

**Written Submission for the Pre-Budget Consultations in Advance
of the Upcoming Federal Budget**

By:
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Recommendation:

1) That the Government of Canada make a renewed and enhanced investment in adMare BioInnovations in Budget 2021 in order to:

- a) Help build and scale struggling high potential life sciences companies whose progress has been stalled by pandemic related impacts. These companies will be essential to Canadians' health, and economic recovery from COVID-19 related issues.
- b) Enhance adMare's successful efforts to train the next generation of science and business leaders – many of whom are currently un-or-under employed due to coronavirus issues and whose active engagement in the industry will be critical to Canada's economic recovery.



Leveraging Canada's Life Sciences Ingenuity in the Fight Against COVID

The COVID pandemic has highlighted the importance of the health/life sciences sector to the country, and the need to bring our pan-Canadian resources together to fight the virus. And although it has created challenges for our industry, so too has it created opportunities.

The pandemic has decimated many industries that will likely not return to their pre-COVID stature for a significant period of time, but it has also turned attention to fostering strong industries of the future. For obvious reasons, life sciences will be a key economic and innovation driver of Canada's future.

Beyond the immediate pandemic, the keystone principle in planning for Canada's future is clear: while security of domestic supply is important, security of domestic knowledge is critical. Our life sciences sector is where much of this critical knowledge resides, so it is up to us to secure, grow, and mobilize it for the physical and economic health of Canadians.

Researchers and businesspeople alike are collaborating across borders, disciplines, and sectors in this crisis more than ever before. In this effort, Canadian researchers in a wide swath of scientific disciplines are working together in unique ways to identify cutting-edge therapies, treatment support tools, and vaccines. The numbers balloon if basic research efforts are included.

The reason Canada has so quickly come to the forefront in developing solutions is that we have built extraordinary knowledge infrastructure at universities, teaching hospitals, research institutes, and within our industry. The industry is driving key Canadian biotechnology hubs with billions of risk capital invested, scaling compelling companies with a long-term perspective here in Canada, and creating thousands of high-skill, high-knowledge Canadians earning large pay cheques. We have tremendous domestic capacity to leverage.

As one of the world's most prolific trading nations, it is also in our interest to market these innovations to the world. In a global industry where Canada accounts for 3% of the market, we will only be able to afford those innovations domestically if Canada can sell them to the world. That is why domestic security of knowledge is critical. Exploiting our knowledge, and building these industries for the benefit of Canadians' health and economy, requires policy that continues to sponsor the translation of research, the development of knowledge-driven talent, and the attraction of global capital. In fact, we should re-double our efforts and avoid the temptation to narrow them for domestic consumption.

We have laid the foundation of a globally competitive 21st-century industry. The pandemic has demonstrated with painful irony why it is so important. However, we must not turn inward in the

name of domestic security and self-sufficiency, and lose the momentum and critical mass that are making Canada a globally competitive exporter of intellectual property-based products in the burgeoning bio-economy.

COVID-19 and the response from Canada's healthcare workers, researchers, and broad life sciences industry and ecosystem, is a coming-of-age moment. It is:

- An **immigration** story with people from around the world making a home here and driving innovation;
- An **export** story with the capacity for innovation that happens here being exported around the world;
- A **manufacturing** story where our strengths align exactly with the type of precision manufacturing that define near bedside supply chains of the future;
- A **research** story with Canada's strong foundation in academic research laying the groundwork for novel diagnostics, vaccines, and therapeutics;
- A **collaboration** story with key players from different places, disciplines, and interests coming together to find solutions.

We need to collectively build on this story, multiply these successes, and exploit the opportunity in front of us. Together, and through immediate catalytic federal investment, we can make global leadership be the 'new normal' for Canadian life sciences.

adMare BioInnovations: Pan-Canadian Leadership When It's Needed Most

adMare BioInnovations is perfectly poised to not only address economic challenges brought on by COVID; but to also take advantage of the opportunity in front of us – to build Canada's life sciences industry to support our economic recovery, and our long-term societal and economic health.

adMare is Canada's global life sciences venture, building the Canadian life sciences industry from sea to sea. We do this by sourcing therapeutically and commercially promising research from leading academic and biotech partners to create new companies of scale, providing specialized expertise, infrastructure, and capital to help existing companies scale-up, and driving the growth of those companies into Canadian anchors by training the next generation of highly-qualified personnel.

The organization is critical to the domestic supply of life sciences knowledge and innovation, and can play an even greater role in the Canadian ecosystem going forward. We have solidly emerged as a definitive national life sciences leader, offering the resources needed to build a sustainable national life sciences industry – through the pandemic and beyond.

adMare was formed out of three former federally-funded Centres of Excellence for Commercialization and Research (CECRs) – CDRD, the NEOMED Institute, and Accel-Rx, answering the need (and Government's call) to align and optimize the Canadian life sciences commercialization landscape. In May 2019, it was announced that CDRD and NEOMED, a leading not-for-profit R&D organization building an innovation ecosystem in Montréal, had

brought together our respective strengths and resources to co-create this new pan-Canadian enterprise, adMare BioInnovations. Subsequent to this, in January 2020, it was announced that adMare and Accel-Rx, another federally-supported innovation organization would also bring our respective capabilities and resources together to operate under adMare.

