track record in the post-acute market as partners of the leading EMRs in skilled nursing facilities (PointClickCare) and home health (Homecare Homebase). We have served 3M+ patients and boast the largest dataset of 28M+ clinically calibrated wound images and 50M+ wound evaluations. We pride ourselves in delivering superior technology for better patient outcomes and have evidenced it through 22 peer-reviewed articles and 45 scientific posters.

Our AI-based solutions improve the prevention, treatment and management of wounds from the bedside to patient administration. Swift Skin & Wound brings clinical-grade imaging to any smart device to capture wound images and automatically calculate wound measurements. Our newest technologies in development provide AI-based assessment and prognosis of a wound. Our dashboards and reports aggregate wound data collected for comprehensive insights and trends to optimize treatments and programs. Our solution has been proven to improve wound healing time by up to 35% (https://swiftmedical.com/clinical-operational-economic-benefits-dwms-home-health/), helping healthcare organizations provide optimized care and patients achieve better clinical outcomes.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Wound care is one of the costliest and overlooked threats to the healthcare system today. It rarely receives the attention that many other conditions do. Yet, there are more people with a chronic wound than there are people with breast cancer, colon cancer, lung cancer and leukemia combined. The number of wounds is projected to increase substantially with aging populations and surging rates of obesity and chronic diseases, like diabetes and kidney disease.

We have the world's largest, most diverse, and highest-quality database of clinically calibrated wound images, comprised of over 28 million images. This anonymized dataset powers our advanced AI models, which help clinicians with intelligent clinical assessment tools, predictive healing and risk tools and treatment support tools.

Wound data is often disparate and inaccurate. Inaccurate data can lead to incorrect treatment plans, which can delay healing and require more resources. Swift Skin & Wound addresses these challenges by improving the accuracy of wound data and organizing it into actionable reports through the power of AI. Our technology was purposefully built so it works with all smart devices and without WIFI connectivity, an essential requirement for home health clinicians who may have to work in remote locations.

BARRIERS TO SUCCESS

One of our biggest challenges has been educating healthcare organizations about the true, often underestimated, cost of wound care. Many organizations fail to recognize the significant financial burden imposed by chronic wounds, which can persist for years. This oversight is often compounded by wounds frequently being associated with other chronic conditions that receive more attention. Looking ahead, we anticipate that the increasing complexity of wound care will continue to pose significant hurdles. As the population ages and the prevalence of chronic diseases rises, the demand for effective wound management solutions will grow. This will require ongoing innovation and investment in technologies that can address the diverse needs of patients and healthcare providers.

KEY WINS

Our groundbreaking wound care research has significantly advanced the industry by demonstrating the transformative potential of AI and technology. Our publications have not only fostered greater acceptance of these innovations but have also provided concrete evidence of the real-world value of digital wound care management solutions. By bridging the gap between clinical research and practice, we're empowering healthcare professionals to make more informed decisions and deliver proactive care. Our studies showcase the extraordinary capabilities of AI in addressing complex and challenging wound care scenarios. Additionally, our partnerships with enterprise skilled nursing and home health organizations have yielded compelling ROI data, highlighting the substantial benefits of investing in wound care technology.

LOOKING FORWARD

We strive to create a future where every patient receives the highest quality wound care. To achieve this, we will equip healthcare organizations with innovative AI solutions to streamline their workflows and enhance patient outcomes. Our solution will continue to build on its award-winning technology and massive dataset to support clinical decision-making at the bedside, drive more preventive care and drive efficiencies in clinical documentation.

Tech4Life Enterprises
https://tech4lifeenterprises.com/

Sector: Healthcare
Countries/ markets of focus: North America
Year founded: 2013
Number of employees: 26 full time employees
Projected number of employees in 3-5 years: 400 fulltime employees

COMPANY OVERVIEW

Tech4Life Enterprises designs and implements telemedicine technology that enhances remote healthcare access, especially in underserved regions. Our telemedicine solutions allow healthcare workers to perform patient consultations and examinations using devices such as digital stethoscopes, digital cameras, and remote monitoring systems. Tech4Life operates in countries where access to specialists is limited, including both developing and developed nations. Our innovative solutions have been applied in various contexts, from improving mental health services in Afghanistan to reproductive health in Kenya. Our products not only simplify telemedicine for health workers but are so user-friendly that anyone can operate them. The kits have proven especially valuable in natural disaster zones and war-affected areas, where reliable healthcare is often scarce. The devices can function without network connections and come equipped with 24-hour battery life. They can be recharged via solar panels or vehicle connections, ensuring uninterrupted care in even the most isolated settings. This level of durability and flexibility makes Tech4Life's telemedicine kits invaluable for healthcare in remote areas. Our approach not only delivers practical solutions but also creates a meaningful impact by making healthcare accessible in the world's most challenging environments.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Tech4Life is committed to making healthcare technology simple and accessible for everyone, enabling quality care regardless of training. We aim to empower the 1.5 million village-based health workers in developing countries who often serve as the sole healthcare providers in their communities. Our telemedicine kits, tailored to specific needs, allow these workers to easily connect patients with remote doctors.

Our technology addresses the critical issue of limited access to trained healthcare professionals in developing countries. Our devices are intuitive and easy to use—just flip a switch to activate them—ensuring that health workers without formal medical training can confidently deliver essential care. This simplicity is crucial in remote areas with limited healthcare access, where reliable, user-friendly solutions are essential.

