QUEENSLAND CAPABILITIES

BRIGHT MINDS | BRIGHT BIO-FUTURES

Queensland Government

Department of State Development, Infrastructure, Local Government and Planning

Copies of this publication are available on our website at www.statedevelopment.qld.gov.au and further copies are available upon request to:

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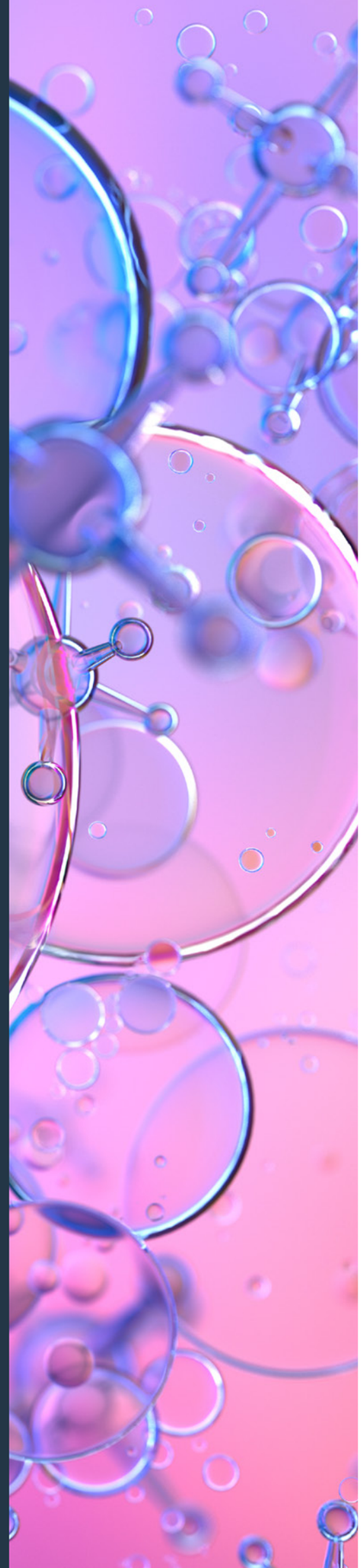


CONTENTS

QUEENSLAND »
BRIGHT MINDS, BRIGHT BIOFUTURE

An Asia-Pacific biomedical industry hub by 2027

It has been over two decades since Queensland, Australia implemented its “Smart State” policy, to transition Queensland from traditional industries to a knowledge-based economy and to position Queensland as a global leader in the fields of biotechnology, information technology, and advanced manufacturing.

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 and partnerships. Our vision is for Queensland to be a globally competitive Asia-Pacific biomedical industry hub by 2027.

The Queensland Biomedical 10-Year Roadmap and Action Plan sets out how we are going to grow, support and attract biomedical enterprises over the next five years and beyond. Developed in collaboration with key stakeholders in academia, industry, and healthcare, this comprehensive plan outlines a clear vision for advancing biomedical research, supporting the growth of the industry, and bolstering the biomedical sector. It sets ambitious goals for fostering interdisciplinary collaboration, attracting world-class talent, and investing in cutting-edge infrastructure and technologies. The roadmap also prioritizes initiatives aimed at translating research discoveries into tangible health benefits and economic growth.

mRNA Translational Science Hub

Global healthcare company Sanofi is establishing a A$280 million mRNA Translational Science Hub at Boggo Road Innnovation Precinct in Brisbane. Queensland Government, the University of Queensland and Griffith University will also support the hub.