The combined organization has helped build companies that have attracted over **\$600M** of investment, are worth over **\$2.5B**, and employ more than **700** Canadians. Furthermore, the organization has successfully advanced some **85** potential new therapies, and trained almost **260** alumni through the adMare Academy – **96%** of whom are employed within the Canadian life sciences industry.

With adMare's shared Vision of *Canadian life sciences leading the world*, our job is to build a national industry commensurate with Canada's research leadership. We do this by:

1. Translating leading academic research into new companies of scale:

As a research powerhouse, Canada has the potential to become a global leader in life sciences, but we must do more to create strong companies of scale. Canada produces ground-breaking research in the biosciences sector which more often than not remains untapped for commercialization. Commercialization of this research, and international marketing and exportation of the resulting *Canadian* products are crucial to get ideas and technology to the world, and for Canada to be recognized on the global stage.

adMare offers a pathway to advance breakthrough research, and translate it into new life sciences companies, and new therapeutics for patients. There is still great untapped commercial opportunity stemming from public investment in research – adMare is proactively mining and exploiting that opportunity. COVID has created new market opportunities, and new research collaborations where adMare will be needed as a critical commercialization partner.

2. Deploying a combination of scientific and business expertise, capital, and physical infrastructure to help existing Canadian life sciences companies scale-up:

Currently, Canada's life sciences sector is somewhat a 'tale of two industries'.

The industry has proven that we can attract investment and scale and anchor companies here. 2019 was a banner year life sciences venture capital in Canada with over \$1.05B invested, up from an average of \$680M over the three years prior (*source: Canadian Venture Capital Association*). We have seen the start of new Canadian anchor companies emerge (of which we have suffered a critical dearth in recent years. Repare Therapeutics, a resident in adMare's Montreal Innovation Centre, recently closed the largest ever IPO of a Canadian biotech firm in its Nasdaq debut, raising \$253M USD, and making it the fifth Canadian company in the past 18 months to reach the \$1B mark in valuation (*source: Globe and Mail, July 3*).

Although we have seen recent successes, at the same time, we have a large pool of companies that are struggling in our COVID world. Because of the uncertainty of the pandemic, VC's are now focused on supporting their existing portfolio companies as

opposed to making new investments, and corporate/scientific milestones and clinical trials have been significantly delayed. And although the Canadian government has committed hundreds of millions of dollars to support COVID-19 projects (e.g. Vancouver's AbCellera Biologics Inc. which also raised US\$105M in venture capital in May), little federal support announced to date applies meaningfully to biotech companies. And the support programs that have been created will come to an end sooner than the need.

adMare has therefore become even more critical to supporting the scaling of high growth firms that have the potential to become anchors. Enhancing adMare's capacity to support such companies through a special allocation of new resources (to be applied to the provision of R&D support, vital investment, and access to key infrastructure), will help many of Canada's next generation of leading life sciences companies survive and become our next cadre of billion dollar anchors.

3. Training the next generation of highly-qualified personnel to drive the growth of those companies into Canadian anchors:

Our training focus (The adMare Academy) is on areas most critical to supporting life sciences companies entrench their roots in Canada, while addressing issues of gender disparity and diversity.

adMare's **BioInnovation Scientist Program** builds on our Post-Doctoral Institute's long successful track record and is a new multi-year, progressive talent development program that broadens the commercial focus, networks, and crossover skills of early-career laboratory scientists to accelerate the flow of novel technologies to market. The program has been designed to be able to be delivered on-line, reaching lab scientists across the country affected by social distancing and other pandemic precautions.

adMare's **Executive Institute** is a 10-month, focused executive development program custom designed to ensure that the Canadian life sciences sector has the management talent and strong industry leaders it needs now more than ever – especially if we are to successfully secure our domestic supply of knowledge.

It is these three critical activities, and our well-established national leadership position and track record that we now look to leverage to the benefit of Canada. With support from the Government of Canada, and in close collaboration with partners across the country including academic researchers, industry, investors, foundations, and governments, adMare can play a pivotal role of amalgamator – bringing all of our collective resources together to not only beat COVID-19 in terms of the physical health of Canadians, but to also use it as a catalytic lever in enabling our life sciences industry to be a key driver in our national economic recovery.

Conclusion

None of adMare's impactful work (and that of CDRD, NEOMED, and Accel-Rx before it) would have been possible were it not for significant ongoing support of the Government of Canada.

adMare has successfully leveraged the Government of Canada's investments to date, and generated additional provincial government support, new private sector investment, and substantial commercial revenue (on a path to self-sustainability). We are now reaping some significant rewards from what we have sown, and seeing increasing commercial success on our path to self-sustainability.

A renewed and enhanced investment in adMare can lay such a foundation for this critical organization to become central to Canada's health sciences efforts – while significantly meeting the challenges and taking advantage of the opportunities presented by COVID.

We therefore recommend that the Government of Canada make a renewed and enhanced investment in adMare BioInnovations as presented on page two of this submission.