## ALBERTA @ BIO 2025

Boston, MA 🔹 June 16-19, 2025

www.bioalberta.com





#BioAB #AlbertaAtBio #AlbertaBIO2025

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BioAlberta is the voice and champion for the life sciences and health innovation industry in Alberta. We convene, connect and navigate the ecosystem to facilitate growth in the sector.

BioAlberta strives to create value for member

various events, strategic value opportunities and

companies. Members are engaged through

Advocacy

alberta

Association for Life Sciences Industry

BioAlberta is an effective voice for life sciences and health innovation to governments, investors and the public. BioAlberta brings together sector stakeholders to create a single, coordinated message to generate action. Our thought leadership, industry commentary and policy development drives positive outcomes for our members and industry, creating a competitive and thriving life sciences ecosystem.

### Engagement

BioAlberta led initiatives.

BioAlberta convenes, connects and navigates. We foster and grow a network of life science entrepreneurs and industry supporters to generate sector activity.

BioAlberta events are recognized by the provincial ecosystem as high value, impactful opportunities for networking and learning. BioAlberta provides a podium of choice for companies looking to demonstrate leadership in health innovation.

### Growth

BioAlberta promotes Alberta's life sciences sector nationally and internationally, engaging with investors and economic organizations to provide growth opportunities for Alberta companies and organizations. BioAlberta's network provides opportunities with investors who understand the life sciences start up and scale up landscape and bring their experience and advice from mature ecosystems in the U.S. and globally.

### OUR NORTH STAR

To unite and champion Alberta's life-sciences community by fostering collaboration, catalyzing connections, and shaping public dialogue around economic opportunity to accelerate sector growth and advance health innovation.

in BioAlberta

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@Bioalberta1 admin@bioalberta.com

## **ALBERTA AT A GLANCE**

### **Fast Facts**

- Alberta Population: 5 million (May 2025)
- GDP in 2023: \$336.3 billion

### Investor Friendly Tax Environment:

- Albertans pay the lowest overall taxes in Canada.
- We have a competitive tax system with low personal and corporate income tax rates, no payroll tax, no provincial sales tax and no health premiums.

### Population facts in Alberta:

- The largest population is found in these Alberta cities: Calgary, Edmonton, Red Deer, Lethbridge and Airdrie.
- Airdrie is the fastest growing city in Alberta with a current population of 108, 304.
- As of Jan 1 2024 the Alberta population was 4, 800, 768.
- Between January 1, 2023 and January 1, 2024 Alberta experienced Canada's largest population growth at 4.4%.
- Calgary and Edmonton house more than 55% of Alberta's population.

### Academic Research Capacity in Alberta

- The University of Alberta, the University of Calgary, the University of Lethbridge and Athabasca University are four comprehensive acadmeic and research universities in Alberta.
- Alberta is also home to 9 comprehensive community colleges, 4 polytechnic institutions, 6 independent academic institutions and 3 undergraduate universities.



## ALBERTA LIFE SCIENCES AT A GLANCE

### Alberta's Life Science Ecosystem

Alberta's life sciences sector was responsible for \$9.2 billion in revenue in 2024. The sector accounted for 23,000 jobs in Alberta.

### Industry Makeup:

- 43.6% of life sciences companies identify as manufacturers.
- 25.5% of life sciences companies identify as service providers.
- 54.4% of life sciences companies identify as being research and development-focused.

### Geography:

- 43.6% of life sciences companies are located in Calgary.
- 38.7% of life sciences companies are located in Edmonton.
- 9.8% of life sciences companies are located in Southern Alberta, primarily in Lethbridge.

### Growth:

- From 2020 to 2022, there has been an increase of 32.2% in research and development spending. Research and development spending reached \$327.3 million in 2022.
- Small enterprises are dominating the life sciences industry, with 51% of companies employing 8 people or less. Small enterprises plan to add 1,800 new positions in Alberta this year; this is a 44.3% increase in direct industry employment over 2022.

### Economic contributions (2024):

- Total economic output of \$9.2 billion
- Total GDP of \$4.7 billion
- Total employment of 34,415 full-time equivalent employees
- Total labour income of \$2.7 billion
- Total government revenue of \$1 billion, including \$538 million in federal tax revenue, \$340 million in provincial tax revenue, and \$134 million in municipal tax revenue

### Alberta's Life Science Ecosystem

• In 2022, 2.6% of life sciences companies recorded revenues exceeding \$50 million.