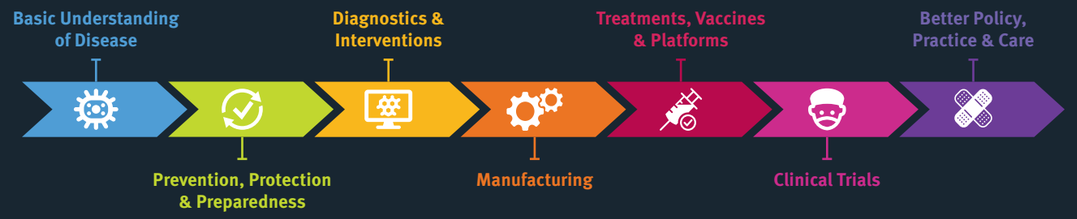
The hub is a first-of-its-kind collaboration that connects researchers in Queensland with Sanofi scientists from the mRNA Centre of Excellence in France and the US. The aim of the hub is to improve mRNA technology and develop vaccines for infectious diseases. This includes the first ever vaccine for chlamydia. The presence of requisite clinical infrastructure sees the hub leverage Queensland’s research expertise in infectious diseases and vaccinology.

WHY QUEENSLAND

Queensland’s end-to-end capabilities in Life Sciences are supported by world-class infrastructure.

They support the critical pipeline supports the critical pipeline required to translate research discoverles into clinical trials, leading to better treatments and care.

Queensland possesses extensive therapeutic and vaccine pre-GMP Infrastructure and expertise across multiple modalities, including:



$2.21b
ESTIMATED ANNUAL GROSS VALUE
in the life sciences industry

$361m
MANUFACTURING R&D INVESTMENT
annually (private)

$534.3M
ESTIMATED EXPORT VALUE

›130
BIOTECHNOLOGY RESEARCH CENTRES

2,200+
PUBLICATIONS
in the last 10 years

›200
SPECIALIST
biotechnology researchers

78
PATENT PUBLICATIONS
since 2013

›100
EMPLOYEES
health and medical research centres

3x
GLOBAL AVERAGE
cited for AI-enabled healthcare

9
RESEARCH HOSPITALS
across Queensland

13,800
PEOPLE EMPLOYED

Source: Health and medical science | Science | Department of Environment and Science, Queensland (des.qld.gov.au)

INNOVATIVE AND HIGHLY SKILLED WORKFORCE

- Knowledge corridor, with dozens of innovation-led organisations.
- 12 research-focused universities, with four in the world's top 250.
- World-class training, teaching and research facilities.
- Highly skilled workforce with strong technical and academic collaboration.
- Over two decades of state government investment in science and innovation.
- Superior scientific talent and excellent research and medical infrastructure.
- International collaborations.

SUPPORTIVE GOVERNMENT

- Fast, pragmatic regulatory pathway with rapid ethics approval.
- Clinical data complies with top international standards.
- Very competitive business costs.
- Low payroll tax, high exemption threshold (A$1.3 million).
- Stable economic and political environment and the most decentralised of mainland Australian states.
- Over 27 years of economic growth in Queensland and Australia.
- Access to Australia's R&D tax offset.

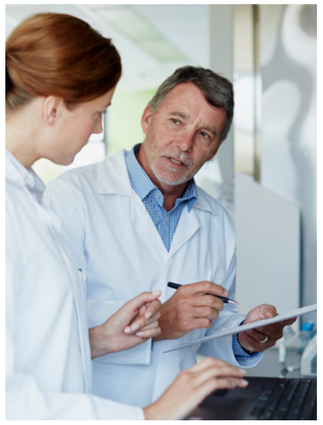
STABILITY AND ECONOMIC GROWTH

- Higher annual growth rate than the rest of Australia.
- AA+ / Aa1 / AA credit rating and AA ESG rating2.
- Exports to almost 200 countries.
- 16 Free Trade Agreements between other nations and cooperations in force.
- Market access to and shared time zones with high-growth markets in the Asia-Pacific region

