Queensland Health

Be part of our **brighter future**

Inner-Brisbane Innovation and Knowledge Precinct Prospectus

Boggo Road Innovation and Herston Health Precincts

Queensland Government

Acknowledgment of Country

We acknowledge the Aboriginal and Torres Strait Islander peoples as Traditional Custodians of the many Countries on which we live and work. We pay our respects to their Elders and recognise First Nations people's continuous and unique ability to care for Country. We acknowledge our responsibility to listen and learn as we walk alongside First Nations people to shape cities and communities for a better future.

Inner-Brisbane Innovation and Knowledge Precinct Prospectus

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Disclaimer

Welcome to the Next Generation of World Class Innovation

Life sciences innovation tackles global challenges. It changes lives – creating social, economic and environmental benefits experienced by communities locally and globally. Progress relies on bringing people with creative minds together, in places which enable them to share ideas and accelerate the speed at which they are put into practice.

The requisite conditions for successful life sciences, 'bio-med' and 'med-tech' innovation ecosystems are well understood. Clarity of purpose, depth and strength of assets (economic, physical and networking), proximity to investment capital and effective governance provide the firm foundations. Increasingly a new set of success factors are emerging to support the attraction of talented people and firms and empower them to do their best work: a great quality of life, compelling and well-connected public spaces that encourage people to meet and socialise, complementary skills and sectors together with an entrepreneurial culture, are the new catalysts for world-class innovation.

We are inviting you to join Brisbane's fast growing life sciences innovation community and be part of shaping its future.

This Prospectus introduces the Inner Brisbane Innovation and Knowledge Corridor, its precincts and participants. It positions our rapidly expanding ecosystem as part of Queensland's wider network, connected with innovation hubs across Australia and proximate to expansive markets across the Asia Pacific.

Australia is the most significant and dynamic life sciences ecosystem in the Southern Hemisphere

Australia is a top ten nation for life sciences research and innovation, and the quality and performance of our healthcare system; we are a trusted and credible partner recognised for our sustained contribution to the global health and life sciences landscape. Australia offers:

A robust, high performing health care system

- Ranked fifth in the world in 2022 on quality of the healthcare system.
- Ranked third amongst eleven high-income OECD countries for health care system performance in 2021 and first for Health Equity and Healthcare outcomes.
- Ranked eleventh in the world on the International Property Rights Index (2022).

A 'go to' destination for early phase clinical trials, attracting pharmaceutical industry giants, red-hot startups and talented people who value lifestyle and community

It was estimated (in 2021) by MTP Connect that around 95,000 subjects participated in ~1,800 clinical trials in Australia and that the sector employed more than 8,000 people. Whilst our life sciences and clinical trials sectors are growing fast, our underpinning scientific research institutions exemplify quality and impact – ranking in the world's top 1 per cent across 15 individual fields of research, including clinical medicine. Australia is not only a strategic location to access and scale life sciences business into the Asia Pacific, but it is also a wonderful place to live, work and play!

A thriving life sciences sector – the largest in the Southern Hemisphere.

Our life sciences sector is valued at over AU$250 billion and the number of life sciences companies has grown by an astonishing 40 per cent since 2019. Sector growth is assured with a critical mass of 2600+ life sciences organisations across the nation, over AU$10.3 billion in biotech sector revenue and a workforce of 264,000+ (2022).

An ecosystem that accelerates the growth, and protects the value of innovative health and life sciences outputs and products

We had the sixth highest per capita expenditure on healthcare with a total of AU$279 billion in 2021. Our government provided AU$21.5 billion in business support and grant funding for life sciences. Small and large companies alike have access to a generous tax offset for expenditure on research and development (R&D). Our health and life sciences sector exports topped AU$5.6 billion in 2021, with ~80 per cent of our total exports going to Asia. We also happen to have one of the richest health record datasets for population level analysis in the world with over 90 per cent of patients happy to share their de-identified personal health information to advance medical research and patient care.

