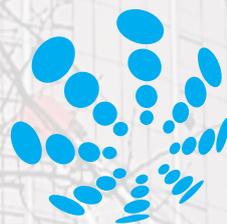
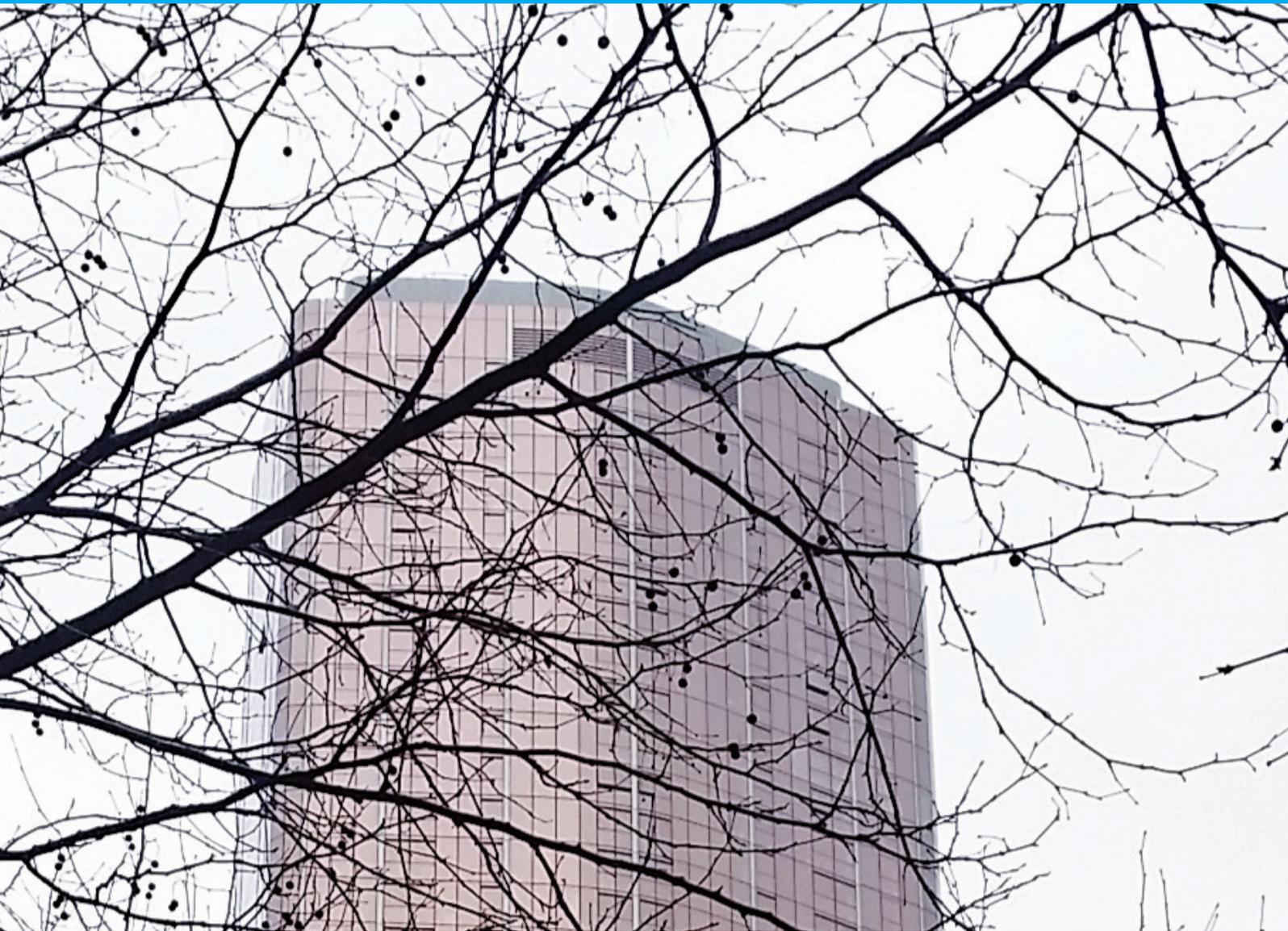


2018 state election

Health industry priorities for Victoria



**BioMelbourne
Network**

Progressing BioIndustry



PRIORITY Establish the **Office of Health Industry Victoria**

Establish the Office of Health Industry as a government agency to prioritise the economic development of the health industry and position Victoria as the go-to state for health industry businesses.

Policy recommendations

1. Establish the Office of Health Industry as a government agency that prioritises the economic development of the health industry in Victoria.
2. Collect, analyse and disseminate health industry metrics to track economic outcomes.
3. Introduce a dedicated voucher funding program for product development and innovation in the health industry and provide facilitation and support for commercialisation activities.
4. Administer a health industry skills development fund to support initiatives to promote skills acquisition, including a Leaders for Health Industry program.
5. Create a health industry taskforce, comprised of industry representatives, to work with the Office and the relevant ministers on strategy, programs and policies that ensure Victoria retains competitive advantage in the global economy.

Rationale

The health industry is an economic priority for Victoria which has world-class capabilities and international competitive advantages. Currently, government services and policies related to health industry economic development are fragmented; they are spread across multiple departments and siloed, creating inefficiency and reduced policy effectiveness. In many instances, economic development funding programs are not industry specific and have not directly serviced the needs of the health industry. Industry and trade programs currently available are not sufficiently targeted to the needs of the health industry and are not strategic in their approach to sector growth needs. Government systems and processes are difficult to navigate, and it is hard for the health industry to engage with government in Victoria.

The Office of Health Industry Victoria would be the government agency responsible for the economic development of Victoria's health industry. A key objective would be to make it easy for industry to do business in Victoria. The Office should assume all government functions currently supporting development of Victoria's health industry and administer new funds and programs supporting sector development. By providing expert personnel, facilitated access to decision makers and a suite of dedicated grants programs, the Office of Health Industry Victoria would maintain and grow the industry's global competitive advantage. Ensuring a comprehensive, consistent and strategic whole-of-government approach to the economic development of the health industry in Victoria will attract investment growth and jobs for the state.

