

September, 2015

BioMelbourne Network Submission Medical Technology and Pharmaceuticals Discussion Paper Department of Economic Development, Jobs, Transport and Resources.

The BioMelbourne Network welcomes the opportunity to contribute this submission in response to the Medical Technology and Pharmaceuticals Discussion Paper.

The BioMelbourne Network is an industry forum for leaders in the biotechnology, medical technology and healthcare innovation in the state of Victoria. Our role is to foster links between companies, research organisations, financial markets and government, fostering an environment for greater collaboration and prosperity. With 185 members, including Victoria's leading universities, medical research institutes, hospitals and life sciences companies, BioMelbourne Network plays a critical role in connecting health, research and industry capabilities and supporting the growth of Melbourne's bioeconomy. The BioMelbourne Network's focus is local and our reach is global. The ultimate success of our members is built upon a strong foundation of research and development, and a competitive innovation ecosystem here in Victoria.

There are economic and social benefits to Victoria that are derived from Government investment in health and medical research, development and innovation. The first is the capacity to deliver better health outcomes for Victorians and the rest of the world. The second is the creation of high-value jobs and the transition toward a high-tech growth economy. The third is the training and retaining of high-caliber, talented people who power the innovation ecosystem in Victoria.

The social and economic benefits of medical research can only be realised by the translation of discoveries through the commercialisation process. Industry expertise is key to ensuring that Victorian ideas and discoveries return their full potential value to society. The productivity of Victoria's biotechnology industry is internationally recognised and continued strategic policy support of the healthcare innovation ecosystem will ensure the future prosperity of our people, our industries and our State.

Vision for Victoria: A globally competitive location leading the transformation of healthcare.

Victoria is a world leading centre for research. Victoria should strive to become a world leading centre for product development. The best of research, the best of translation, the best of product development, the best of healthcare innovation.

The BioMelbourne Network has identified three priority areas with key recommendations:

Priority Area 1 - Maintain a stable supportive policy environment that incentivises translation, innovation and commercialisation

- 1. Promote demand-driven mechanisms to "pull-though" knowledge, ideas and discovery into investible business opportunities
- 2. Support translation and commercialisation by incentivising collaborative partnerships
- 3. Adopt government procurement policies that encourage the development of innovative products and services by SMEs that are validated in the local market
- 4. Position Victoria to leverage and synergise with Federal innovation initiatives

Priority Area 2 – Invest in human capital to foster the development of Victoria's future innovation workforce

- 5. Explore payroll tax incentives to promote job creation and retention of a skilled workforce
- 6. Support industry internships, secondments and work placements for students and researchers
- 7. Create a graduate/post-graduate employment program to develop workforce
- 8. Support entrepreneurial training for researchers to ensure the innovation pipeline

Priority Area 3 - Promote and develop Victoria as a global healthcare innovation destination

- 9. Sustain Melbourne as a leading global biotechnology hub
- 10. Secure Victoria's position as the leading Australian destination for clinical trials
- 11. Foster international linkages for academic and industry focussed R&D
- 12. Enable access to global markets and international expertise

This submission has been produced through consultation and engagement with the members of the BioMelbourne Network and our key stakeholders, and I welcome the opportunity to further discuss the recommendations presented here.

Dr Krystal Evans Chief Executive Officer BioMelbourne Network www.biomelbourne.org

Victoria: The Best of Healthcare Innovation

Melbourne is the city that anchors Australia's health innovation system.

Victoria's global competitive advantage is in the health innovation space. Within Australia Melbourne has an unparalleled density of activity in biotechnology, medical technology, pharmaceuticals, digital health, advanced manufacturing, research organisations, hospitals, healthcare, investors, entrepreneurs, and all the enabling professional services. The global market opportunity for Victoria is the healthcare sector, and health innovation is creating new jobs, new growth and new industries for future economic prosperity. Regional hubs within Victoria also have world leading healthcare capabilities and unique research infrastructure. A connected approach to healthcare innovation between the capabilities in Melbourne with regional hubs, such as Geelong, will allow Victoria to compete at scale in the global healthcare market.