Australia as the choice destination for health and life sciences

Spending in 2021 (AU)	**$234 billion**
industry worth (AU)	**$250 billion**
Global IP rights	**Ranked 3rd**
Australians support their medical records being used for research	**4 out of 5**

Australia's exports

Exporting to	**167 countries**
Value of exports (AU)	**$5.6 billion**
Free Trade agreements	**18**

Medical technologies and pharmaceuticals (MTP) industries

GVA in 2019 (AU)	**$5.2 billion**
2019 MTP Manufacturing Exports (AU)	**$8.2 billion**
Increase in MTP Manufacturing Exports (AU) P.A. since 2016	**16%**

Life sciences ecosystem in australia

People employed **263,693**

Increase in organisations from 2019-2022 **43%**

Life sciences organisations

Commercial entities	**1,427**	Research institutes	**320**
Government and regulatory	**32**	Funding bodies	**166**
Support services	**799**		

Biotechnology industry

Generated revenue in 2021/22 (AU)	**$10.3 billion**
Average growth P.A. from 2017-2022	**2.76%**

Sources

- Advanced Therapeutics in Australia 2023
- IBIS World Biotechnology in Australia – Market Size
- MTP Connect Medical Technology, Biotechnology & Pharmaceutical Sector Competitiveness Plan 2020
- AusBiotech Australian Biotechnology Sector Snapshot 2022

Momentum is building in Queensland

Queensland is experiencing a resurgence in international interest and investment following the announcement of Brisbane, capital of Queensland, as the host city for the 2032 Olympic and Paralympic Games. Growing our existing strengths in life sciences and associated technologies is a key platform of our Legacy Strategy.

Across the state we have world-class health, education and research foundations, a track record for realising ground-breaking research, a flourishing and fast-growing industry ecosystem, a strong talent pipeline – and a great lifestyle. The Queensland Government is also in the midst of a building boom, with a record 4-year capital program of AU$89 billion.

Queensland has a sophisticated, comprehensive and integrated healthcare and biomedical ecosystem.

After sustained investment over 25 years, our biomedical sector is booming and set to grow even further, with Queensland fast becoming a global research and innovation hub with state-of-the-art facilities, talent attraction and partnerships.

Leading edge companies, research institutions and tech start- ups work alongside multi-national pharmaceutical and healthcare companies in established and emerging precincts across Queensland. A range of industry and economic development organisations proactively connect and support growth in the ecosystem.

Queensland is a major hub for scientific discovery and translation in the Asia-Pacific region.

The Queensland Biomedical 10-Year Roadmap and Action Plan demonstrates Queensland's ongoing commitment to expanding the biomedical industry with a vision to become a globally competitive Asia-Pacific biomedical industry hub. The Queensland Government's Advance Queensland: Innovation for a future economy 2022-2032 Roadmap guides the state's journey as a leading and sustainable world-class innovation economy. This includes positioning Queensland innovation precincts and places to reach their full potential, co-locating them with research, education and training institutes and improving accessibility to digital infrastructure, advanced manufacturing and bio-manufacturing capabilities, and other specialised and enabling technologies.

We are one of the fastest growing life sciences destinations

Queensland's biotechnology sector is part of a booming life sciences ecosystem – an ecosystem that grew by 74 per cent between 2017-2022, faster than in the States of NSW (64 per cent) and Victoria (62 per cent). It employs 12,400 people, contributes AU$2.11 billion in gross value-added, and has an export value estimated at AU$450 million.

Some of our latest exciting industry-driven partnerships:

Connecting world-class researchers in mRNA technology

The AU$280 million Translational Science Hub at the Boggo Road Innovation Precinct, led by Sanofi affirms international interest in the foundations and potential of Queensland's biomedical sector. The State is already a global leader in the development, delivery, and advancement of vaccine candidates. Centres of excellence like this in the precincts are underpinning the growth and development of emerging industries in Queensland.

> *"The Queensland Government has invested strategically in science and core infrastructure over the past 25 years. This has enabled access to world-class technology and close collaboration with experts in academia, medicine and industry, and made Queensland the location of choice for Sanofi to establish a global R&D site (the Translational Science Hub)".*
>
> **Dr Iris Depaz,** Managing Director – Translational Science Hub, *Sanofi*

Advancing med-tech innovation with Stryker

Stryker's new R&D Lab in the Herston Health Precinct allows researchers and engineers to better collaborate with clinicians at the site of care. The R&D Lab builds on existing partnerships and offers an expanded focus on digital health, data science, robotics, clinical software applications, and advanced manufacturing research.