The Office of Health Industry Victoria would be a one-stop shop for industries in Victoria operating in the health industry and it would provide information and support to other government agencies to promote the industry overseas and encourage investment and trade. It would put out the welcome mat for existing businesses to re-locate or undertake business extension into Victoria. The Office would also assist Victorian businesses to attract international investment and promote the capabilities and strengths of the health industry in Victoria to the world.



Ensuring a comprehensive, consistent and strategic whole-of-government approach to the economic development of the health industry in Victoria will attract investment growth and jobs for the state.

The office would:

- Represent the health industry within government to ensure that its needs are represented across the whole of government.
- Advocate for Victoria's health industry sector in Australia and overseas, co-ordinating with state and Commonwealth trade initiatives.
- Raise the awareness of government policies and programs with health industry companies and facilitate engagement with industry growth initiatives.
- Collect, analyse and disseminate health industry metrics to track economic outcomes.
- Introduce a dedicated voucher funding program for product development and innovation in the health industry and provide facilitation and support for commercialisation activities.
- Promote Victoria's health industry manufacturing capacity and promote new investment in advanced manufacturing for healthcare across the supply chain.
- Administer a health industry skills development fund to support initiatives to promote skills acquisition, including a Leaders for Health Industry program.
- Create a health industry taskforce, comprised by industry representatives, to work with the Office and the relevant ministers on programs and services and ensure Victoria retains competitive advantage in the global economy.

Benefits to the state

- > A centralised point for health industry engagement with government will improve the ease of doing business in Victoria.
- > Dedicated health industry funding initiatives will help the sector to grow and benefit Victoria's economy.
- > Victoria will be positioned as the state offering a competitive advantage to overseas investors and manufacturers.
- > A whole-of-government approach will drive investment and development in the health industry.
- > A highly skilled health industry workforce will promote development, investment and manufacturing opportunities, driving job growth.
- > In the medium term, health technology solutions will be delivered to Victorian people sooner.





PRIORITY Create a
Health Industry Hub
for **Victorian SMEs**

We propose that the state provides funding to establish a physical location for health industry companies to co-locate, grow and prosper in Victoria.

Policy recommendations

1. Create an industry-designed co-working location with private and shared facilities for health industry companies that can host up to 200 professionals.
2. Support the growth and competitiveness of small and medium enterprises (SMEs) through access to infrastructure and economies of scale through shared services.
3. Foster a culture of collaboration and innovation by establishing a vibrant working environment that offers leadership and skills development opportunities.
4. Provide a focal point for Victoria's health industry to engage with researchers, international VIPs, government, investors and stakeholders and build the profile and identity of the sector.

Rationale

The Victorian health industry is one of the most innovative sectors of our state's economy. The sector is comprised primarily of small and medium enterprises (SMEs), with many companies directly employing fewer than 20 people, creating fragmentation across the sector. There are currently no commercial co-working or business parks that provide a place and space where Victorian SMEs in the health industry can go to grow.

SMEs are catalysts of growth and competitiveness, as companies scale-up and reach out to global healthcare markets. Creating a Health Industry Hub that supports a critical mass of SMEs co-located in one place will drive a culture of commercialisation and innovation in Victoria. The focus of the hub will be to lift industry competitiveness, enhance skills and knowledge exchange, leverage capability across the sector and create a sense of identity and scale for Victoria's growing health industry.

In recent times in Victoria there has been increased dialogue and interest regarding the need for a physical centre for the state's health industry that provides co-location opportunities. A number of proposals have been mooted and BioMelbourne Network does not seek to compete with any proposal. This proposal will create a working prototype for an SME-focused industry hub and an opportunity to test the working models and assumptions for a successful co-location space. This 'Phase 0' initiative could then be scaled-up and integrated into larger precinct plans, complementary to international models of best practice such as BioLabs, MaRS or Kendall Square. It provides an opportunity to demonstrate proof-of-principle for what works for the industry here in Victoria prior to scale-up.

BioMelbourne Network has identified that there is a significant and immediate demand for flexible office space across health industry SMEs, with a desire to co-locate with like businesses. Existing co-working spaces do not meet sector needs and a purpose-designed facility would create scale, identity and momentum for Victoria's health industry.



BioMelbourne Network has identified that there is a significant and immediate demand for flexible office space across health industry SMEs, with a desire to co-locate with like businesses.



SMEs want their staff to have exposure to other industry professionals, but also require private office space to maintain strict commercial-in-confidence around intellectual property and market sensitive data. They want to share administration facilities, so all can benefit from economies of scale and they want work independently to grow their own businesses. Businesses want to contribute to skill development across the sector, to offer mentoring and support and they also want access to programs and informal support services to develop their own people. There is nothing in Victoria that offers these facilities and services to companies in the health industry.

Objectives of the Hub

- To create an industry designed co-working location with private and shared facilities that hosts companies in the health industry accommodating up to 200 professionals.
- To provide an operating environment that enables the growth of SMEs through access to facilities and economies of scale through shared services.
- To provide a vibrant work space that fosters a culture of collaboration and innovation across the health industry and offers leadership and skills development opportunities.
- To provide an anchor and identity for Victoria's health industry that showcases Victorian businesses and provides a focal point for health industry engagement with researchers, international VIPs, government, investors and other stakeholders.