By empowering local healthcare workers, Tech4Life improves healthcare delivery in underserved areas. Our technology bridges the gap between remote communities and professional medical support, enhancing local health systems' capacity to respond to various health issues. Ultimately, we contribute to healthier communities by ensuring more people have access to necessary care, regardless of their location or resources.

BARRIERS TO SUCCESS

One of our biggest challenges is introducing new technology to healthcare professionals in developing countries, where there is often no established culture of research or innovation. Many are already overwhelmed, seeing hundreds of patients daily, and may view new technology as an added burden. Overcoming this resistance requires us to design intuitive solutions and provide hands-on training to demonstrate the benefits without disrupting their workflow.

Navigating the logistical and regulatory landscape is another significant hurdle. Each country has its own set of regulatory approvals and processes, making it challenging to get our kits where they are needed most. Transporting equipment to remote areas with limited infrastructure also poses challenges. To combat this, we send teams with kits to provide in-person training and support which helps build trust and ensures that our solutions are integrated into the community healthcare system.

Looking ahead, we anticipate continued challenges in technology adoption and regulatory compliance as we expand into new regions. Balancing advanced technology with simplicity will be key as we strive to make healthcare more accessible, even in the most underserved areas.

KEY WINS

At Tech4Life, we've achieved significant success with innovative solutions in challenging environments. In 2023, our telemedicine drone was tested during catastrophic floods in Pakistan, enabling remote consultations and delivering vital medical supplies to isolated areas.

In Zambia, our partnership with the government led to the deployment of 50 telemedicine kits, reaching over one million people in rural areas with critical health services. These kits have bridged the healthcare gap in regions with limited access to trained specialists.

In Afghanistan, we addressed the mental health crisis, where over 50% of young adults suffer from depression. By deploying telemedicine kits across three provinces, we provided remote consultations, improving mental health care for 1.5 million individuals with limited access to care.

Our successes are due to our adaptable, easy-to-use technology and strategic collaborations with governments and global health organizations. Membership at TechPlace fosters continuous learning and growth, enabling strategic connections with post-secondary institutions, mentors, and key partners within the Canadian tech ecosystem, contributing to our success and expansion.

LOOKING FORWARD

In five years, Tech4Life aims to lead in social impact by providing telemedicine and remote care devices to millions in underserved populations. Our future strategy focuses on developing non-invasive hemoglobin monitors and telemedicine drones. These monitors, tested in large trials, can significantly reduce anemia in women and children. Our drones, successfully tested in Pakistan's flood-affected areas, not only deliver supplies but also offer remote medical consultations and patient assessments.

We plan to refine and expand this technology, collaborating with partners like Sheridan College to design drones with enhanced battery life, portability, and the ability to operate in extreme conditions. These improvements will ensure continuous healthcare access even when infrastructure is compromised.

Driven by a commitment to social impact, Tech4Life is dedicated to developing innovative technologies that simplify healthcare delivery in rural and underserved regions. Our vision is to expand our reach and make a tangible difference in the lives of millions globally.

TeleVU Innovation Ltd.
www.televu.ca

Sector: Healthcare
Countries/ markets of focus: Canada, US, International. Currently in 14 African and Asian countries.
Year founded: 2021
Number of employees: 6
Projected number of employees in 3-5 years: 20

COMPANY OVERVIEW

TeleVU (pronounced Tele-View) harnesses the power of AR (Augmented Reality) and AI (Artificial Intelligence) to build an ecosystem of connected IoT devices, medical and imaging systems and specialized applications to redefine access to quality medical care, high-quality medical education and digital workflow management.

In clinical settings, our telepresence solution utilizes smart glasses and other IoT devices to connect clinical peers by providing a hands-free POV (Point of View) and immersive experience utilizing AR, voice activation and AI.

At home, patients utilize our state-of-the-art software and handheld all-in-one IoT devices to measure, monitor, store and share their vital signs and health data with their care team.

Throughout the continuum of care, we bring interoperability and connectivity to enhance interactivity and accuracy of virtual care and adding the human touch—virtually.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

While virtual care is often just a basic video calling solution adapted for healthcare, TeleVU has redefined this approach by developing the only fully interoperable, end-to-end virtual healthcare platform designed specifically for peer-to-peer collaboration. By integrating AR, AI, and remote patient examination and monitoring tools, TeleVU ensures seamless care from acute care settings to patient homes, enabling real-time collaboration among frontline clinicians, remote specialists, and even including patients when needed. This innovative approach enhances patient outcomes, expands access to specialized care without the need for travel or transfers, and helps reduce the strain on hospital resources.

TeleVU facilitates continuous monitoring and the early detection of potential complications, reducing hospital readmissions and emergency visits. With its AI-driven insights and real-time data, clinicians can deliver personalized care and make timely decisions that enhance recovery and reduce complications. Moreover, TeleVU champions health equity by bringing expert care to underserved and remote areas, ensuring that location does not limit access to high-quality medical services.

TeleVU's flexible, scalable platform empowers healthcare providers to manage larger patient volumes while maintaining exceptional quality of care, streamlining clinician workflows, and shaping the future of healthcare delivery.

BARRIERS TO SUCCESS

Despite achieving significant success with high ROI and improved patient outcomes, a key challenge remains securing funding for scaling initiatives. Large procurement opportunities often cater to well-established companies, making it difficult for smaller startups to compete for funding opportunities to expand their innovations.

