LIFE SCIENCES AND HEALTH TECH



Melbourne is the life science and health tech capital of Australia. It is home to industry giants, a booming startup sector, top-tier universities, world-class research institutions, Australia's largest biomedical precinct and the deepest talent pool in the nation.

1,200

Companies in Victoria

40%

Of Australian companies based in Melbourne 90,000

Jobs in Victoria \$4.7b

Victoria Gross State Product

Home to leading Australian and global companies

Victoria's life sciences and health tech industry includes pharmaceutical, biotechnology, medical equipment, food science and healthcare organisations, with many global powerhouses choosing to call the city home. Major players include Atmo Biosciences, BioNTech, CLINUVEL, CSL, Gilead, GSK, Hot Doc, Life-Space, Merck, Mesoblast, Moderna, PolyNovo, Roche, Swisse, Telix Pharmaceuticals and Zoetis.

Leading research institutions that attract significant funding

Melbourne's research institutions attract about \$500 million in medical research funding per annum, paving the way for breakthrough innovations in biomedical engineering, immunology, nanotechnology and neuroscience.

Major institutions include the Baker Heart and Diabetes Institute, Burnett Institute, Bionics Institute, Doherty Institute, Florey Institute of Neuroscience and Mental Health, Murdoch Children's Research Institute, Walter and Eliza Hall Institute, and Olivia Newton John and Peter MacCallum Cancer Centres.

Beyond the central city, Victoria hosts the largest portfolio of National Research Infrastructure of any state, including the Australian Synchrotron and the Australian Centre for Disease Preparedness, a Biosafety Level-4 zoonotic laboratory in Geelong.

40%

Federal government funding awarded to Victoria

45%

National venture capital investment in Victoria

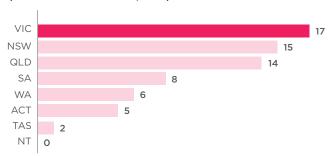
Melbourne's companies are making a global impact

Melbourne's industry innovation is globally recognised, ranking as a leading life science hub for the Asia-Pacific. Victoria accounts for more pharmaceutical exports than any other state, and life sciences and health-tech exports are the largest of any industry.

The nation's deepest talent pool

Melbourne has a significant talent pool of university health graduates, producing 17,000 graduates, more than any other state.

Health Graduates per State in Australia (Student Count in 000's, 2021)



Talent pool supported by high-ranking courses

The University of Melbourne and Monash University (Parkville campus) have globally competitive health and medical courses, which rank among the world's best. Monash is ranked second globally for its pharmacy and pharmacology courses, with the University of Melbourne ranked 11th for its infectious diseases course, 13th for microbiology and 14th for immunology.

Top 5

Life sciences hubs in the Asia-Pacific (CBRE 2021) Dhari

Pharmaceutical manufacturers are based in Melbourne

60%

National pharmaceutical exports come from Victoria

\$2.4b

Victoria exports per annum

Melbourne's health sector has contributed to breakthrough innovations

Telix Pharmaceuticals - a global success story

Melbourne based Telix Pharmaceuticals has achieved staggering growth across multiple global markets to become one of the city's greatest international success stories.

Founded in 2015, Telix specialises in the development and commercialisation of targeted radiation therapies for cancer. Targeted radiation is revolutionising how clinicians can identify and treat cancer and other rare diseases using non-invasive techniques to precisely locate and eliminate cancer cells throughout the body.

In 2021, Telix secured Therapeutic Goods Administration (TGA) and US Food and Drug Administration (FDA) approval for a prostate cancer imaging tool, which helped boost international sales by 450 per cent (2020–22) to \$160 million, topping the Financial Review Fast Global list.

Melbourne's leading research infrastructure in biotech and pharmaceuticals, and active community of medical investors have been a key part of supporting the organisation's global expansion.

Telix now has commercial operations in South America, Europe, the Middle East, Africa and the Asia-Pacific, employing over 300 staff, serving 2,000 patients around the world each week.

Established health startup ecosystem

Health tech and biotech is the most funded segment in Victoria in 2023, raising \$180 million.



479 Health tech startups



14% of all startups are in health tech



Unicorns emerged



\$16.1b
Total
enterprise
valuation



5.2kTotal
workforce



24Accelerator programs

Subsector strengths



Biotechnology

Melbourne has a leading reputation in vaccines and therapeutics, diagnostic tools and technologies, and stem cell research. Mesoblast developed novel cell therapies to treat inflammatory diseases resistant to conventional care and has achieved international success.



Pharmaceuticals

Melbourne has a core capability in pharmaceutical production, which is now the city's largest exported product. CLINUVEL developed and commercialised photomedicine treatments and now operates in six countries.



Medical Technology

Melbourne is a leading hub for innovation and expertise in medical technology. Seer Medical started in Melbourne and now operates in three countries, developing home diagnostic devices that monitor seizures and epilepsy.



Digital Health

Melbourne's digital health sector is poised for significant growth, expected to more than triple in size by 2030 (to \$7 billion), driven by continued growth in digital innovations. Health Delivered, is targeting obesity and diabetes with innovative dietary management platforms and is partnering with INNOVA to enter the European Union.



Clinical Trials and Research

Melbourne has world-class clinical trial and research capabilities, supported by a strong network of research infrastructure. Australia's oldest medical research institute is based in Melbourne, Walter and Eliza Hall Institute, with expertise in cancer and immune disorders.