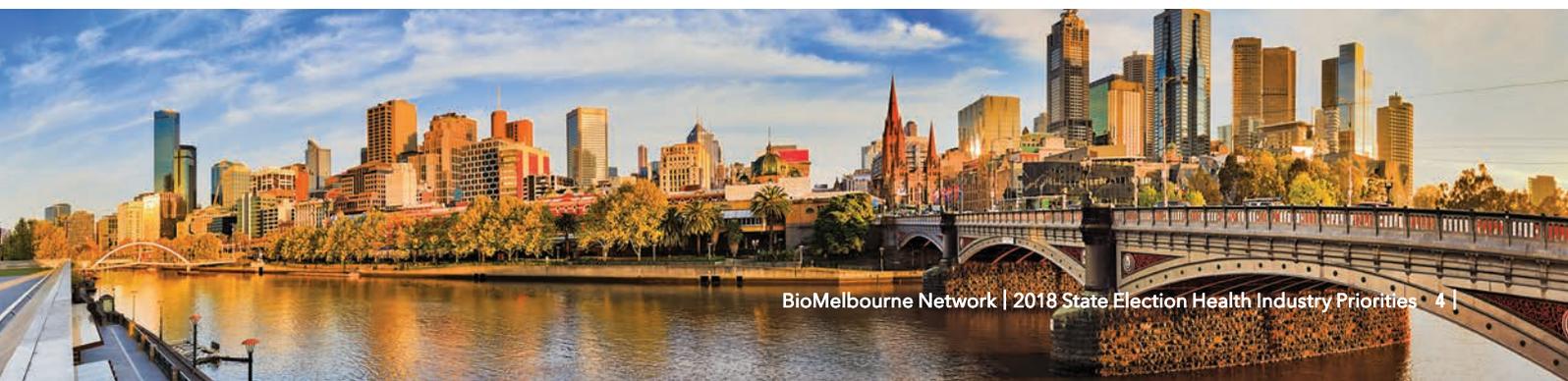
Proposal details

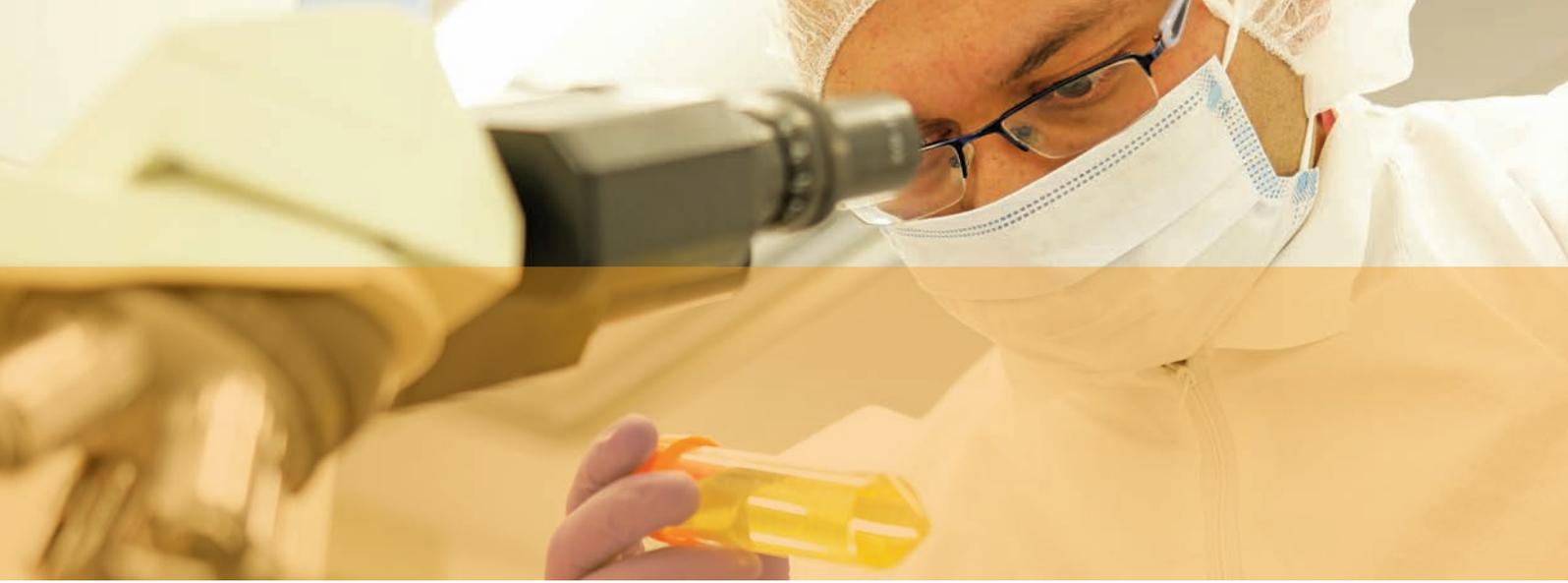
Parkville is the heart of Victoria's health innovation sector and the logical home for the Health Industry Hub. Based on our sample market research we would anticipate a hub that would need capacity to host a minimum of 100 industry professionals to meet current demand and could be expanded to 200+ over three years.

BioMelbourne Network would be an anchor tenant and act as a community curator to oversee culture and fit for tenants and industry hub development activities.

The initial phase of the hub would create a tenanted co-working community and would offer the facilities and services listed below. Once established with traction gained in the market, the Health Industry Hub would scope the need for additional facility services, such as wet lab space, prototyping, manufacture, clean room space and other facilities to support and promote health innovation in Victoria.

A staged approach is recommended because industry needs purpose-designed office facilities and services now, and the hub would serve as a pilot program to build momentum and appetite for co-location. Development of a wet lab facility would be considered in the next phase of the Health Industry Hub. Additionally, this would provide opportunity to assess company needs for additional equipment or services, such as genomics, tissue culture, prototyping and clean room space, and establish feasibility for the business model.





Facilities and services

Management of the hub would ensure that the following facilities are provided:

- Private offices available for short, long term and casual lease
- Hot desks
- Meeting and training rooms
- Function room
- Shared reception, IT and office administration facilities
- Collaboration space
- Document storage and archiving
- Security (physical and cyber)
- Data storage hardware.

Additionally, the following services would be provided:

- Development and maintenance of lists of facilities and services available for hire and use within the precinct.
- Access to centralised competitive purchasing agreements for office equipment and supplies.
- High-speed internet.
- Waste disposal, including secure document disposal.

Industry development

The hub's management would promote industry development by commissioning and coordinating events and programs that may include:

- Networking events
- Mentoring and alumni programs
- Skill development and educational programs
- Trade and industry events
- Business facilitation.

Tenants

BioMelbourne Network approached a selection of its members to assess demand for a dedicated Health Industry Hub and had strong positive responses from SMEs who have expressed an interest in tenancy or use of shared hub facilities. The following tenant scenarios are representative of the companies who endorse this proposal and would consider committing to the hub. Should seed funding be provided to establish the hub then a broad call for expressions of interest will be issued.