> *"With a thriving ecosystem of world-class research, science and health sector capability, Queensland was a clear choice for Stryker to establish an Australian R&D presence. Stryker's decision to locate the R&D Lab in Brisbane is a testament to the success of the Queensland Government's concerted efforts to leverage competitive strengths, access new technologies and industries and drive forward innovation in the state."*
>
> **Rob Wood,** Senior Director R&D, *Stryker Digital, Robotics and Enabling Technologies*

Vaccine for human papillomavirus (HPV)

Professor Ian Frazer and the late Dr Jian Zhou first started developing a vaccine for HPV in the 1990s at The University of Queensland and the Boggo Road Innovation Precinct. Since its commercial release in 2006, over 200 million doses of the Gardasil HPV vaccine have been distributed in 130 countries.

> *"Over the last 30 years I've observed as a participant in the growth of an amazing hub of creative biomedical research and research translation in inner Brisbane. Individual researchers, including myself, have built teams of creative young scientists, spin out companies, and proceed to clinical trials of products of potential worldwide significance. All this has been based on the talent from high quality research institutes and universities, and is made possible by access to state of the art biomedical technology, underpinned by expert technical staff and competitive and philanthropic funding."*
>
> **Emeritus Professor Ian Frazer,** *AC FRS FA*

Brisbane's global innovation community is connected and collaborative

Brisbane's inner-city has a uniquely connected innovation corridor with outstanding integrated life sciences capability. It is physically compact in comparison with other precincts around the world, transit accessible and technically wired.

Embedded in our vibrant, liveable and walkable inner-city, our knowledge and innovation corridor offers proximity to world-class health, education and research institutions alongside significant cultural, recreational and lifestyle experiences – in a distinctive subtropical setting.

The corridor unites a full suite of life sciences service offerings, within a 12 minute train ride once the Cross River Rail line is up and running in 2026. The corridor includes four quaternary hospitals, three tertiary hospitals, three universities and a multitude of specialist research institutions as well as industry and the community – their integration enables to enhanced evidence-based healthcare design and delivery. All of the assets in the corridor are seamlessly connected and linked - by efficient public transport and bike paths.

World-renowned centres and organisations already call the corridor home including the UQ Centre for Clinical Research, the Jamieson Trauma Institute, the Herston Biofabrication Institute, QIMR Berghofer Medical Research Institute (QIMRB), Q-Gen Cell Therapeutics, BASE Messenger RNA Sciences facility at the Australian Institute for Bioengineering and Nanotechnology (AIBN), National Biologics Facility (NBF), Protein Expression Facility (PEF), Translational Research Institute (TRI), Ecosciences Precinct (ESP) and Therapeutics Innovation Australia (TIA). All the assets in the corroidor are seamlessly connected and linked by efficient public transport and bike paths.

In one of the largest hospital and healthcare clusters in the southern hemisphere, the two distinct precincts together create a corridor of leading life sciences infrastructure designed to support the translation of research into health practice and outcomes for patients.

The corridor offers advanced infrastructure with attractive collaborative workspaces, established translation pathways, shared resources, staff development and mobility – as well as an enviable lifestyle. It is highly digitally enabled: connecting and leveraging large scale, diverse data sets, and world-leading capability in data analytics, application and visualisation.

Access to enabling infrastructure, established expertise and emerging hubs in advanced manufacturing, quantum science, AI, and other digital technologies point to an exciting and powerful connected future for the ecosystem.

The anchor precincts in the corridor, benefit from place-based leadership and governance structures that enable collective risk management and streamlined decision-making, provide certainty to existing and future investors and participants – enabling economies of scale, visibility and therefore greater impact.

Hospitals

1. Royal Brisbane Women's Hospital
2. Surgical Treatment and Rehabilitation Services (STARS)
3. St Andrew's War Memorial Hospital
4. Brisbane Private Hospital
5. Wesley Hospital
6. St Vincent's Private Hospital
7. Queensland Children's Hospital
8. Mater Hospital Brisbane
9. Princess Alexandra Hospital
10. Greenslopes Private Hospital
11. Queen Elizabeth ii Jubilee Hospital

University Campuses/ Research Institutes

1. UQ Faculties of Medicine and Health and Behavioural Sciences
2. QIMRB
3. QUT Centre for Biomedical Technologies
   QUT Centre for Genomics and Personalised Health (Kelvin Grove)
4. Queensland University of Technology
5. The University of Queensland
6. Translational Research Institute
7. UQ Pharmacy School
8. Ecosciences Precinct (Boggo Road)
9. Griffith University
10. QUT Medical Engineering Research Facility (Chermside)