### Moving Forward:

- Al is at the forefront.
  - Aiding in the development of new therapeutics, devices, diagnostics, modalities, and indications.
  - A global industry need meets Alberta's innovation ecosystem: In 2023 the Government of Alberta and Alberta Innovates invested \$30 million into Amii (Alberta Machine Intelligence Institute).
  - Digital health pathways in response to the COVID-19 Pandemic
    - The University of Alberta received a \$55 million research grant to invest in research for prevention and treatment methods.

### Alberta's Advantage:

- Extensive and integrated provincial health information systems, including NetCare, MyHealth Records, and ConnectCare.
- Alberta has a diverse population and willingness to participate in clinical trials with public campaigns like Be the Cure.
- Alberta's public health system is the largest integrated healthcare system in Canada and the fifth largest in the world.

### **Clinical Trials Alberta**

- There are over 2,100 active clinical trials in Alberta and over 850 trial sites with highly qualified personnel.
- 32% of current Canadian clinical trials are being conducted in Alberta.
- 35% of industry revenue and investment comes from US and international markets.
- Top therapeutic areas of study include cancer, the nervous system, cardiology, digestive health, blood and lymph disorders, nutrition and metabolic, immune system, and brain and mental health.
- Alberta Real World Evidence (RWE) Consortium enables access to administrative data, including incidence and prevalence, treatment patterns, persistence, safety monitoring, comparative effectiveness, and cost-effectiveness.

### Alberta's Life Science Ecosystem

#### Life Sciences Labour Market:

• Approximately 1,900 establishments, including companies, hospitals, and universities, are engaged in life sciences activities.

Job Function	Size in industry
Research and Development	29%
Manufacturing and Production (includes skilled trades, equipment operations, and select engineering)	20%
Management and administrative	13%

Subsector	Size in industry
Bio-health	46%, approximately 10,580 jobs
Agri-biotech	30%, approximately 6,900 jobs
Bio-industrial	17%, approximately 3,910 jobs
Bio-energy	7%, approximately 1,1610 jobs

### Significant Life Sciences Advancements in Alberta

- University of Alberta chemistry professor Raymond Lemieux was the first to synthesize sucrose in 1953.
- John Carter Callaghan of the University of Alberta performed Canada's first open heart surgery in 1956.
- In 1989 The Islet Transplant group at University of Alberta, founded by Dr. Ray Rajotte in 1982, carried out Canada's first islet transplant, providing 10 per cent of patients freedom from insulin injections.
- In 1999 James Shapiro from the University of Alberta transplants human donor pancreatic islet cells into patients with chronic Type 1 diabetes. This procedure, dubbed The Edmonton Protocol, frees patients from insulin.
- The NeuroArm Surgical Robot was developed at the University of Calgary in partnership with the University of Alberta and Alberta Health Services in 2008. The NeuroArm was the first MRI-compatible surgical robot, used for brain surgery, and a world first in robotic neurosurgery.

### Significant Life Sciences Advancements in Alberta

- Sir Michael Houghton, a University of Alberta virologist was awarded the 2020 Nobel Prize in Physiology or Medicine in recognition of his discovery of the hepatitis C (HCV) virus.
- The Alberta Precision Exchange (APEX) Biobank initiative was launched in 2022. APEX is a province-wide biobank initiative collecting biological samples and health data for research that supports breakthroughs in genomics, cancer, autoimmune disease, and personalized medicine.
- In 2023 the Canadian Critical Drug Initiative (CCDI) was announced with the Government of Canada and Alberta teaming up to build a 40,000 ft<sup>2</sup> life-sciences production hub in Edmonton capable of producing 70 million doses/year. This followed Alberta's \$5.6 million seed investment from 2022.
- Opened in 2024, the new Calgary Cancer Centre, named the Arthur J.E. Child Comprehensive Cancer Centre is the second-largest comprehensive cancer care and research centre in North America.
- The Government of Alberta contributed \$100 million in capital funding to transform the <u>Biological Sciences Building</u> into a dynamic, shared laboratory complex where researchers, students and industry partners will benefit from a state-of-the-art innovation hub. The new Life Sciences Innovation and Future Technologies (LIFT) Centre is expected to double much-needed laboratory spaces
- In March of 2025, Entos Pharmaceuticals announced a \$198.5 Million partnership with the Governments of Canada and Alberta to accelerate biomanufacturing of Fusogenix PLV Next Generation Therapeutics. This investment will help build a 103,000-square-foot R&D center and a GMP manufacturing facility in Edmonton, Alberta.