Future tenant scenarios

Acme Health is a university spin-out, formed through researchers participating in an accelerator program. Acme is growing and, having graduated from the university incubator, there is no suitable space available on campus. Victoria's Health Industry Hub would be the ideal location for Acme to rent an office and allow it to grow alongside like-minded businesses and have access to facilities and services.

Acme Biotech is a medium-sized company that was started in Australia but is now headquartered in Boston. Acme has one full-time person in Australia and she is currently working from home. This is unsustainable because she is professionally isolated and has no access to meeting space. She is keen to work alongside other health industry professionals and she wants the advantage of shared reception and office equipment. Also, Acme is about to host an international delegation of investors and she needs to hire a function room. Victoria's Health Industry Hub could meet all her needs.



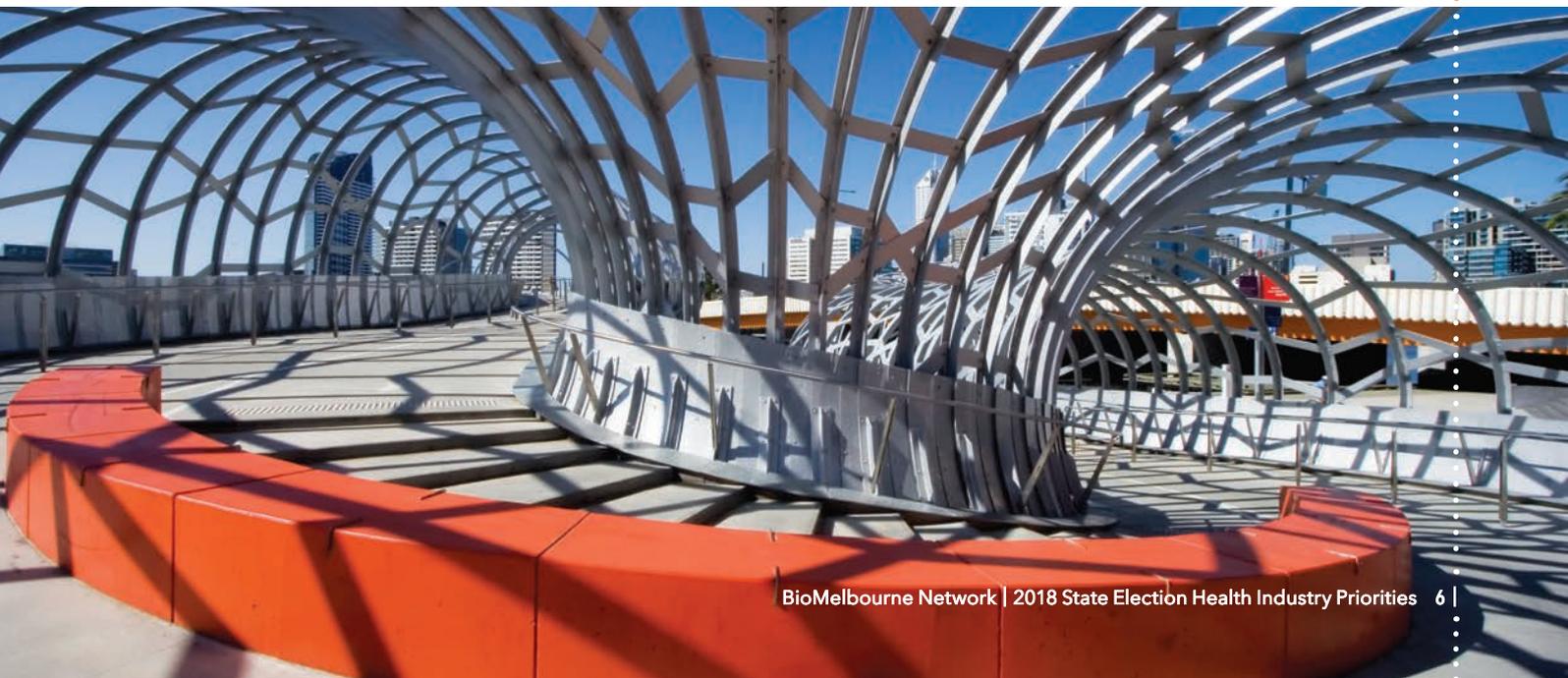
...a vibrant work space that fosters a culture of collaboration and innovation across the health industry...

Acme Pharma is huge international manufacturer with a small niche manufacturing operation in Clayton. There is some office space on site, but it is of low quality and does not include training rooms. Acme is launching a new initiative and is training all its Asia Pacific personnel. They want to train in Melbourne. To do so, they will need two desks in a fully serviced environment that has properly equipped training rooms. A central location is needed to allow personnel to meet with industry professionals while they are not in training. Victoria's Health Industry Hub would be able to service all of Acme's needs.

Acme HealthIT has just acquired a new business and needs to re-locate to consolidate and then grow. Money is tight after the acquisition, so they need to start with five private offices and have the capacity to grow. Access to casual space and meeting rooms is essential and they want to share reception and office equipment. Acme needs to recruit a new CFO and wants to be co-located with other health industry professionals. Only Victoria's Health Industry Hub could service Acme.

Benefits to the state

- > Following seed funding, the Hub will become self-funding and eventually return a dividend to the state.
- > Improved opportunities for start-ups and SMEs to grow will create jobs and increase Victoria's tax base.
- > A space focused on the health industry will become a focal point for international investors coming to Australia, making Victoria the obvious place to invest.
- > Provision of a vibrant working environment that fosters a culture of connectivity will drive skill development and increase Victoria's capacity for industry development.



PRIORITY Increase **clinical trial activity**

Policy recommendations

Increase clinical trial activity in Victoria by 50% over five years by:

1. Increasing recruitment rates by delivering a patient recruitment and stakeholder campaign.
2. Developing our capability by investing in the clinical trials workforce.
3. Attracting international sponsored trials to Victoria by enacting a clinical trials attraction plan and marketing strategy.
4. Taking a stronger national leadership role on clinical trial reform at a Federal level through COAG processes.