KEY WINS

- Wound Care in Underserved Communities: TeleVU has been instrumental in a wound care program serving indigenous communities in NW ON, enhancing outcomes and cutting travel and costs by connecting patients to specialized care remotely.
- Enhanced Community Paramedicine: Paramedics in NW ON leverage TeleVU to consult with specialist nurses and physicians, reducing the need for repeat visits and transfers and boosting community paramedicine services.
- Reducing Surgical Backlog: Partnering with the Canadian Association of General Surgery, TeleVU's TelePresence AR tech has allowed community hospitals to conduct advanced surgeries with mentorship from academic hospitals, alleviating the surgical backlog.
- Remote Patient Monitoring: Collaborating with Humber River Health and OBIO, TeleVU's BioVU platform has shown success in patient monitoring at home, minimizing unnecessary ER and outpatient clinic visits.
- Global Health Impact: In partnership with NGOs across Africa, Asia, and Greenland, TeleVU helps build local capacity and sustainable year-round care models, enabling clinicians to deliver advanced care with the support of remote experts.

TeleVU's commitment to creating "Made in Ontario" technology without outsourcing to international developers guarantees top-level security, privacy, and intellectual property protection for its customers and patients..

LOOKING FORWARD

Looking ahead, TeleVU aims to extend digital healthcare beyond basic telemedicine and video calls, positioning itself as the premier ecosystem for connected care in hospitals. By offering a comprehensive system that integrates multiple solutions under one platform, TeleVU helps reduce digital fatigue for healthcare providers. The company's vision is to bring top-quality care to underserved communities while expanding its global footprint and becoming a key player in international health programs.

Toronto District School Board - Woburn CI
https://schoolweb.tdsb.on.ca/woburnci/

Sector: Education - Secondary
Year founded:
SHSM - 2023

COMPANY OVERVIEW

Woburn Collegiate Institute implemented two Specialist High Skills Major programs - Health and Wellness and Information and Communication Technology sectors in the 2023-2024 school year. Students in Grade 11 and 12 complete sector relevant courses along with a two credit cooperative education placement, complete mandatory and elective certifications, participate in reach ahead and experiential learning opportunities and engage with an industry partner to solve a presented problem in a sector partner experience.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

By offering students a variety of learning experiences through the Specialist High Skills Major (SHSM) programs, we are providing students with the opportunity to extend their learning beyond the classroom walls. Through SHSM reach ahead, experiential learning and sector partner experiences, students have the opportunuty to engage with industry professionals and learn about the skills and knowledge that they will need to be succesful in both post-secondary education and the workplace. We have worked hard to offer students with meaningful and athentic experiences designed to show them potential career options. Students who succesfully complete all SHSM requirements graduate with a special Red Seal Diploma and receive an official record of their SHSM achievements.

BARRIERS TO SUCCESS

The Specialist High Skills Major (SHSM) program requires students to take a two credit cooperative education course in a placement that is connected to the sector. As we grow our SHSM in both of our sectors, finding relevant cooperative education placements has been a challenge. Many healthcare, health sciences, life sciences along with information and communication technology placements find it difficult to see how a secondary school cooperative education student can be of value. Our most significant challenge is showing companies in these sectors that secondary school students have considerable skills to bring to a placement and hosting them will be a benefit to the company!

KEY WINS

The Woburn SHSM programs were implemented in September of 2023. In our first year we had 94 students in the Health and Wellness sector, 55 in Grade 11 and 39 in Grade 12 with 19 earning their Red Seal diploma. We had 31 students in the Information and Communication Technology sector, 19 in Grade 11 and 12 in Grade 12 with 7 earning their Red Seal diploma. In our second year we have grown the Health and Wellness sector to 110 total students and our Information and Communication Technology to 60 students.

Life Sciences Ontario contributed significantly to our success as students were invited to participate in the virtual breakfast presentions where applicable. Students enjoyed the sessions and learned a lot. As a teacher, it was very powerful to see the LSO members in attendance and watch our students connect to and witness lifelong learning in action! They were so excited that they were learning alongside industry professionals.

LOOKING FORWARD

Our main goals for the SHSM programs are as follows: offer a third SHSM in the Business sector, grow the student enrollment to 50% of our Grade 11 & 12 student population, continue to offer unique learning opportunities such as the Life Sciences virtual presentations, continue to connect with industry partners to explore experiential learning experiences and work with these partners to develop meaningful and sector relevant cooperative education placements.

TORONTO INNOVATION ACCELERATION PARTNERS

Toronto Innovation Acceleration Partners (TIAP)
https://tiap.ca/

Sector: Health
Countries/ markets of focus: Canada / Ontario
Year founded: 2008
Number of Employees: 14

COMPANY OVERVIEW

Ontario is at the forefront of health research, consistently producing groundbreaking medical discoveries that not only save lives worldwide, but also hold immense commercial potential. To realize this potential, TIAP brings the province's top universities, hospitals and research institutes together with industry partners and investors to proactively identify the most exciting sparks of ground-breaking therapeutic, medical device and digital health/AI innovation — and provides the tools, resources, and know-how to transform this work into successful commercial ventures.

This critical commercialization capacity includes:

- A team of highly experienced business professionals and a deep network of seasoned advisors with the acumen to support:
  - Company formation, business plan development, technology in-licensing, R&D / technology advancement
  - Building of leadership teams including recruitment of qualified C-suite management, boards, and scientific / subject-matter experts and key opinion leaders; as well as securing of strategic partnerships
- Direct seed investment to bridge early funding gaps, along with matched and/or strategic follow-on financing from top-tier domestic and international life sciences investors.