Place is important for innovation. Connected, collaborative cities drive economic activity.

Cities are vital to Australia's economic prosperity, with the intensity of economic activity increasingly concentrated in city-based and regional-economies. Cities are critical aggregators of talent, infrastructure and ideas. Melbourne is a collaborative city, with its own style of doing business that draws heavily on networks. The BioMelbourne Network provides a key competitive advantage for Melbourne's future in health innovation by connecting capabilities within the city, across Victoria, and the world.

Melbourne is a city where talented, passionate people want to live and work

Access to human capital is an increasing driver of global business success and one of Victoria's most precious resources is our people. The best technology in the world won't make it to market without the right team around it. Melbourne is a livable, cultural, knowledge city with a highly educated resident population. Our industries create high-tech, high skilled jobs – but also high-value, high-reward jobs. Our sector is powered by passionate people who develop drugs, devices, diagnostics, and digital tools that make a difference to patients lives. Attracting, training and retaining talented people and supporting human capital development builds Melbourne's competitive advantage for healthcare innovation. This returns social capital into the economy by creating satisfying and rewarding careers for people living in Victoria.

BioMelbourne Network has identified three key priority areas:

Priority area 1: Maintain a stable supportive policy environment that incentivises translation, innovation and commercialisation

Priority area 2: Invest in human capital to foster the development of Victoria's future innovation workforce

Priority Area 3: Promote and develop Victoria as a global healthcare innovation destination

Priority Area 1 - Maintain a stable supportive policy environment that incentivises translation, innovation and commercialisation

Recommendation 1: Promote demand-driven mechanisms to "pull-though" knowledge, ideas and discovery into investible business opportunities

- Continue to invest and support health and medical research to the highest level to sustain this asset base for the future of Victoria.
- Develop and support programs that allow industry to articulate problems, needs and skills
 requirements to access talent and infrastructure in research organisations. This could
 include business R&D vouchers that connect businesses with research capabilities, either
 directly with the research institute or through existing programs such as AMSI Intern, VPTN
 and other research infrastructure platforms. It is telling that the NSW Government now have
 a voucher scheme in place, that appears to be modelled on the previous Victorian
 Government program, that is now driving R&D activity in this sector in NSW.

Recommendation 2: Support translation and commercialisation by incentivising collaborative partnerships

- Develop and support programs that allow hospitals and primary healthcare providers to articulate problems, needs and skills requirements to access R&D expertise and product development "know how" from SMEs. This could include an innovation R&D voucher that connects health with business to drive innovative product development and improve healthcare.
- Create and support mechanisms that connect SMEs with global expertise, international skills and connect into the supply chain. This could include support for travel and meetings with partners, and provide support for the formation of collaborative global partnerships.
- Use a business R&D voucher system to facilitate collaboration between SMEs that have complimentary capabilities to accelerate product development.

Recommendation 3: Adopt government procurement policies that encourage the development of innovative products and services by SMEs that are validated in the local market

• Adopt a government procurement model that drives innovation in local SMEs, modelled on the US Small Business Innovation Research (SIBR) program. Funding could assist SMEs to engage with government customers to develop of new products and services in the health system.

Recommendation 4: Position Victoria to leverage and synergise with Federal innovation initiatives.

- Ensure that Victorian companies are positioned, informed and connected with Federal innovation initiatives. This could involve workshops, courses and facilitated sessions that allow Victorian businesses to connect with research partners to effectively apply for Federal competitive funding in medical technologies and pharmaceuticals, such as NHMRC-Development grants and ARC-Linkage grants.
- Victoria should continue to play a strong advocacy role at the Federal level to ensure the state can fully leverage Federal funding programs such as MRFF and Industry Growth Centres.
- Provide top-up funding, or matched funding to Victorian companies who are successful in securing Federal funding to create a competitive advantage for locating and retaining innovative R&D in Victoria.