Rationale

In recent years Australia has had higher clinical trial activity on a per capita basis than global competitors such as the US, UK, France and Germany¹, with one third of all Australia's clinical trials taking place in Victoria². The clinical trials sector is on a growth trajectory, with 429 clinical trials registered in Victoria in 2017³ up from 265 trials in 2013. During this four-year period, Victoria had the highest number of registered trials compared to any other state³, demonstrating it ranks in the top tier of national activity. In 2015, approximately A\$330 million in clinical trial expenditure and funding directly contributed to the Victorian economy⁴.

Victoria has a strong and growing clinical trials sector that provides patients with access to new treatments, provides innovative products with development pathways to market and creates economic opportunities for the state with over 2000 jobs currently supported in the sector⁵. The Australian regulatory framework and the Federal R&D tax incentive are key drivers for growth in this industry. Victoria is a recognised leader in clinical trials, known for the quality of its clinical sites and the clinician expertise that facilitates the timely execution of excellent clinical trials. Importantly, the single ethical review system means that Victoria's ethical assessment approval process is the fastest in the country, giving it a distinct competitive advantage.

To remain globally competitive, Victoria must address challenges in patient recruitment, clinician engagement, and increased workforce capability. By combining positive action on these issues with an international marketing campaign, we believe Victoria can achieve growth in clinical trials activity by 50% over five years, in line with the national clinical trials growth projections in the recent MTPConnect 'Clinical Trials in Australia' report⁴.



Victoria is the recognised leader in clinical trials, known for the quality of its clinical sites and clinician expertise...



Recommendation 1 Increase recruitment rates by boosting patient and clinician engagement in clinical trials

The biggest challenge in recruiting clinical trial participants is a lack of awareness from healthcare professionals and participants about clinical trials, their availability and how to participate. Patients are embracing the opportunity to be part of clinical trials with a growing readiness, however they must first be aware of what clinical trials are and which ones are potentially available to them. Numerous studies have shown that 75-85% of patients⁶ said they would have been willing to enrol in a trial had they known it was possible.

Stakeholder engagement in clinical trials should be recognised as a priority for increasing patient recruitment. Stakeholder engagement has not been recognised as a priority metric by the Australian New Zealand Clinical Trials Registry (ANZCTR) or reporting the National Aggregate Statistics (NAS) report and BioMelbourne Network believe this is key to increasing patient recruitment.

BioMelbourne Network recommends:

1. A high-level promotion campaign in both urban and regional areas to inform and engage consumers and healthcare professionals - firstly about the benefits of participating in a clinical trial and secondly about awareness of clinical trials that are available and open to recruitment. The Victorian-focused campaign could be launched on International Clinical Trials Day, and be delivered across multiple media platforms, covering a range of disease indications and trials types.
2. Training and education for healthcare professionals including GPs, clinicians, nurses and the broader clinical trial workforce to increase skills and best practice knowledge on communicating the value of patient engagement in clinical trials, including use of existing clinical trial referral networks.

Recommendation 2 Develop our capability by investing in the people who power clinical trials in Victoria

Victoria has a world-class workforce managing clinical trial planning and execution. This encompasses a variety of activities such as protocol development, site coordination, ethics and regulatory approvals, site monitoring, data management, statistical analysis and reporting. There are currently numerous professional development courses and training programs available in Victoria to develop skills for entry into the clinical trials workforce. These courses are conducted within both the public and private sectors.

However, there is no overall workforce development strategy for the clinical trials sector. It is feared that the exponential growth in demand for clinical research and unmet patient need is outpacing the growth in workforce capacity and capability, and that this workforce gap is getting larger. There is a strong need to invest in Victoria's clinical research workforce, with a focus on retention and progression in career pathways that recognise clinical research roles at all levels within the healthcare system.

BioMelbourne Network recommends:

1. Undertaking a 'Clinical Trials and Clinical Research Workforce Audit' to map the current and future skill needs across the healthcare system, and using this to develop a 'Clinical Trials Workforce Strategy' to coordinate programs and address the barriers and gaps identified. This could build upon current work being undertaken by the Victorian Comprehensive Cancer Centre (VCCC) in cancer trials capability and extend across other areas of clinical research.
2. Creating a 'Clinical Trials Future Workforce Fund' to execute the strategy and fund programs such as internships and clinical trial fellowships that support the development and retention of the clinical trials workforce by developing career pathways for clinical trial coordinators, clinician investigators, clinical research associates and project managers.



3. Professionalising, recognising and funding dedicated clinical trials roles embedded within hospitals to increase the efficiency of running of clinical trials and attract and retain talented staff.

Recommendation 3 Increase the number of international sponsored clinical trials by developing and delivering an international clinical trials attraction and marketing strategy

Currently clinical trials attract an estimated annual investment of A\$330 million into Victoria, which is funded predominately by private industry, including pharmaceutical, biotechnology and medical technology companies. Clinical trial expenditure pays for a range of products and services within the healthcare system, including employment of clinical and non-clinical staff involved in the conduct of trials.

Much of the recent growth in the local clinical trials sector is due to increased attraction of international clinical research studies to Victoria. Victoria has a growing reputation as a destination of choice, attracting companies from North America, China, India, Japan and Europe, securing investment into clinical trials and securing access to cutting-edge therapies for patients.

There is an excellent business case to increase the value of clinical trial investment by at least 50% over the next five years, to an annual figure of A\$500 million per year. A cohesive business development and marketing strategy and plan will attract international sponsors to Victoria and provide mechanisms for international engagement with Victorian investigators, clinical trials sites and contract research organisations (CROs) to initiate clinical trials.