Further to this, TIAP works in close collaboration with other downstream organizations throughout the ecosystem to amass the complementary resources needed to support ongoing scale-up and growth — thus ensuring a robust sustained pipeline of new highly-promising Ontario companies.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

As the hands-on interface with tech transfer, TIAP is at the forefront of the company formation process and offers unique value for stakeholders:

- For investigators, innovators and entrepreneurs from Ontario's research institutions: TIAP provides a pathway to translate their work into new commercial ventures.
- For investors: TIAP offers a robust pipeline of pre-validated, de-risked investment opportunities.
- For industry partners: TIAP offers a pool of novel innovations based on world-leading research to help build their technology pipelines.
- For highly qualified personnel (HQP): TIAP offers a growing commercial life sciences industry in which to seek employment.
- For our federal and provincial governments: TIAP translates public investment in research into significant societal returns, enhancing Ontario's and Canada's health and economic security.

BARRIERS TO SUCCESS

In the post-COVID era, Ontario's ability to transform its research advantage into commercial innovations is hindered by a lack of capital for early-stage ventures, particularly in the $2-10 million range. This funding gap prevents life sciences startups from scaling and realizing their potential, leaving many lucrative opportunities, unrealized. We commend the array of initiatives bolstering our sector, notably Ontario's "Taking life sciences to the next level" strategy, which aligns well with Canada's

Biomanufacturing and Life Sciences Strategy. It is now time to build on these as we are poised to create lasting value and a strong foundation for a sustainable life sciences sector, but failing to support new ventures adequately could mean missing a unique opportunity for massive economic growth in this rapidly expanding industry.

KEY WINS:

With a 15-year track record, TIAP has made a measurable impact on the growth of Ontario's life sciences sector. Key achievements include:

- Advancement of more than 100 novel innovations.
- Launch of ~70 new companies (50% being led by women and >60% led by other under-represented groups).
- Over $47M in direct investment made into emerging Ontario life sciences companies.
- Raising of over $1B in private investment by portfolio companies.
- Creation of 1,000+ new jobs.

TIAP portfolio companies to watch include:

- Fibrocor: First supported through our LAB150 Program; lead program soon to enter trials for idiopathic pulmonary fibrosis.
- Zucara: Recently raised $20M to advance the first solution to prevent hypoglycemia in people with diabetes.
- Vasomune: Created by TIAP and the Sunnybrook Research Institute around vascular normalization strategies; successfully progressed lead product from discovery to a Phase 2a trial for ARDS.
- Radiant: Built on science developed at SickKids and U of T; recently closed a $35M financing to advance its therapeutic pipeline via its proprietary Multabody™ Platform.

LOOKING FORWARD:

A Unified Vision for Innovation: Through partnerships with government, industry, academia, investors, support organizations, and patient groups, we have made significant progress toward making Ontario a global leader in life sciences. However, ensuring global competitiveness, retaining and attracting talent, and scaling life sciences companies requires a strategically aligned innovation approach and even greater focus on collaboration rather than competition, uniting resources and sector support. Together, we are on the brink of an extraordinary opportunity to achieve unparalleled success in life sciences. The time to thrive is now!

University Health Network
www.uhncommercialization.ca

Sector: Healthcare
Countries/ markets of focus: Canada
Year founded: 1990's
Number of employees: 17,000+

COMPANY OVERVIEW

UHN is Canada's No. 1 hospital and the world's No. 1 publicly funded hospital. With eleven sites (6 research institutes, 5 hospitals) staff, UHN consists of Toronto General Hospital with its Toronto General Hospital being no. 3 in the world behind Mayo and Cleveland Clinics, according to the most recent Newsweek ranking (https://bit.ly/3CnbVnv), Toronto Western Hospital, West Park Healthcare Centre, Toronto Rehab, Princess Margaret Cancer Centre and The Michener Institute of Education. As Canada's top research hospital, the scope of research and complexity of cases at UHN have made it a national and international source for discovery, education and patient care. Flagship program areas include: cardiology (Peter Munk Cardiac Centre/Ted Rogers Centre for Heart Research), transplantation (Ajmera Transplant Centre), neurosciences (Krembil Brain Institute), vision (Donald K. Johnson Eye Institute), arthritis (Schroeder Arthritis Institute), surgical innovation (Sprott Department of Surgery), genomic and regenerative medicine (McEwen Stem Cell Institute), oncology, infectious diseases, social medicine (Gattuso Centre for Social Medicine) and rehabilitation medicine. UHN is a research hospital affiliated with the University of Toronto.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Fuelling global innovation in health care through philanthropic partnership with the Accelerator Fund.

Transforming discoveries into real applications for patients can take years of development, refinement, validation and testing. While research and clinical investigators at University Health Network (UHN) have long been at the forefront of global discoveries, securing funding for early, pre-clinical research can often be challenging due to the high risks and high costs of this phase. To help scale our promising technologies via commercialization, UHN has launched the Accelerator Fund. Supported by the UHN and Princess Margaret Cancer Centre Foundations, the Accelerator Fund is a philanthropic fund and a critical resource for advancing patient care in Canada and around the world, helping promising innovations from within UHN and its ecosystem reach patients faster so that new medicines and therapeutics have a higher chance to make it from the lab to the clinic.

Through the Accelerator Fund we support early-stage projects, providing funding, mentorship and access to essential resources, enabling researchers and innovators to de-risk their discoveries, attract investment, and ultimately, bring life-changing therapies to those in need. Without this support, these new drugs and treatments might never leave the lab.