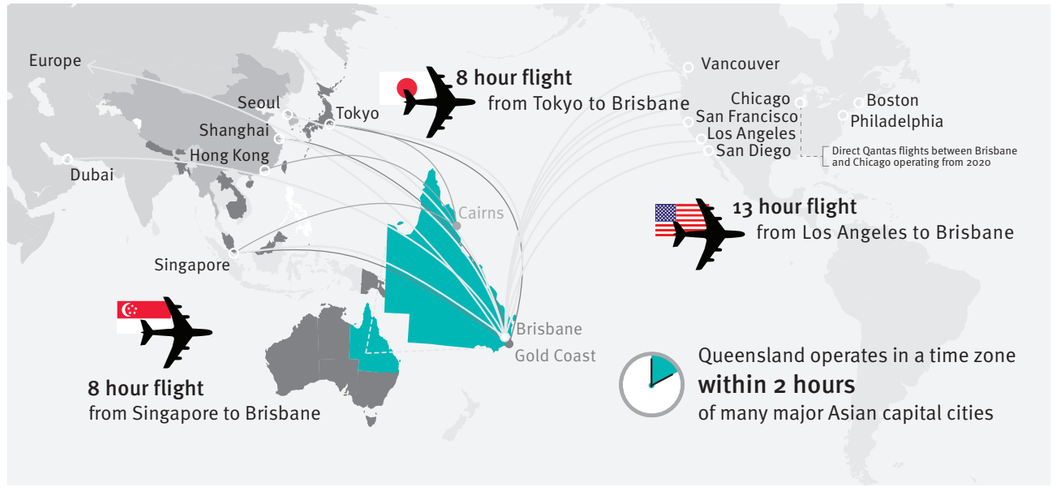
LIFESTYLE

- Enviable, relaxed lifestyle and world-famous natural attractions.
- Lowest median house price in a capital city on the east coast.
- Average of 300 days of sunshine annually.

CAPABILITY AND INFRASTRUCTURE



- Home to prestigious research institutions such as the Queensland Institute of Medical Research (QIMR Berghofer) and the Translational Research Institute (TRI).
- World class, highly-connected hospitals, health centres and research organisations based within key innovation precincts.
- Global expertise in tropical medicine and infectious diseases.
- High-value niche businesses supported by an established network of service providers.
- Expertise in e-health, comprehensive pathology information and telemedicine.
- Attractive location for clinical trials with sophisticated academic health translation research infrastructure.
- Home of Australia's leading biopharmaceutical contract manufacturer.
- Over 130 research organisations involved in biotechnology research and development.
- Regional and remote health delivery, with a focus on digital health.



QUEENSLAND'S STRENGTHS

PRO INDUSTRY

World-class biomedical ecosystem

Fast, pragmatic regulatory pathway with rapid ethics approval

Clinical data complies with top international standards

Superior scientific talent and excellent research and medical infrastructure

EDUCATION

World-class training, teaching and research facilities

Highly skilled workforce with strong technical and academic collaboration

Brain gain

Many Queenslanders have returned home with experience in international markets

LIFESTYLE

Enviable, relaxed lifestyle and world-famous natural attractions

Lowest median house price in a capital city on the east coast

Average of 300 days of sunshine annually

POPULATION

Over 5 million residents with strong population growth and immigration from other states

PRO-BUSINESS

Very competitive business costs

Low payroll tax (4.75%), high exemption threshold (A$1.1 million)

Stable economic and political environment and the most decentralised of mainland Australian states

Over 27 years of economic growth in Queensland and Australia

LOCATION

Strategic location at the crossroads of the fast-growing Asia-Pacific region

Five international passenger airports with direct connectivity to global markets

Advantageous time zone within two hours of many major Asian capital cities

Industry-research collaboration and commercialisation

Queensland has an advanced research-informed healthcare system with world class health professionals, renowned researchers and state of the art facilities. Recent testaments to our highly collaborative, innovative, and well supported environment for conducting leading health and medical research include the development of the world's first human papilloma virus vaccine, the mRNA vaccine and molecular clamp technology, and at-home non-prescription diagnostic kits for COVID-19.

While many Queensland health and medical researchers re-prioritised their research on potential vaccines, treatments and other medical interventions in response to the COVID-19 pandemic, other researchers have applied their expertise to other impacts of the pandemic upon our economy and other aspects of society.

