Bioeconomy Roundtable: Investing in Manitoba



Hosted By
Bioscience Association Manitoba
Reports & Recommendations
March 2021

In Partnership With







Executive Summary

The concept of a thriving bioeconomy continues to grow in importance among key stakeholders in Manitoba. To be better prepared for the next health crisis, it is critical that Bioscience Association Manitoba (BAM) helps its members better understand the benefits of attracting investments with ways to access partnerships and boost our bioeconomy. As the province emerges from COVID-19 and moves towards recovery, policy makers and stakeholders need to implement initiatives to advance research and development, create a self-reliant supply chain, attract investments for commercialization or biomanufacturing capacity and foster growth in our bioeconomy workforce.

Manitoba is considered unique with its strong and vibrant bioeconomy and is central to organizations that offer solutions relating to health research, commercialization and procurement of local technologies, access to patients for clinical trials, that ultimately fuel innovation through collaborative partnerships. However, despite the clear benefits of investing in Manitoba to improve our bioeconomy, a streamlined process to connect with provincial health agencies and key stakeholders is onerous.

One of BAM's goals is to assess and assist in building a strong bioscience community and uncover new opportunities for partnerships between industry, researchers and government organizations. As part of our mandate to promote information sharing, BAM hosted a strategic roundtable discussion and commissioned this report, which contains includes a set of recommendations to further strengthen investments in Manitoba.



Recommendations

Manitoba needs to:

- I) Fuel innovation and drive R&D through collaborations and partnerships
- 2) Support and attract clinical trials.
- 3) Incentivize local procurement for a self-reliant supply chain.
- 4) Support investment for commercialization and biomanufacturing capacity.
- 5) Enhance skills and talent development of highly qualified personnel (HQPs)

Setting The Stage

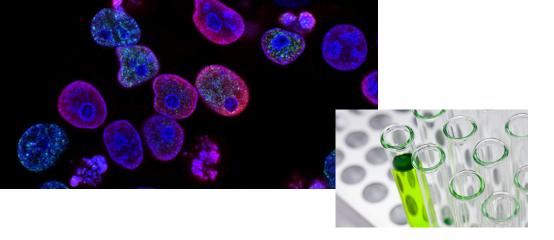
In his opening remarks, Honourable Ralph Eichler, Minister of Economic Development and Jobs stressed the Manitoba government's commitment to providing the right environment for existing businesses to endure and for new businesses to open their doors. He also emphasized that stakeholder engagement plays an important role in supporting a thriving industry.

Andrew Casey, CEO and President of BIOTECanada, highlighted that the Biohealth industry delivered in a very significant way throughout the pandemic, and that we should have a greater capacity in this country to respond to this type of a crisis. Governments are now thinking about the future, with the Canadian federal government launching a bio manufacturing initiative.

In her presentation, Anne Babineau, Director (West), Innovative Medicines Canada, outlined four key strategies that would position Canada (and Manitoba) as life sciences leaders: 1) the importance of establishing and supporting lasting partnerships between industry and government; 2) lead in the adoption of health technologies, value based procurement and real world evidence agreements; 3) implement agile, efficient and predictable regulatory system and 4) promote Canadian innovation internationally.

The Research Improvements Through Harmonization in Manitoba (RITHIM) program, to be launched this year, was described by **Karen Dunlop**, CEO of Research Manitoba, as a streamlined system supported by a single electronic platform, which will coordinate the process and provide user-friendly research to be undertaken in Manitoba.

Kim Kline, President of BAM, highlighted the work to be undertaken by the Advanced Healthcare Initiative with three priorities: 1) Act as a liaison for innovators and healthcare professionals to increase healthcare awareness of the local technology and resources within MB; 2) provide the ability to develop the RD phase and test new technology with direct end users; 3) create potential within the local market for Manitoba products, and access to medical professionals to understand the technology gaps within their health care setting.



Discussion Topics

Roundtable participants discussed three issues:

- 1) Obstacles to growth
- What is holding back the Biohealth industry in Manitoba to capitalize on new opportunities?
- What can we learn from other provinces?
- 2) Looking ahead towards a Biohealth-Manufacturing ecosystem
- How can we add to the provincial capacity?
- What are the next steps or opportunities?
- 3) Supply Chain and Procurement
- How can we improve the process and fast track validation steps?
- What are possible pathways for collaboration and approvals; what are the barriers?