The Accelerator Fund is a critical resource for advancing patient care in Canada and around the world, fuelling leading-edge projects across UHN to change the lives of patients everywhere.

University of Toronto

https://www.utoronto.ca/

Sector: Post-secondary institution

Countries/ markets of focus: Students and industry partnerships from 180 countries and regions

Year founded: 1827

Number of employees: Number of faculty supporting the health and life sciences programs of study: 7,000 faculty

Projected number of employees in 3-5 years: Number of undergraduate and graduate students in the health and life sciences programs of study: 13,500

COMPANY OVERVIEW

The University of Toronto (U of T) is a research and innovation powerhouse training the next generation to transform the future of health care and increase Canada's health security. U of T anchors the Toronto Academic Health Science Network (TAHSN), a cluster of 14 research hospitals propelling the Toronto region as a leading global hub for life sciences research. In 2022-23, with more than 13,500 enrolled students and 88,000 employees, TAHSN attracted almost $1.5 billion in public and private research investments.

Unique research initiatives in regenerative and precision medicine, fluidic technologies, healthy aging and heart failure supports researchers in commercializing their discoveries to the benefit of all. More than one-third of venture capital investments made into life sciences startups in the Greater Toronto Area are affiliated with U of T, including leading innovators such as Deep Genomics, Notch Therapeutics, AmacaThera and Signal 1.

A century after the discovery of insulin, game-changing advancements at U of T are continuing to support better health and patient outcomes.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Across three campuses, U of T's research, innovation and talent ecosystem is at the centre of the life sciences sector in the region. The Temerty Faculty of Medicine is Canada's leading medical school by enrollment, while at the University of Toronto Scarborough, the Scarborough Academy of Medicine and Integrated Health will educate 300 health-care professionals. At the University of Toronto Mississauga, SpinUp is providing early-stage life science founders access to wet lab co-working space, equipment, office spaces and entrepreneurship programming, bridging the gap from lab to IP that can attract external investment.

The TAHSN hospital network enables collaboration and facilitates innovations, translating life sciences discoveries made in the lab into real solutions impacting clinical practice and the patient bedside.

U of T supports interdisciplinary approaches. For example, researchers at the GEMINI initiative are working to improve healthcare with anonymized hospital data. At the Acceleration Consortium, an initiative supported by a $200-million investment from the Canada First Excellence Research Fund, AI is accelerating the speed of drug discovery and delivery with self-driving labs.

U of T's AI ecosystem has led to companies such as BenchSci and Intrepid Labs to revolutionize the design of next-generation drug products by leveraging active machine learning, advanced robotics and deep pharmaceutical expertise.

BARRIERS TO SUCCESS

TAHSN is Canada's top hub for health sciences research and is among North America's leading centres for catalyzing economic growth, including commercializing new therapies through clinical trials. To this end, continued growth of the ecosystem requires investment increases to help propel the region to sustainable success. This includes greater coordination among the federal and provincial governments to support lab infrastructure and the training of life sciences clinicians and innovators at all levels. Ongoing investments demonstrates public support for the university's exceptional impact in educating the next generation of health-care professionals.

The networks of global research and investment housed at U of T depend on a strong university that has the support and tools required to continue advancing the region. The university and the hospital network require continued investments in health research funding and commitments to support infrastructure, early phase clinical trials, growth of local startups and development of the talent pipeline.

KEY WINS

U of T and its hospital network is Canada's top life sciences cluster, ranked third in North America by Nature. Unparalleled talent and training along the entire discovery to commercialization continuum supports this achievement.

Life sciences education spans multiple sites including 7,000 learners at Canada's top medical school, the Temerty Faculty of Medicine (TFoM), with 14 fully affiliated research-intensive hospitals – and community and clinical care sites.

The new Entrepreneur-in-Residence (EiR) program at TFOM is assisting hospital clinician-researchers to develop products to be operationalized in multiple hospital sites, facilitating the procurement of made-in-Ontario health innovation. With support from a $300,000 grant from Intellectual Property Ontario, the EiR pilot program harnesses networks at U of T, the Hospital for Sick Children and Sunnybrook Research Institute, and connects seasoned business leaders to researchers, clinicians and technology-transfer offices.

This year, the University of Toronto Mississauga (UTM) supported health innovation by establishing SpinUp, the university's first wet-lab-based incubator accelerating startups spun up from university research.

In short, U of T is facilitating the flow of research from lab to market, improving patient outcomes and advancing the province's life sciences strategy.

LOOKING FORWARD

U of T is among a select group of globally ranked universities deploying initiatives that span fields and faculties to advance large-scale, high-impact research to solve multifaceted challenges. The life sciences sector is a leading research area, contributing to the region's global reputation. Discoveries that improve health and the health-care system's ability to deliver care are building public and private confidence in the future of the region as a driver of health security for all Canadians and the world.

Integrated in the university's mission are entrepreneurial training and capital attraction programs that help founders to translate discovery into products, protect their intellectual property and open global markets. Creating 10,000 jobs to date, U of T startups will continue to open pathways to new treatments and therapies in fields such as genomics, health analytics, precision and regenerative medicine and attract investors who recognize the resources in the region.

University of Toronto Scarborough

www.utsc.utoronto.ca/artscicoop

Sector: Post-secondary
Year founded: 1964

COMPANY OVERVIEW

The Arts and Science Co-op program at the University of Toronto Scarborough is a 50-year-old initiative that allows undergraduate students from a rich array of academic programs to gain real-world work experience. These academic streams encompass a wide range of disciplines, including Life and Physical Sciences, Psychology, Mental Health, Health Policy, and more.