BioMelbourne Network recommends:

1. Developing and implementing a cohesive business development and marketing strategy that promotes Victoria's strengths and international competitive advantage in clinical trials, to attract international and Australian sponsors to Victoria. This plan should engage with leading clinical trial investigators, CROs and other stakeholders to develop a sector-led strategy that leverages off existing capabilities and resources.
2. Providing funding mechanisms for international clinical trials business development activities that align with the strategy, to support hospitals and other clinical trial sites, clinical research networks and CROs to attract clinical trials to Victoria. This should include leveraging our high-quality standards, proximity to Asia, our ethnically diverse, English-speaking population, and the exemplary networks of clinicians and healthcare professionals.
3. Engaging with local innovation companies including biotechnology and medical technology start-ups and growth stage companies and provide mechanisms to accelerate translation and adoption of local health innovation products into the healthcare system through clinical research, returning benefit not only to the economic growth of the sector, but to the healthcare system and Victorian patients.

Recommendation 4 Take a stronger national leadership role on clinical trial reform at a Federal level through COAG processes

Victoria should leverage its leadership position in clinical trials to drive reform at a national level through the COAG Health Council. Advancing the clinical trials environment, streamlining clinical trials processes and implementing recommendations at a national level will improve the impact, quality and efficiency of clinical trials in Victoria, for the benefit of patients and the clinical trials sector.



Victoria should leverage its leadership position in clinical trials to drive reform at a national level...



CLINICAL TRIAL GROWTH FUND

1 Boost patient-clinician engagement in clinical trials

- > High-level promotion campaign in both urban and regional areas to inform and engage consumers and healthcare professionals
- > Training and education for healthcare professionals including GPs, clinicians, nurses and the broader clinical trial workforce to increase skills and best practice knowledge

2 Invest in the people who power clinical trials

- > Map the current and future skill needs across the healthcare system, and develop a 'Clinical Trials Workforce Strategy'
- > A 'Clinical Trials Future Workforce Fund' that supports the career development and retention of the clinical trials workforce
 - > Professionalising, recognising and funding dedicated clinical trials roles embedded within hospitals

50% ↑
CLINICAL TRIAL ACTIVITY

3 Develop and deliver an international clinical trials attraction and marketing strategy

- > Developing and implementing a cohesive business development and marketing strategy that promotes Victoria's strengths and international competitive advantage in clinical trials
- > Provide funding mechanisms for international clinical trials business development
- > Engage with local innovation companies and provide mechanisms to accelerate translation and adoption of local health innovation products into the healthcare system

4 National leadership at the federal level through COAG processes

- > Victoria to drive reform at the national level
- > Provide leadership in advancing the clinical trials environment, streamlining the clinical trials process and implementation at the national level



Benefits to the state

- > Improved patient access to products and services will improve health outcomes.
- > Increased translational research activity will deliver solutions to the community faster.
- > Investment in and delivery of clinical trials will increase economic activity.
- > The international profile of the Victorian clinical trial ecosystem will increase.



PRIORITY

Boost

Advanced manufacturing for the health industry

Policy recommendations

Secure, innovate and grow advanced manufacturing activity in Victoria's health industry and increase the value of the sector by 50% over the next 10 years.

1. Create a health industry Manufacturing Fund to support sector innovation and growth initiatives.
2. Establish fellowships to support industry-based learning and develop a skilled health industry manufacturing workforce.
3. Develop a health industry manufacturing sustainability strategy.
4. Promote Victoria's health industry manufacturing capacity to the world.

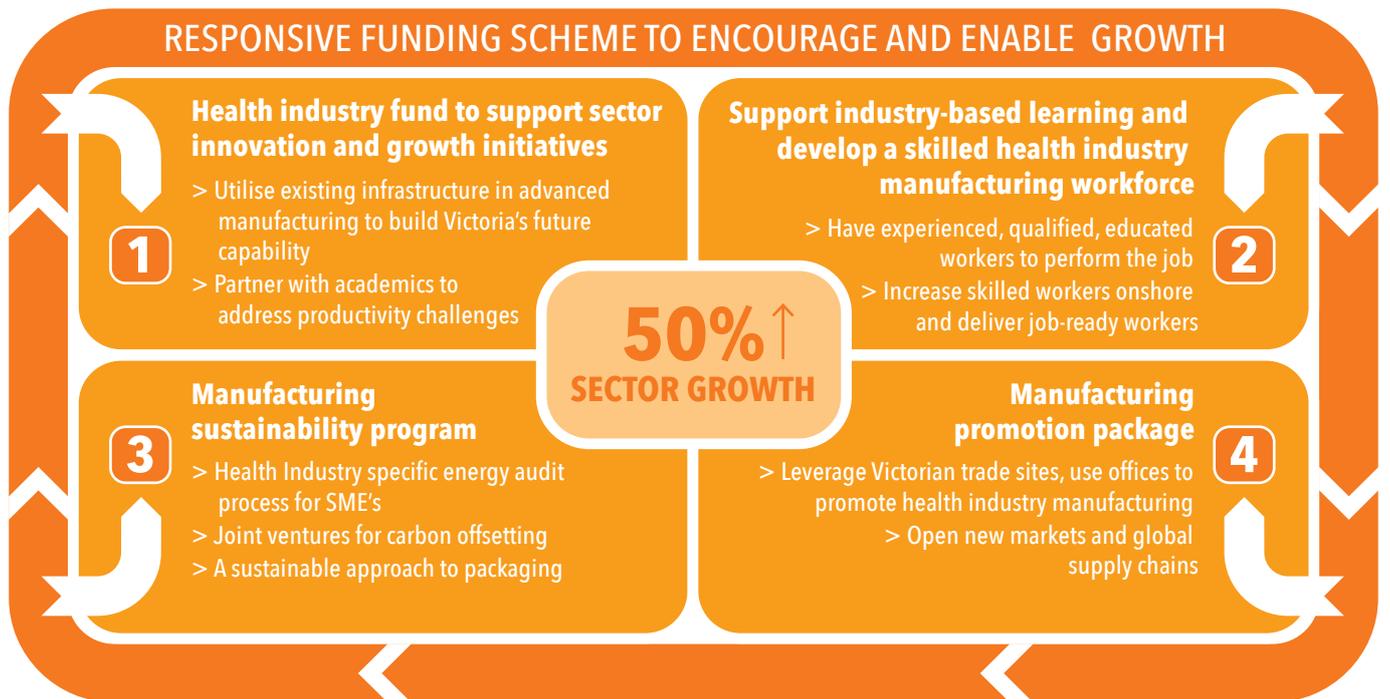
Rationale

In 2016, Victoria exported pharmaceutical products to the value of A\$1.56 billion equating to about 47%⁷ of Australia's total pharmaceutical products. These products are among the state's top five manufactured goods exports. To maintain sector growth and compete with world leading high-value manufacturing countries like Germany, Italy and Austria, the Victorian health industry needs to adopt advanced manufacturing processes and Industry 4.0 principles, such as cyber physical systems, automation, artificial intelligence, and merge manufacturing with data, information and communications technology. This will prevent industry decline, boost productivity, generate new export growth and increase the economic value of Victoria's advanced manufacturing in the health industry.