Priority Area 2 – Invest in human capital to foster the development of Victoria's future innovation workforce

Recommendation 5: Explore payroll tax incentives to promote job creation and retention of skilled workforce

- Victoria has the lowest payroll tax threshold in Australia. This creates a barrier for start-ups and micro-companies looking to expand their workforce. Payroll tax incentives could be considered for companies working in identified priority sectors, such as medical technologies and pharmaceuticals. This could be linked to the employment of recent graduates or researchers who are moving into start-ups and SMEs.
- Payroll tax relief could be offered to medical technology and pharmaceutical companies who are pre-revenue, potentially on a deferral system. This would particularly be of benefit to companies with manufacturing activity here in Victoria, who could re-pay a deferred payroll tax contributions when in revenue.

Recommendation 6 - Support industry internships, secondments and work placements for students and researchers

- Support and create opportunities that give the future workforce experience and exposure to industry during their study and research training.
- Provide facilitation and networking for students and companies to inform and engage them with the diverse number of excellent focussed internship programs that are already established, to co-ordinate and accelerate participation.

Recommendation 7: Create a graduate/post-graduate employment program to develop future workforce

- Many large corporations offer graduate and post-graduate employment programs that provide 12-24 months of in-company training to develop the future workforce for that sector. This is not possible for SMEs working in the medical technology and pharmaceutical sector. Creating a graduate employment program would enable high-growth potential SMEs to employ highly educated ,trained graduates, creating jobs but also retaining and training the future innovation workforce here in Victoria.
- This would also incentivise companies looking to establish in Victoria, by supplying a program to access a highly skilled and knowledgeable workforce.

Recommendation 8: Support entrepreneurial training for researchers to ensure the innovation pipeline.

• Provide programs that diversify the skill set of researchers to give them the skills and training they need to enter the innovation workforce. This could include support for existing programs such as the highly successful "Molecules 2 Medicine" program.

Priority Area 3 - Promote and develop Victoria as a global healthcare innovation destination

Recommendation 9: Sustain Melbourne as a leading global biotechnology hub

 Biotechnology is undergoing a global boom period, with increased deal flow and market capitalisation. Melbourne needs to continue to promote itself as a leading global location for innovation in biotechnology. It has been noted that the term "biotechnology" is not being embraced in Victoria, and is absent from the title of this discussion paper. Biotechnology is an enormous global market opportunity for Victoria, as the state is already internationally renowned in this space. Victoria should position itself to capitalise on the growing global opportunities for trade and investment in biotechnology.

Recommendation 10: Secure Victoria's position as the leading Australian destination for clinical trials

- Clinical trials are a key competitive advantage for Victoria, in terms of attracting business activity and investment. International companies, including large pharmaceutical companies and smaller biotechs, who conduct clinical trials in Victoria create spill-over benefits for the wider sector. Once international companies have established a presence and are engaged in clinical trial activity, they tend to then explore R&D, manufacturing or investment opportunities. Clinical trials should be promoted internationally as a key capability for Victoria.
- Victoria should play a strong advocacy role in Federal clinical trial reform, to streamline administration and improve the efficiency of the clinical trials system.

• Support and enable greater participation and engagement in clinical trials. This could be through the development of interactive online tools, marketing campaigns, and supporting education and training for recruitment.

Recommendation 11: Foster international linkages for academic and industry focussed R&D

- Support out-bound trade missions to leading international conferences, such as BIO, AdvaMed and JP Morgan Healthcare Biotech Showcase.
- Attract the international innovation community to Melbourne by securing bids for major international conferences and then, provide opportunities for engagement with the local business community through an associated industry engagement program.

Recommendation 12: Enable access to global markets and international expertise

 International connections are critical for business, especially start-ups and SMEs. Support for international engagement gives a huge return on investment in terms of opening up new markets and new ideas. An example of a highly successful scheme to support international connections was the Victorian State Government Technology Trade and International Partnering (TRIP) - Biotechnology and Small Technology program. This program created benefits not only for individual companies accessing global markets and international expertise, but for the broader sector by sending brand ambassadors into international markets, conferences and conversations to profile and market the leading capabilities here in Victoria.