Starting after their first year, students complete two to three paid employment experiences in sectors relevant to their field of study. These work terms can last 4, 8, or 12 months and begin in January, May, or September.

Unlike traditional internships that typically occur only during the summer, this co-op program enables students to engage in meaningful, career-aligned work throughout their degree. This hands-on experience helps students develop practical skills and build professional networks while continuing their studies.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Simplifying the Hiring Process for Life Science Employers: We simplify the hiring process for employers by reducing barriers and offering flexible timelines. Our team supports employers through every step, from developing job descriptions to coordinating interviews and guiding them to funding opportunities. With our help, many employers have completed the hiring process in as few as 10 business days.

Supporting next generation of Life and Health Science professionals: Co-op students hired in healthcare have undertaken diverse responsibilities, including lab work, research study support, patient recruitment, administering tests, data analysis, report generation, and even presentations. They've excelled in analytics and software development, demonstrating rapid learning, flexibility, and up-to-date knowledge of current trends.

Fostering Thought Leadership in the Life Sciences Industry: Beyond matching students with employers, we foster thought leadership in the life sciences industry. We've developed resources like the EDI Employer Guidebook to help employers incorporate equity, diversity, and inclusion in their hiring processes. Additionally, we host regular networking events like LAUNCH, where employers and co-op-seeking students connect, facilitating talent acquisition and professional growth.

BARRIERS TO SUCCESS

One of our biggest challenges has been helping life science organizations overcome financial barriers to hiring quality student talent through co-op programs. Many organizations are eager to bring in students but face hiring limitations due to a lack of funding. To address this, the Arts and Science Co-op team tracks available funding opportunities, such as tax credits, hiring grants, and wage subsidies. We connect employers with provincial or federal funding resources that can help them access financial support, making co-op hiring more feasible.

In the future, the primary hurdle will continue to be ensuring consistent access to funding for these organizations, especially as funding programs evolve each year. We believe that staying informed and adaptable will be crucial in helping employers maximize these opportunities and maintain a steady pipeline of student talent.

KEY WINS

Our major successes lie in creating mutually beneficial partnerships between students and employers. Students gain invaluable hands-on experience, income, and the opportunity to explore their career paths. For many, it reaffirms their commitment to their chosen field, while for others, it opens doors to new career possibilities.

Some students have been published as co-authors in prestigious industry journals through their co-op placements. Their work during the co-op term has helped them gain clearer insights into potential career paths.

Employers benefit from accessing quality support from students who bring fresh perspectives and skills. Many of these students transition into full-time roles after graduation, reducing the challenges of retaining trained personnel.

What has contributed to these wins over the past 50 years is our ability to align students' educational goals with real-world experience while helping employers find motivated talent that fits their organizational culture. This synergy has driven the continued success of our co-op program.

LOOKING FORWARD

Our goal is to continue simplifying the hiring process for employers, enabling them to connect with university co-op teams and hire students for their projects. Co-op programs can play a crucial role in addressing workforce shortages and high turnover rates in the healthcare sector while also guiding students to explore their roles within this space.

Looking ahead, the Scarborough Academy of Medicine and Integrated Health (SAMIH) is set to transform healthcare education in the Scarborough region. Launching in 2026, SAMIH will train future healthcare professionals and will graduate up to 30 physicians, 30 physician assistants, 30 nurse practitioners, 40 physical therapists, and 300 life sciences undergraduates per year.

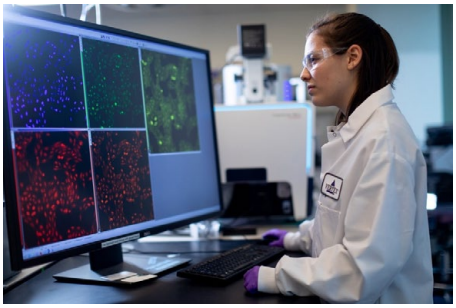
The revamped health sciences undergraduate program will offer unique placement opportunities and paid co-ops to students. This new generation of healthcare professionals will help address a significant gap, as the Ontario Ministry of Health and Long-Term Care has identified Scarborough as an area in high need of physicians.

The building will also include a clinical psychology clinic, a pharmacy clinic led by UofT faculty and students, and clinical settings where nurse practitioner students, under supervision, can provide direct care to the community.

Co-op Hiring Inquiry: utsc.utoronto.ca/hire-coop/connect-with-us

Vertex Pharmaceuticals
www.vrtx.ca

Sector: Pharmaceuticals
Countries/ markets of focus: Global
Year founded: 1989
Number of employees: +35 employees



COMPANY OVERVIEW

Vertex is a global biotechnology company that invests in scientific innovation to create transformative medicines for people with serious diseases. We invest in diseases where there is a significant unmet need and where we believe we can have a transformative impact for patients.

The company has approved medicines that treat the underlying causes of multiple chronic, life-shortening genetic diseases — cystic fibrosis, sickle cell disease and transfusion-dependent beta thalassemia — and continues to advance clinical and research programs in these diseases. Vertex also has a robust clinical pipeline of investigational therapies across a range of modalities in other serious diseases where it has deep insight into causal human biology, including acute and neuropathic pain, APOL1-mediated kidney disease, IgA nephropathy, autosomal dominant polycystic kidney disease, type 1 diabetes, myotonic dystrophy type 1 and alpha-1 antitrypsin deficiency.