## ALBERTA EVENTS

### **BioAlberta Events**

**Panelists:** 

**Troy Hamilton** 

Co-Founder and Director of

Operations,

CaRe Clinic

To register for BioAlberta events, please visit bioalberta.com

### Monday, June 16, 2025, 7am: Alberta's Clinical Trial and RWE **Advantage**

### **Presented by Alberta Innovates**

### Location: Burroughs Room, The Westin Boston Seaport District

Join industry experts and leaders from Alberta's post-secondary institutions, community clinics, and service providers in an engaging panel on why Alberta is a gualified destination for clinical research and healthcare innovation. Our esteemed panelists will highlight the excellence in clinical trials and world-wide evidence that occurs across Alberta each day. Hot breakfast buffet begins at 7:00 am. Panel discussion begins at 7:30 am.



#### **Ryan Mercer** Director of Clinical Research Innovation, Alberta Innovates



Lawrence Richer, MD, MSC Associate Dean, Research College of Health Sciences



Rami Fayed Vice President & General Manager, Canada, AbbVie

### Tuesday, June 17, 2025, 8pm: Alberta@BIO Reception Location: Harpoon Brewery & Beer Hall

**Tara Cowling** 

Founder and President,

Medlior Health Outcomes

Research Ltd.

Join BioAlberta, Alberta companies and supporters at the highly-anticipated Alberta Reception, a can't miss networking event at BIO. Network with life sciences leaders to understand why Alberta is a leader in technology and innovation, and how Alberta uses industry partnerships to impact health innovation. 8

\*Oilers jerseys will be welcomed as we watch Game 6 of the Stanley Cup Finals

## ALBERTA @ BIO 2025

Delegate Member Companies

## **48Hour Discovery**

48Hour Discovery (48HD) is a biotechnology company accelerating peptide drug discovery through its proprietary phage display platform. Founded in 2017 and headquartered in Edmonton, Alberta, 48HD combines highthroughput screening, state-of-the-art chemical modification, and AI-driven analysis to rapidly identify and optimize macrocyclic peptides for therapeutic and diagnostic use.

The platform enables partners to move quickly from hit to optimized lead, supporting applications across oncology, immunology, and radiopharmaceutical development. With a growing portfolio of preclinicalstage binders to high-value targets, 48HD is helping redefine what's possible in early-stage drug discovery.

Backed by strategic collaborations with over 25 pharmaceutical and biotech companies—including several global leaders—48HD offers both servicebased discovery and co-development opportunities to advance peptide therapeutics and theranostics. Recent innovations include late-stage peptide reshaping technologies that enable post-selection chemical tuning to enhance binding, stability, and functionalization.

Ask us about our portfolio of potent binders to tumor-relevant cancer targets—and how Canadian innovation is driving the next generation of precision medicines.

### Contact

Adam Brown, CBO abrown@48hourdiscovery.com

# 48Hour **Discovery**

## **Alberta Innovates**

Alberta Innovates is the province's most comprehensive research and innovation agency. From funding to commercialization, we are Alberta's innovation engine. We foster and accelerate research and innovation to benefit citizens and drive economic growth.

Alberta Innovates works across sectors to fund, partner and enable entrepreneurship throughout the province. The corporation operates in 11 locations with more than one million sq ft of industrial testing and lab facilities. Alberta Innovates employs 589 highly skilled scientists, business and technical professionals.

Our focus on health research and technology innovation aims to transform care, providing Albertans with the services they need, where and when they need them. Alberta Innovates manages a collaborative province-wide initiative – Clinical Trials Alberta – aimed at building capacity and capabilities in our clinical trial ecosystem. Clinical Trials Alberta works with our research community, trial sponsors, and healthcare providers to ensure we respond to the needs of industry as an attractive destination for conducting high-quality clinical trials.

We exist to serve Albertans, empower our partners and inspire future innovators to build a better, healthier future.

Learn how <u>Alberta Innovates</u>.

**Contact** Ryan Mercer, Director, Clinical Research Innovation <u>ryan.mercer@albertainnovates.ca</u>



## Alberta Real World Evidence Consortium

The province of Alberta stands out as a global leader in real-world health system data, housing one of Canada's largest, most mature, and comprehensive repositories. This remarkable resource serves as the foundation for the Alberta Real World Evidence Consortium, a highly experienced cross-functional provincial research team from the Universities of Alberta and Calgary, along with the Institute of Health Economics. Leveraging these unique data assets, the Consortium conducts timely health-focused research using real-world data, engaging funding partners, decision-makers, and knowledge users.

