

# MEDTECH & PHARMA

Brisbane excels in biomedical research, medical device manufacturing and clinical trials on a global scale, and is home to a network of world-class translational research centres and state-of-the-art hospitals and precincts. This has created a critical mass of knowledge generation driving growth in high-value specialisations such as bio-medicine, vaccine research and drug discovery, oncology, clinical trials, ageing and chronic conditions, neurosciences, hospital management and e-health and human bionics. Together with a well-supported startup ecosystem and strong advanced manufacturing capability, Brisbane is at the forefront of the convergence of technology and healthcare, attracting international attention and recognition.

## *Brisbane's Competitive Advantages*

### ASIA PACIFIC LOCATION

Located on the doorstep of the fastest-growing region for consumer demand and income growth, Brisbane is ideally positioned for the global pivot to Asia and the Pacific. Companies such as Cook Medical, the largest privately-owned medical device company in the world, has based its Asia Pacific headquarters in Brisbane and companies such as Cochlear and ResMed also have a significant presence with Cochlear producing external components of the cochlear implant systems at their recently expanded Brisbane manufacturing facility.

Brisbane also has a substantial complementary medicines manufacturing sector, with companies including Integria Healthcare, Health World Limited and Sanofi Aventis Consumer Healthcare based here.

With a burgeoning medtech and pharma capability and well-established research, business and cultural connections across the globe and throughout the Asia Pacific region, Brisbane is an ideal place to locate your medtech and pharma enterprise.

### EDUCATION, RESEARCH & TALENT

Brisbane's medtech and pharma sectors are supported by a highly educated and specialist workforce.

Brisbane's impressive state-of-the-art health and medical research facilities and hospitals attract world-class medical researchers and clinicians who engage in cutting-edge translational research.

The QIMR Berghofer Medical Research Institute is currently ranked seventh in the world for patent citation rate, and Brisbane's universities - the University of Queensland and Queensland University of Technology - are two of the top three Patent Cooperation Treaty filing universities in Australia.



### STRENGTHS AND SPECIALISATIONS

Brisbane is home to agile, innovative and entrepreneurial biomedical businesses across a number of existing strengths and emergent sectors. Its pre-clinical and early-phase clinical trial capabilities are underpinned by a world-class research base and state-of-the-art translational facilities across:

- **vaccine development and delivery**
- **biopharmaceutical contract manufacturing**
- **immunotherapies**
- **generic pharmaceuticals**
- **complementary medicines**
- **nutraceuticals**
- **medical devices and diagnostics**
- **bionics**
- **biofabrication**
- **digital health technologies including:**
  - **connected devices**
  - **remote monitoring technology and point-of-care diagnostics**
  - **wearable devices**
  - **telehealth**



## DRUGS & VACCINES

Brisbane is home to world leaders in vaccine research. Researchers are connected by an ecosystem of more than 60 institutes – research hospitals, precincts, laboratories and other research organisations, including five drug discovery and development institutes, which together drive new product development:

- **The University of Queensland (UQ) Diamantina Institute**
- **UQ Centre for Integrated Preclinical Drug Development (TetraQ)**
- **Queensland University of Technology's Institute of Biomedical Innovation**
- **UQ Centre for Clinical Research**
- **QIMR Berghofer Medical Research Institute's Clinical trials and Biostatistics Units**

## CHRONIC DISEASES AND AGEING

Brisbane's researchers are addressing many of today's health and medical challenges including the development of new therapeutic approaches to treat neurodegenerative diseases.

The city boasts a critical mass of research centres that contribute to new product development including the **Queensland Brain Institute (QBI)**, home to more than 450 scientists working to understand the neural circuits in the brain, and how dysfunction of these circuits can lead to an array of disorders such as ageing dementia.

The **Clem Jones Centre for Ageing Dementia Research** at QBI is Australia's largest research centre dedicated to the prevention and treatment of dementia. Griffith University's **National Centre for Neuroimmunology and Emerging Disease Research** is a world-class research facility focussing on the etiology of pathomechanisms of chronic fatigue syndrome.

## NATIONAL SUPPORT WITH MTPCONNECT

**MTPConnect**, the national Growth Centre for the Medical Technologies and Pharmaceuticals sector, is fully engaged in the Brisbane ecosystem. With a long-standing and productive alliance in place with Life Sciences Queensland, MTPConnect-supported projects are contributing to Brisbane's reputation as a centre of commercial and research excellence.

- **Bridge and BridgeTech Program:** a Queensland University of Technology program supported by industry to enhance the commercialisation skills and business acumen of researchers, life science and medical device entrepreneurs.
- **Herston Biofabrication Institute:** a project involving Queensland University of Technology, Metro North Hospital and Health Services and Hear and Say to develop 3D scanning and 3D printing techniques for children with microtia (under-developed ears).
- **Early stage clinical trial manufacturing and training:** a collaboration with Brisbane's Translational Research Institute and industry to establish a flexible and accessible clinical manufacturing facility to enable the translation of innovative, investigational products into clinical studies.
- **A new compounds library to support drug discovery:** the Hit ID Platform project, with the Cancer Therapeutics CRC, Griffith University, Compounds Australia and other industry partners, is working to create a fit-for-purpose, readily accessible drug discovery library to boost Australia's drug discovery capabilities.
- **Biologics advanced manufacturing:** led by the Australian Institute for Bioengineering and Nanotechnology and University of Queensland, this is a project to enhance industry capabilities and skills around R&D and advanced manufacturing of biologic medicines.

## CLINICAL TRIALS

The greater Brisbane region is internationally respected for its contribution to commercially driven drug development and is one of the world's most attractive locations for clinical trials. The region has an outstanding early phase research and clinical trial capability with several world-class universities, hospitals, infrastructure, academic centres of excellence and clinical trial facilities. More than 75 core biotechnology companies and 70 biotechnology-related research organisations make up a dynamic early-stage private sector.

## QLD GOVERNMENT

The Queensland Government has a long history of investing in knowledge intensive industries, with over \$6 billion in world-class science and innovation infrastructure funded since 1999.

The Queensland Biomedical 10-Year Roadmap and Action Plan is also supporting and developing our state's growing biomedical sector. The Roadmap is part of the broader Advance Queensland initiative, with funding of \$650 million for programs that drive innovation, build on our natural advantages, and help raise our profile as an investment destination.