AI-enabled healthcare includes analysis of the large volumes of personal and system-wide clinical data, management of electronic medical records, use of wearable devices, diagnostic imaging and genomics. In AI-enabled healthcare alone, Queensland researchers produced over 89,000 publications between 2017 and 2021, and the most recent of these (in 2020) were cited 3 times the global average (citation rate of attributable publications), with more than 1200 of these linked to patent publications. Queensland AI-enabled healthcare researchers collaborate most frequently with the USA (33%); the UK (25%); China (18%); Canada (12%), and Germany (11%).

Queensland has a network of infectious disease scientists and clinicians recognised internationally for research excellence that is supported by world-class infrastructure.

QUEENSLAND AI-ENABLED HEALTHCARE RESEARCHERS COLLABORATE MOST FREQUENTLY WITH:

33%	25%	18%	12%	11%
USA	UK	CHINA	CANADA	GERMANY

Vaccine development

Millions of lives will be saved from cervical cancer by the Human Papilloma Virus (HPV) vaccine Gardasil® that was developed at the University of Queensland by Professor Ian Frazer and the late Dr Jian Zhou to reduce the incidence of cervical cancer. Now produced by Merck Vaccines Gardasil® has led to a 90% decrease in the prevalence of HPV.

Diagnostic imaging

Most of the MRI scanners in the world use magnetic resonance technology research by Queensland Centre for Advanced Imaging. The Translational Research Institute (TRI) collaboration with the Siemens Healthineers enables researchers and clinicians to use advanced medical imaging without the need for invasive testing.

Vaccine development

A universal vaccine for Malaria – a disease that annually causes over 200 million clinical episodes and more than 600,000 deaths has been developed by JCU's Australian Institute for Tropical Health and Medicine (AITHM), is in clinical development in a project led by AITHM in collaboration with Townsville University Hospital, DMTC Ltd and Pfizer.

AI-enabled healthcare

In a project aimed at using AI and whole-genome sequencing to predict patient outcomes of cancer treatment, QIMR Berghofer have partnered with Brisbane-based AI technology company, Max Kelsen, precision analytics firm, genomiQa, genome sequencing company, BGI Australia, and the Royal Brisbane and Women's Hospital.