There are exceptional opportunities for the Victorian health industry ecosystem to invigorate advanced manufacturing opportunities and generate significant economic growth for the state. Policies that incentivise high-tech infrastructure upgrades and the introduction of new innovative product lines will boost productivity and export capacity. This will increase Victoria's reputation for high quality manufacture of high value products and support the growth of advanced manufacturing in the health industry.



There are exceptional opportunities for the Victorian health industry ecosystem to invigorate advanced manufacturing opportunities and generate significant economic growth for the state.



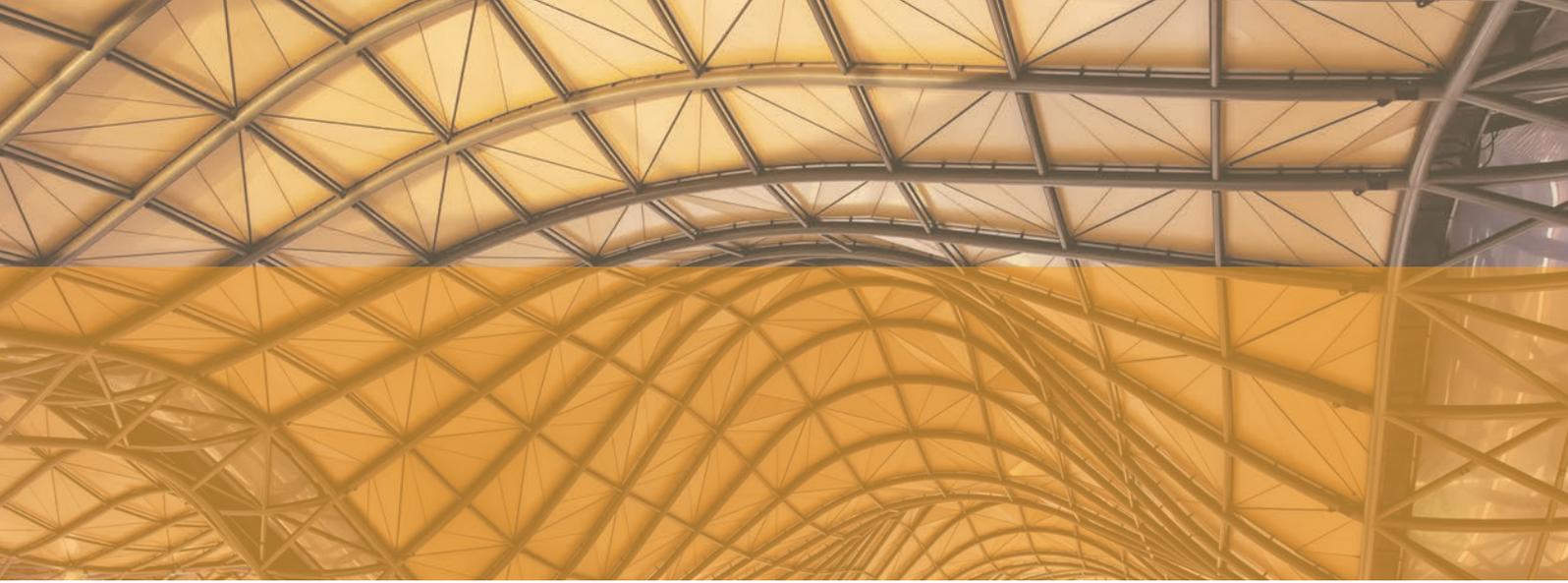
Recommendation 1 Create a Health Industry Manufacturing Fund to support sector innovation and growth initiatives

To grow the value of advanced manufacturing in the local health industry, companies need to be able to adapt to the evolving needs of the global health industry. With the increasing complexity of therapeutic products, companies need to be able to respond with innovative manufacturing processes to meet future medical needs.

BioMelbourne Network calls for a Health Industry Manufacturing Fund that is responsive to industry needs and allows manufacturers to be agile in accessing funds to attract new clients, projects and product lines to Victoria. This will increase Victoria's competitiveness on a global level and seize emerging market opportunities in our region.

A key part of this program will be collaboration. Victoria's universities have a diverse expertise in manufacturing and engineering capability and these grants should facilitate collaboration with the manufacturing companies to bring new technologies aligned with Industry 4.0 into reality. Collaboration should then extend across the manufacturing companies as one technology is proven and implemented then a faster implementation path is available to the other companies should they wish to embrace it. By progressing on multiple fronts and collaborations the implementation of advanced technologies to the organisations will be world class.

The fund should have a simple application process, with transparent criteria and a robust published scoring matrix. Applicants should have access to advice from senior decision makers and applications should be assessed by a panel of industry and government experts. On receipt of funding, the company and the state should agree on targets and milestone reporting for funding against the agreed targets.



Recommendation 2 Establish fellowships to support industry-based learning and develop a skilled health industry manufacturing workforce

BioMelbourne Network members are reporting significant workforce shortages and skills gaps in areas of health manufacturing. New graduates require additional on-the-job training, experienced personnel are frequently lost to opportunities overseas and the market is failing to deliver job-ready workers. We propose the development of a health industry-based manufacturing fellowship program that brings together academic partners with established manufacturing firms to address this job-market failure.