Sunshine Coast

- University of Sunshine Coast
- Sunshine Coast University Hospital
- **Sunshine Coast Airport**

Locations of relevance

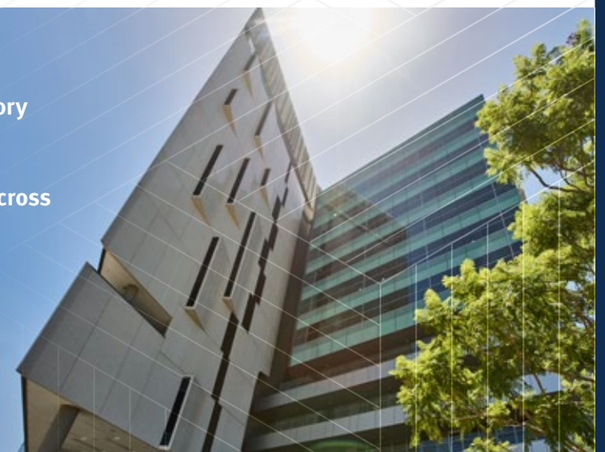
- 1 William Street, Queensland Government Headquarters
- Brisbane 2032 Olympic and Paralympic Games Venue and Precincts

Two connected precincts anchor the corridor and are catalytic to its growth and development

The complementary precincts at Herston and Boggo Road are at the heart of Brisbane's innovation and knowledge corridor with proximity to the CBD and major Olympic Games venues such as the Gabba Stadium and Brisbane Arena. These catalytic places are core platforms for collaboration, accelerated health and life sciences innovation and commercialisation outcomes; facilitating direct engagement between researchers and healthcare practitioners. They are an attractor of today's talent and are cultivating the next generation workforce.

The precincts are a place where new technologies and concepts converge in a quaternary hospital environment. Together they activate and amplify existing capabilities and excellence in advanced and specialised research and healthcare services to drive patient-centric innovation. Emerging technologies in data science, quantum science, robotics, manufacturing, imaging and other domains that are revolutionising healthcare, are integrated across the precinct footprint. The specialisms that each site and partner organisation bring are leveraged to create new opportunities for growth and improved diagnostics, treatment planning, and patient care. The precincts offer a home for innovative health startups and leading healthcare and research providers.

The QIMRB, established in 1945, has a distinguished history of innovation and collaboration with clinicians, hospitals, universities and research institutes – delivering ground-breaking discovery and translational research outcomes across the fields of cancer, mental health, infectious diseases, chronic disorders, clinical trials and cellular therapeutics.



Boggo Road Innovation Precinct

A powerful engine room for health, biomedical and environmental sciences, the Boggo Road Innovation precinct is home to world-class talent, translational research, as well as highly-regarded and well-connected knowledge institutions. Its reputation for scientific breakthroughs and achieving commercial outcomes are well-known, with transformational discoveries such as the Gardasil cervical cancer vaccine and a mix of precinct partners that enable an integrated and accelerated pathway to globally relevant commercial products and outcomes. Situated within a three-kilometre radius of the Brisbane CBD, the Precinct is complemented by existing infrastructure, globally recognised medical and scientific research institutions and the Cross River Rail and Brisbane Metro networks. With investment from government, industry, healthcare providers, and academia, the Boggo Road Innovation Precinct is set to become a place of many more success stories, where we will celebrate and commercialise the work of people who will change the world.

The precinct incorporates sites on either side of a rail corridor at Dutton Park. There are 20+ members of the Boggo Road Collaboration Group, including anchor partners: Ecosciences Precinct (environmental sciences hub), Metro South Hospital and Health Service including the Princess Alexandra Hospital, Translational Research Institute, Queensland Investment Corporation, CSIRO, UQ, and QUT and commercial partners such as Sanofi, Thermo Fisher Scientific, Siemens Healthineers and a number of innovative early stage companies.

Competitive strengths and capabilities in: key healthcare services, translational life sciences including clinical sciences, clinical and diagnostic imaging, commercial manufacturing, including clinical cGMP manufacturing for clinical trials, virtual reality, augmented reality, data visualisation platforms and other related immersive technologies, environmental protection, ecosciences, biosecurity, sustainable agricultural production, soil security, biotechnology, immunology, vaccine and therapeutic drug development, advanced manufacturing, biomanufacturing, and research translation services. Strong adjacent capabilities in big data, quantum science, small footprint advanced manufacturing, medical device manufacturing and AI.