Medical devices

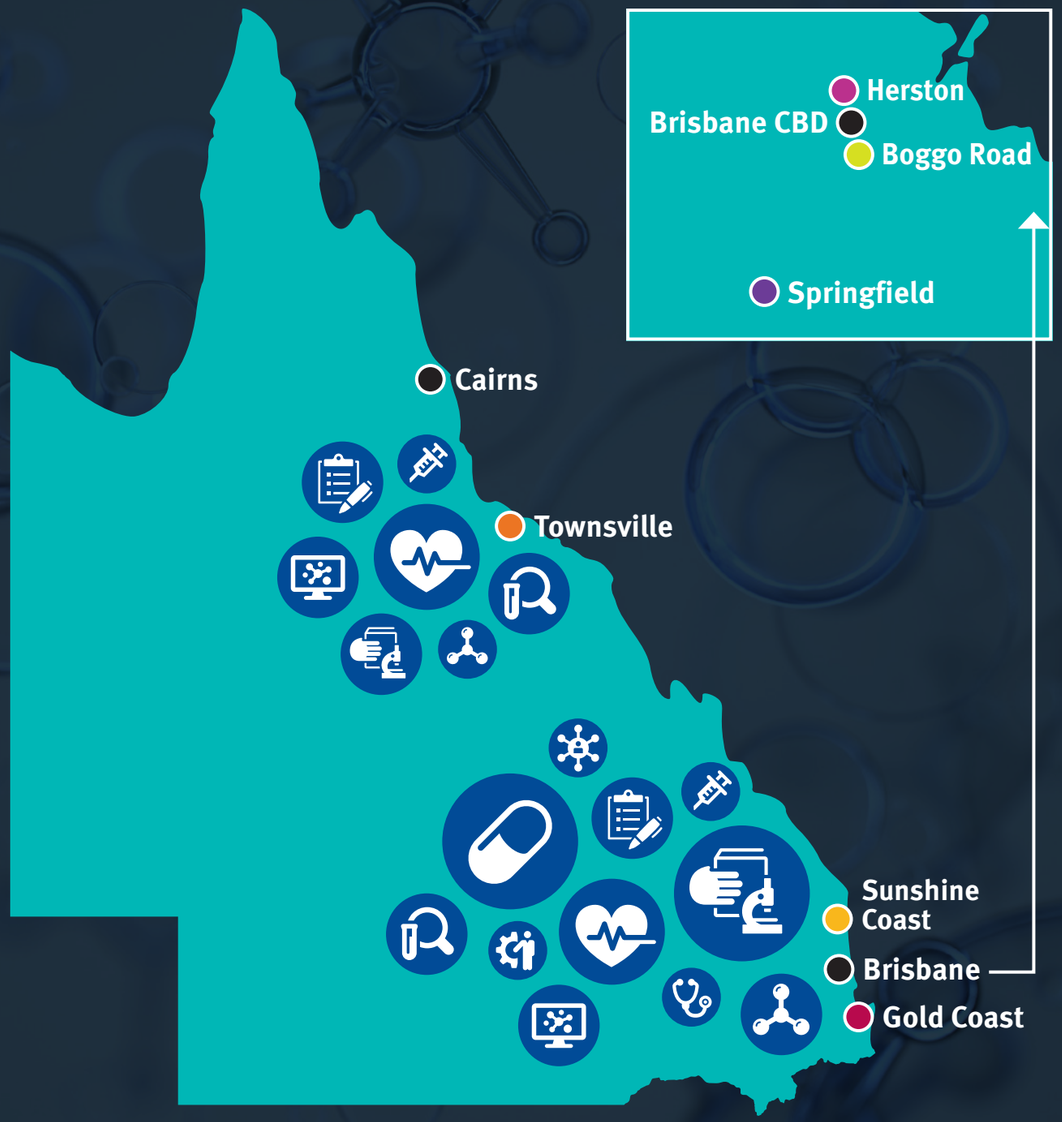
The easily stored and administered needle-free vaccine delivery technology developed by researchers at the Australian Institute for Bioengineering and Nanotechnology has been commercialised by UQ spin-off company Vaxxas into their Nanopatch™ High-Density Microarray Patch (HD-MAP).

Personalised medicine

Working to identify cancer-causing genetic mutations for better cancer survival rates, the Australian Translational Genomics Centre is a partnership between QUT, Metro South Hospital and Health Service, and Pathology Queensland, and is one of the largest genomic diagnostic and research DNA sequencing services of its kind in Australasia.

Source: Health and medical science | Science | Department of Environment and Science, Queensland (des.qld.gov.au)

Queensland Capabilities



PRECINCTS

- TropiQ – Townsville Tropical Intelligence and Health Precinct
- Herston Health Precinct
- Springfield BioPark
- Sunshine Coast Precinct / Centre for Bioinnovation
- Boggo Road Innovation Precinct
- The Gold Coast Health and Knowledge Precinct

OUR CAPABILITIES

- Biotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - Other
- Pharma - Integrated
- Medical Technology
- Digital Health
- Professional Services and Consulting
- Public/Non-Profit Organisations / Medical Facilities
- Supplier and Engineering
- Tropical Health
- Clinical Trials

Focus on our precinct partners

BOGGO ROAD INNOVATION PRECINCT

The Boggo Road Innovation Precinct is the heart of southeast Queensland's existing knowledge corridor, an ecosystem of scientists, clinicians, academics, entrepreneurs, and industry.