Smileyscope - local startup achieving global success

Smileyscope is a multi-award-winning digital therapeutics company that has transformed paediatric treatment through its child-friendly, patented virtual reality programs that are designed to reduce pain and anxiety during medical procedures.

The company's innovative approach has revolutionised paediatric needle practice worldwide. Smileyscope has improved over 100,000 procedures across four continents and global vascular access guidelines now recommend the therapeutic platform.

Smileyscope was accepted into the US FDA Safer Technologies Program (SteP) to expedite market access into the USA in 2022. It has received over 30 international awards.

Melbourne has a world leading biomedical precinct

Melbourne Biomedical Precinct (MBP)

The MBP is at the forefront of global biomedical research, attracting more funding than any other cluster in the country.

The precinct's strong network of partnerships between academia, research and industry helps deliver applied research, yielding a publication citation rate of twice the global average.

This approach enables competitive research translation performance, demonstrated recently by CSL, Walter and Eliza Hall Institute and the University of Melbourne which secured funding for a startup incubator to help commercialise local, early-stage biotech organisations.

Beyond MPB, Victoria also boasts a diverse and thriving biotechnology sector that includes vital precincts such as the Clayton Innovation Cluster, the Alfred Medical Research and Education Precinct and the Arden Precinct.

Precinct snapshot



40+

Organisations

Home to more than 40 hospitals, medical research institutes, bio-medical organisations and universities



\$2.8b

Investment

MBP investment capital injected into research and healthcare facilities over the last decade



25%

Of competitive research funding

MBP attracts around 25 per cent of Australia's competitive biomedical research funding



7k

Health and medical students

MBP educates 7,000 biomedical health and medical students

MBP Clinical research capabilities



Infectious diseases and Immunology



Child health and wellbeing



Neurosciences (incl. mental health)



Healthy aging and aged care



Cancer research and treatment

Cumming Global Centre for Pandemic Therapeutics (CGCPT)

CGCPT established in Melbourne to prepare for future pandemics.

As part of the Doherty Institute at the University of Melbourne, CGCPT develops novel platform technologies to ensure preparedness against future pandemics. It will enable the rapid design, testing and dissemination of novel therapeutics in response to a future outbreak.

A total of \$250 million in philanthropic funding was provided by a Canadian donor, Geoffrey Cumming, marking the largest donation of its kind to medical research in Australia's history.

\$250m

Philanthropic donation

\$75m

Funding from the Victorian Government

The Aikenhead Centre for Medical Discovery (ACMD) is Australia's first hospital-based biomedical research centre

ACMD is a \$206 million global biomedical engineering research and training centre that brings together world leading universities, research institutes and tertiary hospitals to address significant global medical challenges through medical device application, focusing on epilepsy and osteoarthritis.

The facility has dedicated teaching resources to support future research leaders in clinical, nursing, allied health and biomedical fields.

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University and research partners

100+

Projects with research partners



Generous Research and Development tax incentives for eligible companies

Eligible foreign investors benefit from strong research and development tax incentives in Australia, receiving up to a 43.5 per cent as a refundable tax credit.



Favourable regulations

Australia's TGA approval requirements have strong alignment to other major global markets, including the EU, USA, Japan and Canada for prescription medicines and medical technology.



Experienced professional services firms

Foreign investors in health benefit from an ecosystem of established professional services firms in Melbourne, including lawyers, accountants and intellectual property (IP) attorneys to support end-to-end commercialisation.

Catalyst – an international company calling Melbourne home

Catalyst is a specialist global biopharmaceutical Contract Research Organisation (CRO), dedicated to designing and delivering better clinical trial experiences for researchers in oncology and haematology.

Catalyst offers biotech companies specialised services across all stages of the clinical trials journey, including clinical trial management, biostatistics, data management and quality/compliance, to provide sponsors and clinical research institutions with industry-leading, customised clinical development solutions.

Catalyst recently established its regional hub in Melbourne as a gateway to the Asia-Pacific market and is now a key contributor to Melbourne's world leading clinical trials capability.

Melbourne has so much to offer foreign businesses



Favourable visa settings

Australia proactively attracts top-tier talent through dedicated visa programs such as the Global Talent Visa and Global Talent Employer Sponsored program.



Gateway to the Asia-Pacific

The Asia-Pacific health and MedTech market is significant and projected to reach almost \$2,400 billion by 2030. Regional growth is expected to be fuelled by Asia's expanding ageing population and rising consumer demand for wearable technology.



Lower business costs

Melbourne offers significant cost advantages for businesses. Industrial leases and office space rentals are around 35 per cent cheaper than Sydney.

Victoria has the second lowest metropolitan payroll rate in the country (4.85 per cent) and the lowest regional tax rate (1.21 per cent). Melbourne's energy costs are 45 per cent lower than in Sydney.



The epicentre of co-working

Melbourne dominates the co-working landscape in Australia, accounting for more than half the total available space in Melbourne, Sydney and Brisbane.



Exceptional liveability

Melbourne is currently the World's Fourth Most Liveable City, having held the title of World's Most Liveable City for a record-breaking seven years from 2011 to 2017. Its exceptional lifestyle advantages are a key drawcard for attracting and retaining top talent.

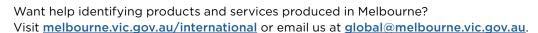


Diverse population

Over 200 nationalities are represented in Melbourne providing a diverse cohort to participate in clinical trials.

Thinking about starting a business in Melbourne?

Visit <u>melbourne.vic.gov.au/invest</u> or email us at <u>investmelbourne@melbourne.vic.gov.au</u>.





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