Recommendations

Manitoba needs to fuel innovation and drive R&D through collaborations I. and partnerships

Tackling post-COVID-19 challenges with innovative technologies will require the collaboration of research, industry and supporting stakeholders. This helps raise awareness of research challenges and unmet needs while highlighting technological developments. To fuel innovation in Manitoba, more opportunities should be available for industry to explore therapeutic areas of interest with academics. Such collaborations supported by policy makers, will lead us to the next generation of breakthroughs that will provide new opportunities for innovation with economic and societal benefits.

To achieve this, policy makers need to expedite the roll-out of RITHIM and consider expansion of its mandate: to act as a communication hub between all Biohealth stakeholders and as a match-making conduit for companies. Strong links between industry and technology/researchers are critical for success of the Biohealth sector.

Recommendations Cont.

2. Manitoba needs to attract clinical trials

Conducting clinical trials in Manitoba is key to enhancing patient treatment as well as integral to the R&D process. However, researchers require sufficient funding and industry require incentives for their clinical research. Policy makers should investigate a strategy to incentivize companies to conduct clinical trials in Manitoba, including the model used in Australia. The Australian government has number of key incentives to conduct clinal research in the country: if a company declares less than \$20 million of annual revenue, it will be eligible for a refund of 43.5 cents back on every dollar spent on R&D via a rebate at the end of the fiscal year .

Additional funding capacity is needed for grants that support cutting edge platform technologies, in particular areas where advanced technology is needed for clinical trial support. The government should also support programs like AHI to implement these recommendations and remove barriers to clinical validation.

3 Manitoba needs to incentivize local procurement for self-reliant supply chain

Biohealth manufacturers require support from the provincial government to establish an incentivized local procurement strategy to build a strong supply chain in Manitoba. An evolving Biohealth sector produces technologies with higher value so that the "low-cost" supplier is not necessarily the best choice. Opportunity exists for local industry to excel and become global leaders in the development and manufacturing of sophisticated medicaments, ingredients, research and product components, etc. An incentivized pathway for procuring products from local certified manufacturers with risk mitigation tools in place is key to a self-reliant supply chain.

Along with working with various manufacturing suppliers to strengthen our local capacities, the government should collaborate with experts including Supply Chain Management Association and the University of Winnipeg Supply Chain Management faculty to create and implement an incentivized local procurement strategy.

^{*}Is Australia the future for successful first-in-human clinical studies? (pharmaceutical-technology.com)

Recommendations Cont.

4. Manitoba needs to support investment for commercialization and biomanufacturing capacity

Government incentives for short- and long-term investment would generate capital to support the commercialization of local products. Scaling biosciences companies to achieve regulatory approval of products while manufacturing and selling (to local and international markets) is a challenge in Manitoba. The lack of capital to support companies at various stages, from start-up to scale-up, prevents further growth. Data from the 2021 BAM Industry survey indicates that the most significant obstacles reported by organizations were a strategic partner for the purpose of investment and raising capital.

5. Enhance skills and talent development of highly-qualified personnel (HQPs)

The biosciences industry has experienced strong growth and will require an adaptable workforce consisting of HQPs that are balanced in their technical and soft skills. Leadership and management training should be incentivized that will facilitate the growth of businesses including training in financing, to commercialization and exporting.

To increase employment within a specialized work force and foster talent development, Manitoba should support programs and industry associations, such as BAM, that bridge the gap between industry and educators by:

- i) facilitating industry interaction with post-secondary institutions and co-op/work placement coordinators
- 2) implementing industry mentorship programs where students have the opportunity to gain experience directly within a Biohealth company
- 3) utilizing the BAM Industry Survey and other engagement opportunities to develop targeted training programs that integrate industry needs.

Collectively these strategic government programs would ensure transition of Manitoba graduates into employment and would foster growth in our recovering bioeconomy.

Data Analytics are related to all pillar areas described above and are an important component of information sharing and communication. Consideration should be given to the development of an easily accessible portal to access information required for research and commercialization of various Biohealth products, including medicaments, in a single data repository.

Going Forward

As policy makers consider the recommendations outlined in this report, BAM is ready to facilitate on-going dialogue for development of policy that would contribute to Manitoba's competitive bioscience industry. Access to data health opportunities and post-COVID-19 research can be built upon to further increase our competitive advantage. With strategic initiatives such as RITHIM (Research Manitoba) and AHI (BAM), the expansion of such opportunities should be led by a Steering Committee consisting of support from Shared Health, Winnipeg Regional Health Authority and Research Manitoba. The Steering Committee would work with national partners to drive change with federal government legislation in hopes of passing a Bioeconomy Bill and boost our Biohealth sector.

A copy of the full report of the Roundtable including complete presentation material is available by contacting BAM.