A powerful engine room for health, biomedical and environmental sciences, the precinct is home to world-class talent, translational research, scientific breakthroughs, and highly regarded and well connected knowledge institutions. Its reputation for achieving commercial outcomes with public impact precedes itself, with breakthroughs such as the Gardasil cervical cancer vaccine and key precinct partners including the Princess Alexandra Hospital, Ecosciences Precinct, Translational Research Institute, Sanofi, Queensland Government Departments – Queensland Health, Department of Environment and Science, Department of Agriculture and Fisheries, University of Queensland, CSIRO, Griffith University, Queensland University of Technology and Queensland Investment Corporation.

Situated within a 3km radius of Brisbane CBD, the precinct is complemented by existing infrastructure such as the Cross River Rail, metro network, the heritage Boggo Road Gaol and globally recognised medical and scientific research institutions.

With investment from government, industry, clinicians, 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.

OUR CAPABILITIES ARE:

- Biotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - other
- Medical technology
- Clinical Trials
- Digital Health
- Pharma
- Professional Services and Consulting
- Public/Non-Profit Organisations/Medical Facilities
- Tropical Health
- Good Manufacturing Practice Facility
- Biofutures and agriculture:
  - Analytical Chemistry – environment, agriculture and resource management
  - Advanced manufacturing – bioengineering
  - Biosecurity – plant and animal

GOLD COAST HEALTH AND KNOWLEDGE PRECINCT

The Gold Coast Health and Knowledge Precinct (GCHKP) is Asia-Pacific's newest innovation hub, a vibrant entrepreneurial ecosystem now emerging onto the world stage.

GCHKP is internationally recognised for transforming lives through healthcare innovation, new knowledge and next-generation technologies.

Anchored by Griffith University (ranked in the top 2% of universities worldwide), Gold Coast University Hospital (in the Newsweek Top 250 World's Best Smart Hospitals) and Gold Coast Private Hospital, GCHKP co-locates leading global talent for collaboration and commercial success.

The key research and service capabilities include precision personalised medicine, drug and diagnostic development, advanced design and manufacturing and pioneering digital and preventative health care.

Backed by $5 billion of health, education, transport and residential infrastructure, the 200ha GCHKP contributes a $3.4bn value-add to the Queensland economy and is home to 15,000 workers, 1,000 researchers, 20,000 students, 2,500 residents and 50 SMEs and tech companies.

And that's just today... the Precinct of tomorrow is already coming out of the ground, with almost $250m of private development underway within Lumina, the 9.5ha commercial cluster of development-ready GCHKP sites.

The data proves GCHKP is a smart investment in Australia's fastest-growing major city—the Gold Coast, a globally renowned lifestyle destination boasting a stable, diversifying economy, competitive taxes and a skilled workforce.

CAPABILITIES:

- BioBiotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - other
- Medical technology
- Clinical Trials
- Digital Health
- Pharma
- Biotechnology – Drug Discovery
- Rehabilitative and Regenerative Biotechnologies

HERSTON HEALTH PRECINCT

Herston Health Precinct is one of the largest integrated precincts in Australia. Anchored by Queensland's largest hospital, Royal Brisbane and Women's Hospital, this 20-hectare precinct is a world class centre for healthcare innovation, education, research, training and clinical services.

Over the next ten years, HHP will benefit from further public and private investment, including the Herston Quarter Redevelopment being led by Australian Unity, and the Queensland Cancer Centre. The Precinct is easily accessed by road, train and bus, with a new railway station at Exhibition in 2024/25.

In addition to the four foundation Partners (Metro North, UQ, QUT and QIMR-B), this includes Australian Unity who are leading the Herston Quarter Redevelopment - a 5.3 hectare precinct focused on health, wellbeing and innovation. Other on-site entities include Pathology Queensland, CSIRO Australian eHealth Research Centre and Stryker.

HHP continues to evolve. We are developing a number of new health and research centres and institutes which offers opportunity to collaborate and innovate. As a world leading cluster of biomedical, research, education and clinical activity, we have potential for continued growth in translating medical research into clinical practice, treatment and prevention.