Examples of Assets: Translational Research Institute (TRI), Translational Manufacturing at TRI (TM@TRI projected opening 2025), TRI Clinical Research Facility, Translational Science Hub (TSH), UQ Frazer Institute, UQ School of Pharmacy, Thermo Fisher Scientific Pharma Services, CSIRO BioFoundry and bioengineering capability, Chemistry Centre (agricultural, environmental and resource management), Leukaemia Foundation, Ecosciences Precinct (government and collaborative research, survey, extension and monitoring programs), Australian Centre for Complex Integration Surgical Solutions, the new Brisbane South State Secondary College, SPARQ-ed Senior Immersion Program, and a wide range of environmental, animal and human health expertise and facilities managed by Queensland Government agencies.

Herston Health Precinct

In the Herston Health Precinct, 13,000+ clinical and non-clinical staff, scientists, researchers, and students currently come together across 30+ health facilities, medical research institutes, universities, and other organisations to deliver excellence in health innovation, education, research, training, and clinical care. Anchor partners include: Metro North Hospital and Health Service including the Royal Brisbane and Women's Hospital (RBWH), QIMRB, UQ, and QUT.

Competitive strengths and capabilities in: key healthcare services, biomedical science and BioMedTech, 3D printing and additive manufacturing for custom made medical devices (implantable devices, artificial skin, 3D scanning) and the practice of medicine, digital health, social and public health, clinical trials, research methods, genomics, health equity, infectious diseases, cancer care, maternity, trauma and burns care, precision medicine, and cell therapy manufacturing.

Examples of Assets: Herston Imaging Research Facility (HIRF), Surgical, Treatment and Rehabilitation Service (STARS; Includes SERA- STARS Education and Research Alliance (MNH and UQ)), QIMRB (including QGen QGen Cell Therapeutics GMP facility for the production of cellular therapeutics & GenomiQa), the Research Alliance for Urban Goori Health (Metro North, UQ Poche Centre and the Institute for Urban Indigenous Health), First Nations Health, Oral Health Alliance (Metro North & UQ), Jamieson Trauma Institute, UQ Centre for Clinical Research, Herston Biofabrication Institute (Metro North & UQ), UQ Centre for Health Services Research, Queensland Aphasia Research Centre (Metro North & UQ), RECOVER Injury Research Centre (Queensland Motor Accident Insurance Commission & UQ), Pathology Queensland, Genetic Health Queensland, Nursing and Midwifery Academy (QUT and Metro North), The Herston Infectious Diseases Institute (HeIDI), the Queensland Digital Health Centre (CSIRO's Australian e-Health Research Centre), Stryker R&D Lab, UQ's Medical, Public Health and Dentistry Schools, and advanced clinical simulation and training facilities.

Grow with us and shape the future

The precincts boast an exciting mix of world-leading science and research translation capabilities, infrastructure, activities and complementary specialisms that leverage existing strengths and build amazing options for the future. Both precincts will benefit from billions of dollars of investment in infrastructure in the lead up to the 2032 Olympic and Paralympic Games, creating opportunities for new partners to grow with, and shape the development of a world-leading, entrepreneurial health innovation ecosystem.

The Boggo Road Innovation Precinct is on track to become of Asia's leading translational life sciences precincts

The precinct is located within three kilometers of the Brisbane CBD at the southern end of Brisbane's Innovation and Knowledge Corridor. The Queensland Government has declared the Boggo Road CRR Priority Development Area (PDA) over 39 hectares of predominantly state government-owned land surrounding the new Cross River Rail train station and appointed the state's trusted investment manager, Queensland Investment Corporation (QIC), as precinct custodian. Boggo Road will become the second busiest interchange destination within South East Queensland by 2036 and the first stage of the physical infrastructure delivery for the precinct-wide masterplan is well underway. This blend of transport connectivity and institutional presence and investment is superior compared to other innovation precincts nationally and internationally.

Boggo Road is a nationally significant centre of knowledge, technology and health-related uses. It is an attractive landing pad for SMEs and large companies to expand their business, attract talent and accelerate research commercialisation activities with incredible opportunities for commercial-academic research linkages.