The Consortium initiates the collaborative research process by considering the interests of our funding partners, and aligning these with our deep understanding of the evidence required to support health care and drug policy decision-making. By doing so, we identify the right research questions and generate meaningful evidence from a trusted source that can be used for informed decision-making.

### **Business Objectives**

The Alberta Real World Evidence Consortium provides businesses in the health care sector the opportunity to support collaborative real-world data-driven research that generates meaningful evidence from a trusted source, providing invaluable insights that contribute to advancing health outcomes and supporting the shaping of effective policies and decisions.

### Contact

Karen Martins, PhD. Associate Director, Research and Strategy martinuk@ualberta.ca



## Applied Pharmaceutical Innovation (API)

API, one of Canada's largest not-for-profit life sciences organizations, bridges the gap between academic research, development and commercialization. Enabling innovation among life sciences academia, startups and small to medium-sized enterprises, API provides direct access to industry capacity and expertise, accelerating testing and development timelines. With a comprehensive suite of services, API serves as a CDMO, CRO, scientific and commercialization one-stop solution for pharmaceuticals, natural health products, medical devices and diagnostics companies.

API has grown to more than 70 staff and is supported by an interdisciplinary external network of over 100 scientists, clinicians, regulatory, patent and market experts. API has attracted over 75 industryled projects, created more than \$500M in value for incubated companies and supported over 50 SMEs, scale-ups, and spinoffs.

Based in Alberta with lab and office spaces in Edmonton and Calgary, API works with partners across Canada and around the world to build life sciences companies and expand expertise for students, postdoctoral fellows and entrepreneurs. Further, API is building new capacity to bolster critical medicine supply chains, emphasizing readiness for global health emergencies through initiatives like commercial-scale manufacturing and novel compound discovery platforms.

### Contact

Shawn Couch, Director Business Development shawn.couch@appliedpharma.ca



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## **Entos Pharmaceuticals Inc**

A new reality in genetic medicine lies ahead, one that will be ushered in with the advent of safe, effective, and redosable nucleic acid delivery technologies. Since its inception in 2016, Entos® has been dedicated to advancing next-generation genetic medicines using our proprietary Fusogenix<sup>™</sup> PLV<sup>™</sup> drug delivery system.

The Fusogenix PLV platform is formulated with FAST proteins to enable the delivery of nucleic acid to target cells through direct fusion. Entos is pioneering the development of life-changing medicines for patients and has partnered with global companies, such as Eli Lilly, to accelerate and expand the impact of our platform.

Entos Pharmaceuticals Inc. is headquartered in Edmonton, Canada, with its wholly owned U.S. and U.K. subsidiaries based in San Diego, California, and London, United Kingdom, respectively.

For more information, visit<u>www.entospharma.com</u>, or follow Entos on <u>LinkedIn</u>.

Entos® word mark and design logo, FusogenixTM and PLVTM are registered trademarks of Entos Pharmaceuticals Inc. All other trademarks and registered trademarks are the property of their respective owners.

### Contact

John Lewis, CEO info@entospharma.com



## GlycoNet

GlycoNet is a pan-Canadian research and commercialization network consisting of over 210 researchers in 36 institutions across the country. GlycoNet investigators use the study of carbohydrates (sugars) in living cells to find solutions to unmet health needs through the development of tools, drugs, vaccines and diagnostics. Taking a One-Health approach that considers the connections among human, animal and environmental health, GlycoNet is advancing research, innovation and training in glycomics to improve quality of life for Canadians. Under the network, GlycoNet Integrated Services (GIS) operates as a national platform of glycomics services. GlycoNet and GIS together provide one-stop access to glycomics tools, specialized expertise, consulting and collaborative opportunities to academia and industry, both nationally and internationally. GlycoNet is also a leader in training the next generation of glyco-scientists and promoting collaboration and advancement in glycomics research.

### Opportunities for partnering with GlycoNet include:

- Co-funding of research projects in collaboration with GlycoNet investigators
- Access to specialized glycomics services and facilities for clients
- Internships and training opportunities with researchers and industry partners
- Other collaboration and licensing opportunities.