CAPABILITIES:

- Biotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - other
- Medical technology
- Clinical Trials
- Digital Health
- Pharma
- Tropical Health
- Public/Non-Profit Organisations/Medical Facilities

SPRINGFIELD BIOPARK

The vision for BioPark Australia is to create a place where multiple biologic industries (Therapeutics, Vaccines, Med Tech, Diagnostics and Wellbeing) will co-locate and keep growing. Central to the BioPark will be its provision of the complete suite of necessary components and reagents for these industries.

It has potential to offer a "Fill and Finish" module where bulk products are divided into vials for use in a dispensary/pharmacy and specialist storage (including very low temperature) areas for biologics. Future-proofing is built-in with staged expansion sites available to users.

Bio Park Australia is already well underway with Southern RNA and Aegros currently planning the construction of their facilities in the precinct.

CAPABILITIES:

- Biotechnology - Therapeutics and Diagnostics
- Pharma - integrated
- Tropical Health
- Production & Manufacturing facilities
- Medical Technology

SUNSHINE COAST PRECINCT / CENTRE FOR BIOINNOVATION

Discover a thriving ecosystem of innovation and collaboration at the heart of the Sunshine Coast precinct. The region is a global leader in sustainability, passionately championing the United Nations' Sustainable Development Goals with a profound impact on clean water, climate action, and biodiversity conservation.

Diversity thrives here. The precinct's commitment to interdisciplinary research through a 'One Health' approach seamlessly bridges human, animal, and environmental health. Within the Centre for Bioinnovation (CBI), groundbreaking advancements in diagnostics, vaccines, and antimicrobials are realized, propelling us to the forefront of global health solutions.

This is more than a university; it is a catalyst for change within our communities. Deeply rooted in regional engagement, the precinct pioneers healthcare access improvements through clinical trials, mental health research, and medical innovation.

The state-of-the-art Innovation Centre fosters vibrant university-industry partnerships, offering invaluable mentorship and training. But that's not all. The Sunshine Coast precinct is a dynamic hub, home to key biotechnology companies like Servatus, Terragen, Provectus Algae, and Biomedical Chitosan. Its food and agribusiness network, a community of over 370 members, nurtures growth and sparks innovation.

CAPABILITIES:

- Biotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - other
- Medical technology
- Clinical Trials
- Digital Health
- Professional Services and Consulting
- Public/Non-Profit Organisations/Medical Facilities
- Supplier and Engineering
- Tropical Health

TROPIQ – TOWNSVILLE TROPICAL INTELLIGENCE AND HEALTH PRECINCT

As Australia's home for all things health and tropical intelligence, TropiQ stands as a beacon of innovation and a gateway to the global Tropics. A true living laboratory and collaborative ecosystem of over 70 organisations, its work spans Health, Medicine, Environmental Sustainability, Disaster Resilience, Defence, Agriculture and Aquaculture and honours the Indigenous communities on whose lands it thrives.

Located in the heart of North Queensland, the place-based precinct strategically co-locates: James Cook University (JCU), Townsville University Hospital, the Australian Institute of Tropical Health and Medicine (AITHM), CSIRO and adjoins Lavarack Barracks - Australia's largest land-based defence base.

The planned North Queensland Simulation Park (NQ SPARK) will be equipped with an advanced environmental simulator, clinical simulation, agile command and control simulation, and high-performance computing. Once developed, NQ Spark will activate and catalyse an industry precinct in critical and emerging technologies with an emphasis on research, defence, and health.

Dive into the world of emerging infectious diseases and mosquito-transmitted diseases, from novel Tuberculosis vaccines to drug development and disease treatment, from regional health systems to allied health, JCU's work is transformative.

The challenges of climate change, food security and disaster resilience in the Tropics are immense. To meet these challenges, JCU is innovating with AI and AgTech solutions to enhance aquaculture and counteract the threats posed by changing rainfall patterns. JCU protects Tropical Australia by setting the standards for buildings under Tropical conditions, and through the recently established Centre for Tropical Biosecurity that pools expertise from diverse disciplines.