The Herston Health Precinct is a global leader in health, innovation, education, research, training and clinical care

The Herston Health Precinct is within three kilometers of the Brisbane CBD at the northern end of Brisbane's Innovation and Knowledge Corridor. The enormous potential of the precinct is evidenced by the planning for a AU$750M Queensland Cancer Centre and the continuing development of the Herston Quarter PDA by Australian Unity – this already includes a new sub-acute public hospital, a refurbished heritage precinct, and newly created public realm with future stages being planned and designed to realise the potential of the Herston Health Precinct. The amenity and attractiveness of the precinct is growing on multiple fronts with the new transport links (Cross River Rail and Brisbane Metro) and the transformation of the adjacent 64-hectare Barrambin (Victoria Park) site into an iconic parkland. With forward investment in physical and digital infrastructure planned for the next five years, the Herston Health Precinct population is predicted to increase a further 20 per cent by 2028. Current forecasts suggest up to 10,000 people work, visit and reside within the Herston Health Precinct. This significant precinct population offers access to a world-leading talent, and a substantive database for research and translation.

Advance Queensland, launched in 2015, is a significant investment by the Queensland Government to drive a more diversified Queensland economy, strengthen regional growth and create jobs. It has supported more than 8,000 recipients, whose projects have directly driven close to 28,500 jobs and leveraged AU$1 billion in funds from external partners and investors. The Queensland Government is continuing to invest, with the *Advance Queensland – Innovation for a Future Economy: 2022–2032 Roadmap*, launched in July 2022, sets out the direction, key priority outcomes and initiatives for the next phase in Queensland's innovation journey.

A supportive environment for startups and scaleups

Just one example of Queenslands' support for startups and scaleups is the new AU$75 million Venture Capital Development Fund managed by QIC is activating a venture investment and technology accelerator ecosystem that will increase access to the finance and expertise that early stage companies need to grow and scale.

A sustainable healthcare system

In addition to the highest quality of healthcare delivery and the capacity to innovate, both precincts are committed to an environmentally sustainable, climate-smart and equitable healthcare system with planning and implementation of initiatives aligned to the sustainability agenda of the United Nations.

Accelerating clinical trial and translational capabilities

Queensland is a fast-growing hub for clinical research and translation, from pre-clinical development to clinical trials and manufacturing, featuring a network of over 160 clinical trial sites and 40+ Contract Research Organisations and other specialised service providers.

Growing and Emerging Hubs

All of the activity in the Innovation and Knowledge Corridor is supported by specialised hubs across the city including the Advanced Robotics for Manufacturing Hub, the Queensland XR Hub for Extended Reality, the Queensland AI Hub and new initiatives proposed in the new Queensland Quantum and Advanced Technologies Strategy.

2032: Creating our future now

Brisbane is a fast growing, multicultural city with an enviable quality of life. Its dynamic innovation culture, diverse industry strengths, growing talent pool, unique sub tropical cityscape and proximity to remarkable natural assets create an inimitable competitive advantage - talent will want to live here.

We are a connected life sciences innovation community at the vanguard of discovery and treatment.

By 2032, Brisbane will be recognised for its sustainable healthcare platform and as a global hub for life science research, translational practice and healthcare. Transdisciplinary research strengths in life and earth science enable our 'One Health' capability which seeks to optimise the health of people, animals, and ecosystems.

Our high-performance specialisms in cancer, immunology, genomics, tropical health solutions, vaccine technology, medical device development, digital medicine early-stage clinical trial delivery and sovereign capability in cell therapy manufacturing are leading the world, while our growing capabilities in quantum science, AI, data science and advanced manufacturing, including next-generation technologies, position us at the forefront of discovery and translation.

Interconnected One Health solutions that advance human, animal and environmental health benefits will be supported by our digitised data, advanced analytics and world-leading clinical innovation, education and training system. Through the interconnectedness with health services in northern Australia, Queensland will become a global leader in rural, remote and tropical health care.

The natural home for research scientists and translational practitioners.

Our city centre is our life sciences hub. A dense, connected corridor of high-calibre hospitals, research institutions and universities where industry, scientists, practitioners and patients intermingle in a high amenity urban environment supported by robust infrastructure.