The fellowship program will fund 250 positions over 10 years for students and researchers from Victoria's leading universities, VET colleges and research institutes. Fellowships will be supported by matched funding from companies with a 50:50 co-investment from government and will be administered by the academic institution partner. With an intake every two years, fellowships will be over a one-year period with the option to extend for another year, subject to review. BioMelbourne Network companies have expressed great interest in this program and it is expected that up to 250 positions could be supported by health industry SMEs and the larger pharmaceutical companies over five intake rounds. Based on previous examples of programs of this kind, the employment prospects for fellowship students transitioning into full-time roles are very high. The outcome of this would be the creation of new jobs in the industry and increased skills and capabilities in the manufacturing workforce.

Recommendation 3 Develop a health industry manufacturing sustainability program

The global pharmaceutical manufacturing industry is facing an increasing pressure from consumers and regulators to reduce the environmental impact of its activities and address sustainability issues in the supply chain.

Victorian health industry manufacturers are experiencing significant cost pressure from rising energy prices which is reducing the global competitiveness of Victoria as a manufacturing location.

This has created strong demand for increased energy efficiency and a transition to a carbon neutral industry. To increase Victoria's cost competitiveness in manufacturing and create greener supply chains, BioMelbourne Network recommends developing an energy and sustainability program that includes:

- A health industry manufacturing specific energy audit process for SMEs as a blueprint to energy efficiency. This should also examine interruptions to supply, which cause significant loss of productivity and financial impact to the health industry manufacturing companies. Where the audit identifies strategies to improve energy efficiencies, companies could apply to the manufacturing fund in recommendation 1 for support to implement the identified strategies. This could include a requirement to use local Victorian supplies, services and expertise to address these issues, to stimulate economic growth in the local industry.
- Opportunities for joint investments between government and manufacturing companies to help offset their carbon footprint. We know that pharmaceutical manufacturing has common, high-energy use technologies that are specific to manufacturing for the health industry. These could be offset by joint ventures in renewable energy projects in other Victorian regions.



BioMelbourne Network members are reporting significant workforce shortages and skills gaps in areas of health manufacturing.

- Sustainable approaches to supply chains, including packaging. A collaborative approach between pharmaceutical manufacturers, suppliers and research institutions should be supported to move to more environmentally friendly supply chains. For example, partnering with research institutions and suppliers for the innovative use of sustainable packaging materials for pharmaceuticals would provide a global competitive advantage to the Victorian industry, and further leverage our 'clean, green' reputation in target export markets.

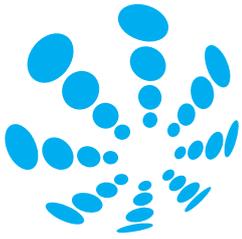
Recommendation 4 Promote Victoria's health industry manufacturing capacity to the world

Victoria's world leading manufacturing capacity in the health industry should be promoted to the world, to increase the profile of sector capabilities in global markets. In order to achieve growth in the health manufacturing sector, 'Brand Victoria' must be more visible to attract potential investment and niche high-value manufacturing opportunities to the state. There is a need to open up new market export opportunities, particularly in emerging economies in the Indo-Pacific, Middle East and Africa. This can be achieved by leveraging Victoria's overseas trade offices and prioritising the promotion of our health industry manufacturing capacity with clear and consistent market messages and branding.

Benefits to the state

- > Economic activity generating high skilled jobs and revenue will be increased.
- > Workforce capacity leading to the creation of more opportunities for businesses will be increased.
- > Overseas investment in Victoria will be increased.
- > Exports and associated revenue will be increased.
- > Local manufacture of health products will increase the security of supply.
- > Victoria's reputation as an open, flexible economy, built on trade and engagement with the world will be increased.
- > Initial support provided to the sector will increase revenue that will generate high multiple return on investment to government.





BioMelbourne Network

Progressing BioIndustry

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References

1. Askie LM, Hunter KE, Berber S, Langdord A, Tan-Koay AG, Vu T, Sausa R, Seidler AL, Ko H, Simes RJ. The clinical trials landscape in Australia 2006-2015. Sydney: Australian New Zealand Clinical Trials Registry: 2017
2. VicTrials. Why Victoria. 2018: available at <https://victrials.com.au/why-victoria/> [accessed 26 March 2018]
3. ANZCTR. Interactive real-time statistics. Available at <http://www.anzctr.org.au/Stats/RealTimeStats.aspx> [accessed 26 March 2018]
4. MTP Connect. Clinical Trials in Australia: The Economic Profiler and Competitive Advantage of the Sector. 2017: available at https://www.mtpconnect.org.au/Attachment?Action=Download&Attachment_id=54
5. In 2015: 6900 clinical trial jobs supported Australia wide in the clinical trial sector. Given 30% of clinical trial activity happens in Victoria, this equates to approximately 2070 jobs. Source: MTP Connect. Clinical Trials in Australia: The Economic Profiler and Competitive Advantage of the Sector. 2017
6. CCHRE Annual Progress Report 2010-2011. Available at <https://www2.health.vic.gov.au/Api/downloadmedia/%7B710A34CC-5623-4514-B83E-6C6F605F5D30%7D> and Australian Clinical Trials - Why talk to your patients about clinical trials. Available at <https://www.australianclinicaltrials.gov.au/health-care-providers/why-talk-your-patients-about-clinical-trials>
7. Trade Victoria: MTP. Available at <https://trade.vic.gov.au/victorias-capabilities/industry-sectors/medical-technologies-biotechnology-and-pharmaceuticals/overview>

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Acknowledgements

This report was produced by BioMelbourne Network and acknowledges the generous contribution of the BioMelbourne Network Board of Directors, the Policy and Research Team, BioMelbourne Network member working groups and student interns.

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BioMelbourne Network Members

Clinical Trials Working Group

BioMelbourne Network Members

Pharmaceutical Manufacturing Forum Working Group

BioMelbourne Network Members

Ms Amelia Dwyer

Work Integrated Learning student, Monash University

Ms Rehnuma Sejuty

Work Integrated Learning student, Monash University



Victoria has world leading competitive advantages in the health industry, which encompasses health and medical research, biotechnology, medical technology, pharmaceuticals, digital health, healthcare delivery, health services, and global health.