Vertex's Canadian headquarters are located in Toronto, where we've recently expanded our office footprint at 20 Bay Street. Vertex Canada has also sponsored 64 clinical trials across 9 diseases areas in Ontario, with over 170 participants enrolled, since 2010.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

Vertex's Research and Development (R&D) strategy is unique and differentiates us in the industry. We invest the majority of our operating expenses in R&D as we believe that the true value of our industry lies in scientific innovation. This commitment is reflected in our company's structure, where 3 out of 5 employees are dedicated to R&D.

Fundamentally, we are a disease-first company. We select diseases in which we understand and can address causal human biology, with validated targets, and biomarkers that translate from bench to bedside. We believe this exponentially increases our chance of developing transformative medicines. We don't want to be a hammer looking for nails; we want to first identify the problem, then invent, acquire, or partner on the tool or technology necessary to do the job.

We also aim to make a positive impact in the communities where we are located by bolstering the next generation of innovators, supporting patients and their families, and enabling solutions to community challenges. In 2023, the Vertex Foundation awarded more than $42 million in charitable giving where we supported projects and organizations with a strong commitment to creating a more inclusive and equitable society.

KEY WINS

Vertex's major successes include:

- Four approved medicines in Canada for cystic fibrosis, which have transformed treatment of the disease. Not only have our *cystic fibrosis transmembrane conductance regulator (CFTR)* modulator therapies helped individuals manage their condition, Cystic Fibrosis Canada's 2022 Annual Report also shows that our CFTR modulator therapies have led to reductions in hospital stays and fewer lung transplants, benefiting the Canadian healthcare system at large.
- The first-ever CRISPR-based gene editing therapy to treat sickle cell disease and transfusion-dependent beta thalassemia. In September 2024, Health Canada granted Marketing Authorization for PrCASGEVY® (exagamglogene autotemcel), an autologous genome edited hematopoietic stem cell-based therapy, for the treatment of patients 12 years of age and older with sickle cell disease (SCD) with recurrent vaso-occlusive crises (VOCs) or transfusion-dependent beta thalassemia (TDT).
- Multiple other programs with near-term launch potential, including the first new class of acute pain medicines in decades.

These successes would not have been possible without the help of Canadian policymakers, patient advocacy groups, and healthcare professionals. Their commitment to the health and well-being of Canadians has been critical in delivering and improving access to life-saving treatments and ensuring that Canada remains at the forefront of medical innovation.

LOOKING FORWARD

By the end of this year, we expect to be in the clinic in 10 disease areas with each of these programs a first-in-class or best-in-class program. Taken together, we have the opportunity to serve millions of patients around the world. We have made strong progress toward the goal we set in 2023 of five launches in five years and are well on the way to meeting, if not exceeding, that goal.

Vaccine and Infectious Disease Organization (VIDO)
www.vido.org

Sector: Innovation & Research
Countries/ markets of focus: Global
Year founded: 1975
Number of employees: 180+ personnel

COMPANY OVERVIEW

For close to 5 decades, the Vaccine and Infectious Disease Organization (VIDO), a University of Saskatchewan research centre, has been a global leader in infectious disease research and vaccine development for humans and animals, dedicated to advancing global health and pandemic preparedness.

The recent pandemic demonstrated the impact that infectious diseases can have on global health and the economy. In response, VIDO is increasing its capacity to address risks affecting public health, wildlife, and the livestock industry.

To continue establishing itself as Canada's Centre for Pandemic Research, VIDO is growing its team of multidisciplinary scientists and researchers, expanding laboratory capacity to Containment Level 4 (CL4), developing new Containment Level 2 (CL2) animal housing, and has just completed a Containment Level 3 (CL3)-capable vaccine development centre. This comprehensive setup allows VIDO to work on all pathogens and move seamlessly from research to the manufacture of vaccines, ensuring a rapid response to infectious disease threats.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

VIDO has been at the forefront of vaccine and therapeutic development for existing and emerging diseases. VIDO focuses on a 'One Health' approach, which integrates human and animal health, and recognizes that most new infectious diseases affecting humans arise in animals – referred to as zoonotic disease.

VIDO supports researchers both in Canada and globally with its unique start-to-finish infectious disease research and vaccine development/manufacturing capability. VIDO is also part of several national and international networks and strategic partnerships including the Coalition for Epidemic Preparedness and Innovations (CEPI) animal network, the National Institutes of Health Biomanufacturing and Preclinical Animal Models as well as NATO as a testing centre for biotechnology. During the COVID-19 pandemic, VIDO played a key role in Canada's response – identifying the pathogen, developing animal models and testing potential treatments. We participated in frequent calls with the WHO to expedite vaccine development.

KEY WINS

VIDO's technologies have been incorporated into eight vaccines in the market, including six world firsts. Its first vaccine, Vicogen, developed in collaboration with Connaught Laboratories, protects calves against E. Coli K99 (Calf scours). VIDO also developed the first recombinant vaccine for animals at a time when the industry thought this was cost prohibitive.

During the COVID-19 pandemic, VIDO was the first organization in Canada to isolate the virus. This was done in collaboration with Sunnybrook Hospital and the Public Health Agency of Canada's National Microbiology laboratory. VIDO developed the first animal model in Canada which it used to test over 500 different medicines during the pandemic, including its own vaccine which reached Phase II in clinical trials. This is VIDO's first human vaccine to reach this stage of development and better prepares us for future human vaccine development.