Our signature precincts at Boggo Road and Herston are well established as innovation precincts of international impact – a testament and showcase of what we can achieve. They are prospering within a supportive institutional framework that accelerates their growth and development.

Whilst these precincts, and our proximity to the burgeoning ASEAN markets (collective GDP of ~USD3.65 trillion in 2022), are a drawcard for companies and research organisations, South East Queensland also offers an enviable blend of stunning beaches, tropical rainforests, and dynamic urban centres, and access to the tropical environments and Great Barrier Reef to the north and to the high growth capital cities to the south.

We have co-developed our community, working with our ecosystem partners to create the optimal conditions for high performance.

Investing in research and innovation

Queensland is at the forefront of health and life sciences innovation, and our success has been built on the State Government's sustained commitment to advancing the sector.

Partner with us
Exemplars of our success

Early phase clinical trial capabilities

Queensland provides an ideal environment to design and administer early phase clinical trials, with a sophisticated health and life sciences research environment, home to world-class universities, hospitals, clinicians, and research centres with infrastructure to host clinical trials. There is a rich pipeline of global clinical trials in the coming years and great opportunities for sponsors and contract research organisations to leverage our ecosystem.

Infectious diseases and tropical medicine

Queensland is recognised as a global leader in infectious disease and tropical medicine research. Notably, Queensland innovation is responsible for leading tropical research surrounding malaria, tuberculosis, Streptococcus Group A and STIs (gonococcal and chlamydia). Queensland's capabilities are only set to grow exponentially through the Translational Science Hub which will have an initial focus on a chlamydia vaccine.

Vaccine discovery, development and delivery technologies

Queensland has been globally recognised for revolutionary vaccine discovery, development and delivery technologies. The Translational Research Institute facilitates this innovation, supporting several SMEs, with notable breakthroughs from Vaxxas, developing a needle-free vaccine delivery technology, to open up the potential for mass vaccination.

Digital Health

With Queensland's digital health strategic vision in place, the Princess Alexandra Hospital (PAH) acted as a catalyst to Queensland becoming a leader in digital health integration, opening Australia's first large-scale digital hospital in 2015, quickly expanding to 16 digital hospitals by 2019. Queensland Health and the CSIRO Australian eHealth Research Centre are developing and delivering exciting digital innovations including Australia's largest telehealth trial of aged care home monitoring. Further building on these capabilities, Queensland Health is leading the AU$75.2 million 5-year ground-breaking Australian Teletrial Program, to connect rural, regional and remote clinical trial site clusters. World-renowned oncologist Professor Sabe Sabesan from James Cook University is co-ordinating this national project.

Genomics

Through national and international collaborations and a data-rich healthcare system, Queensland offers genomic specialty capabilities that support innovation in diagnostics, clinical care and precision health. A full suite of genomics services is offered through Queensland Genomics, including gene fusion panel, myeloid panel and whole exome and genome sequencing. QIMR Berghofer spin-out company genomiQa have developed what they believe to be the most comprehensive cancer genomic test in the world.

Advanced Technologies

Future proofing the innovations within Queensland's life sciences industry is at the forefront of Queensland's strategy. Over the past 30 years, Queensland has steadily built a reputation for being at the global frontier in science and advanced technologies in areas such as robotics, artificial intelligence, nanotechnology and synthetic biology. Now, the new $76 million Queensland Quantum and Advanced Technologies Strategy launched in 2023, will harness Queensland's expertise in quantum technologies for accelerated economic growth and transformative solutions to some of our most pressing challenges.

Q-Gen Cell Therapeutics

Queensland's growing biomedical sector has high-value businesses and Centres specialising in vaccine development, medical device manufacturing and biomanufacturing. Supporting the immunotherapy industry, Q-Gen Cell Therapeutics is the TGA-licensed, advanced cellular therapy manufacturing facility of QIMRB. As one of largest facilities of its kind in Australia it is a trusted cellular therapy manufacturing partner and it provides potentially life-saving cell therapies to critically ill patients as an authorised provider under the TGA's special access scheme.

Contributors

Together we are greater than the sum of our parts. Queensland Health together with our fast-growing life sciences innovation community are committed to partner and collaborate with institutions and companies nationally and internationally to continue to grow our life sciences, bio-med, and med-tech innovation.

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Read more online

www.health.qld.gov.au/research-reports/research/**research-health-capabilities**