GlycoNet and GIS are supported in part through the Government of Canada's Strategic Science Fund and the Canada Foundation for Innovation. Learn more: <u>glyconet.ca</u>

### Contact

Dr. Elizabeth Nanak, CEO enanak@ualberta.ca



## Innovative Medicines Canada

Innovative Medicines Canada represents Canada's innovative pharmaceutical industry. We help our members discover, develop and deliver innovative medicines and vaccines.

Our member companies, which range from early-stage startups to established organizations, are revolutionizing healthcare through the discovery and development of new medicines and vaccines.

Our industry supports 103,000 high-quality, well-paying jobs in Canada and invests \$3 billion in R&D every year. Collectively, our activities contribute \$16 billion per year to Canada's knowledge-based economy.

Guided by a strict Code of Ethical Practices, we work with governments, insurance companies, healthcare professionals and other stakeholders to advance the field of pharmaceutical research and development and enhance the wellbeing of Canadians. We are committed to being valued partners in Canada's healthcare system.

We achieve our goals by forming alliances, supporting policies, improving Canada's regulatory environment, widening access to innovative medicines and ensuring the effective protection of intellectual property.

We believe in ensuring that Canadians have access to the innovative treatments they need. Our activities are a fundamental part of safeguarding our healthcare system for future generations.

For more information: <u>https://innovativemedicines.ca/about/</u>

Contact TBD TBD



### Medlior Health Outcomes Research

Medlior Health Outcomes Research Ltd. is a Canadian research consultancy specializing in real-world evidence (RWE) generation to support healthcare decision-making across the product lifecycle. Since 2008, Medlior has partnered with pharmaceutical, biotech, and MedTech companies to inform market access strategies, demonstrate value, and support regulatory and HTA submissions.

With unique access to Alberta's comprehensive health system data and a robust network of clinical and academic collaborators, Medlior delivers end-to-end RWE services—from study design and data access to advanced analysis and reporting. Our multidisciplinary team includes experts in epidemiology, biostatistics, health economics, and clinical research.

In addition to evidence generation, Medlior offers strategic market access support through landscape assessments and value proposition development to drive adoption and payer engagement.

We are committed to innovation through methodologically rigorous, Alenabled evidence generation that accelerate timelines while ensuring scientific integrity. As an independent research organization and trusted partner to industry, government, and health authorities, Medlior delivers insights that matter.

Learn more at: <u>www.medlior.com</u>

### Contact

Tara Cowling, Founder and President Tara.cowling@medlior.com

## MEDLIOR® HEALTH OUTCOMES RESEARCH

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## University of Alberta (U of A)

The University of Alberta in Edmonton is a leading Canadian teaching and research institution, renowned globally for its excellence in humanities, sciences, arts, business, engineering, and health sciences. It is recognized for innovations in energy, AI discoveries, lifesaving vaccines, cell-based therapies, Indigenous research, agricultural advancements, and studies on intersectional inequities and decolonization.

Improving lives. Changing lives. Saving lives. The U of A is a catalyst in creating incredible growth in research — accelerating data and discoveries with promise to solve some of the most pervasive health care problems of our time.

### Contact

Darren Fast, AVP, Innovation, Knowledge, Mobilization, and Partnerships dgfast@ualberta.ca



## University of Calgary (U of C)

UCalgary researchers are partnering with industry sponsors to turn knowledge into breakthrough treatments, diagnostics, devices and solutions. Our scholars have made significant progress in bridging the gap between research results and practical application of knowledge.

### Our goals for BIO:

- Research Partnerships with global SMEs, MNEs.
- Collaborations with international academic partners.
- Collaborations with international governmental partners, trade commissions.
- Outreach on capabilities and institutes at University of Calgary.
- Investor relationships for UCeed.
- Out licensing of University Created IP.

#### Contact

Sid Gunamalai, Industry Engagement, Health & Life Sciences, Office of the Vice President of Research sid.gunamalai@ucalgary.ca







## Hosted by BioAlberta, the NIHR's first Virtual Office provides dedicated support to:

Expertise Samples and data Access world-leading expertise to develop your innovation

Identify and access health data and clinical samples

Find specialist world-class research facilities

Plan, place and deliver your research in the UK

Engage patients to improve study design and recruitment

Explore collaborative opportunities between Canada and the UK

Leverage the NIHR's knowledge for free through tailored services.
Explore streamlined support to bring your product into the NHS, and generate the evidence needed for regulatory approvals and reimbursement in the most integrated research system in the world.

Meet us in our virtual office and explore how we can help







industry@nihr.ac.uk



### **Robb Stoddard**

CEO robb@bioalberta.com

www.bioalberta.com

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