In 2024, VIDO strengthened its ability to respond to emerging infectious diseases with the completion of its Vaccine Development Centre. The facility can produce all major vaccine platforms and other biologics supporting human clinical trials and the commercial production of veterinary vaccines.

These successes were made possible through strong partnerships, generous funding and visionary leadership that recognized the need to expand VIDO's impact.

LOOKING FORWARD

VIDO aims to further establish itself as Canada's Centre for Pandemic Research by continuing to expand its cutting-edge infrastructure and growing its scientific expertise.

The organization is continuing to hire top scientists, each bringing diverse backgrounds and training the next generation of researchers. Promoting scientific excellence and collaboration will continue through membership in key infectious disease networks and by building strategic international partnerships.

Construction of a new $100 million animal housing facility will soon be complete, allowing a wider range of animals to be housed, increasing capacity and capability for finding solutions to both human and animal infectious diseases. VIDO has also started to establish a CL4 lab, enabling research on all pathogens. This will establish VIDO as the only non-government organization in Canada with CL4 capacity and increase its ability to work on pathogens of global health importance.

This thorough approach will allow VIDO to respond swiftly to new infectious disease threats and drive global health solutions.

Visions of Science
https://www.vosnl.org/

Sector: Nonprofit/Charity
Countries/ markets of focus: Canada
Year founded: 2004
Number of employees: 35
Projected number of employees in 3-5 years: 50+

COMPANY OVERVIEW

Visions of Science is a leader in advancing STEM equity for youth from underrepresented communities, focusing on Black and racialized youth in low-income areas across the Greater Toronto Area. Our innovative programs inspire and empower youth from grades 3 to age 25, fostering curiosity, leadership, and a passion for STEM through hands-on learning, mentorship, and a strong support network. By breaking down barriers and nurturing talent, we enable youth to actively contribute to solving the world's most pressing challenges and shape their future.

WHAT ARE YOU DOING THAT'S UNIQUE? WHAT PROBLEMS ARE YOU SOLVING, AND WHAT IS YOUR IMPACT BEYOND YOUR COMPANY'S WALLS?

At the intersection of STEM education and community empowerment, Visions of Science addresses critical gaps that hinder Black and racialized youth from realizing their full potential in STEM. Despite the clear connection between STEM education and economic opportunity, systemic barriers leave these youth underrepresented. Our out-of-school programs bridge this gap, offering engaging, culturally relevant experiences that boost confidence and competence.

Our results speak volumes: **86%** of participants report improved leadership skills, **85%** gain a deeper understanding of STEM careers, and **100%** feel more motivated to pursue STEM education and careers. Through strong, sustained partnerships, we foster long-term, community-based engagement that drives lasting impact.

BARRIERS TO SUCCESS

Our primary challenge lies in dismantling the systemic inequities that limit access to STEM opportunities for Black and racialized youth. We constantly adapt our programs to be accessible and relevant while securing sustainable funding to scale our impact. As demand grows, we remain committed to innovation, meaningful community engagement, and strategic partnerships to meet the evolving needs of youth and ensure lasting change.

KEY WINS

Since 2004, we have reached over 19,000 youth across 30+ communities, transforming how young people see their futures in STEM. Our efforts have earned national recognition, including the NSERC Award for Science Promotion, and extensive media coverage. We engage thousands of youth annually through workshops, camps, and career-readiness opportunities.

Our partners play a pivotal role in this success. Collaborations with Shift Health, Dynacare, CCRM, Roche Canada, and Life Sciences Ontario provide essential funding, mentorship, field trips, internships, and immersive STEM experiences. These connections bridge the gap between education and industry, ensuring youth gain valuable skills and networks. For example, Shift Health and Dynacare offer paid internships for high school students, while CCRM's biotechnology activities offer youth hands-on experiences.

LOOKING FORWARD

In the next five years, Visions of Science aims to engage 10,000 youth annually, expanding across the Greater Toronto Area and beyond. We will strengthen our STEM Pathways with more mentorship and career readiness initiatives, collaborating with schools, community groups, and industry leaders to tailor programs to local needs. By advocating for STEM equity and shaping an inclusive innovation ecosystem, we empower youth to thrive and become leaders who drive global progress.

Visions of Science youth at Dynacare

About LSO

LSO is a business-led, member-funded, not-for-profit organization with a legacy of more than 30 years advancing the success of Ontario's life sciences sector. Our customized approach to working with member companies and industry partners allows us to leverage the strengths of the LSO network to commercialize Canadian innovation and technologies, while offering value-added support, services, mentorship, and events.

LSO Vision:

"Diversity of Members, Unity of Voice"

Our vision is a vibrant life sciences sector in Ontario that speaks with a unified voice to create an environment that fosters collaboration, innovation and is recognized as a leading contributor to a better, more prosperous life in Ontario.

LSO Vision:

"Advancing life sciences for a better society"

LSO's mission is to foster success for Ontario's life sciences sector through collaboration, advocacy, networking, education, and promoting its innovation locally, nationally, and internationally.

LSO Values

- CONSULTATION, COLLABORATION AND CONSENSUS BUILDING
- INCLUSIVITY, DIVERSITY, EQUITY AND ACCESSIBILITY
- ALIGNMENT OF VOICES IN ADVOCACY
- EVIDENCE-BASED DECISION-MAKING
- THE EQUAL SOCIAL, ENVIRONMENTAL AND ECONOMIC BENEFITS OF LIFE SCIENCES

LSO advances our sector's diverse interests by:

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LSO

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