The **TropiQ partners** are united in a mission: to protect and empower life through the application of tropical intelligence, to fortify Australia's global stance, enhance biosecurity, and pioneer economic growth in novel directions.

Join TropiQ, where the future of the Tropics is being reimagined.

CAPABILITIES:

- Biotechnology - Therapeutics and Diagnostics
- Biotechnology - R&D Services
- Biotechnology - other
- Medical technology
- Clinical Trials
- Digital Health
- Tropical Health
- Pharma
- Public/Non-Profit Organisations/edical Facilities

BRIGHT MINDS
BRIGHT BIOFUTURE

QUEENSLAND HEALTH CLINICAL RESEARCH FELLOWSHIPS

- Supporting health clinicians undertake research linked to their practice

health.qld.gov.au/research-reports/research/researchers/grants-support/clinical-research-fellowships

FEMALE FOUNDERS CO-INVESTMENT FUND

- Supporting female founders to leverage funding
- Assisting female founders to secure new investment

advance.qld.gov.au/entrepreneurs-and-startups-industry-small-business/female-founders-co-investment-fund

IGNITE IDEAS FUND

- Suitable for SMEs with high-growth potential
- Supporting SMEs to undertake commercialisation projects

advance.qld.gov.au/entrepreneurs-and-startups-industry-small-business/ignite-ideas-fund

ENTERPRISE ACCELERATION FUND

- $24 million fund for innovative, early-stage companies
- Investments of between $500,000 and $2.5 million

qic.com.au/bqbif

INDUSTRY PARTNERSHIP PROGRAM

- $415.5 million transformational industry development program
- providing tailored assistance packages to develop projects

statedevelopment.qld.gov.au/queensland-jobs-fund/industry-partnership-program

'MADE IN QUEENSLAND' PROGRAM

- Advanced Manufacturing 10-Year Roadmap & Action Plan initiative
- Assisting traditional manufacturing to become internationally competitive

rdmw.qld.gov.au/manufacturing/manufacturing-assistance-programs/made-in-queensland

GO GLOBAL EXPORT PROGRAM

- Providing Queensland's export-ready SMEs with funding
- Helping businesses navigate planned export transaction challenges

tiq.qld.gov.au/queensland-business/how-we-help/go-global-export-program

DISCOVER | **DEVELOP** | **COMMERCE** | **LAUNCH** | **EXPORT**

ADVANCE QUEENSLAND INDUSTRY RESEARCH FELLOWSHIPS

- Establishing collaboration between researchers and industry
- Maintaining and growing researcher/industry partnerships

advance.qld.gov.au/universities-and-researchers/industry-research-fellowships

INVESTMENT SUPPORT SCHEME

- State based tax rebates to attract contestable projects to QLD requiring a minimum of 50 FTEs in SEQ or 20 in regional QLD

qic.com.au/bqbif

STRATEGIC INVESTMENT SCHEME

- Tailored assistance packages that support large scale projects to QLD requiring a minimum of 200 FTEs in SEQ or 50 in regional QLD

treasury.qld.gov.au/investment/invested-in-queensland/investment-schemes

BACKING QUEENSLAND BUSINESS INVESTMENT FUND

- Helping established SMEs realise their potential
- Supporting innovation, job creation and investment returns

treasury.qld.gov.au/programs-and-policies/backing-queensland-business-investment-fund/

"Helping enterprises accelerate growth, nurture innovation and unlock their potential"

QUEENSLAND BIOMEDICAL BUSINESS ATTRACTION PROGRAM » statedevelopment.qld.gov.au/industry/critical-industry-support/biomedical/queensland-biomedical-business-attraction-program

This program is a key initiative of the Queensland Biomedical 10-Year Roadmap and Action Plan. It's designed to attract interstate and international biomedical industry to access Queensland's biomedical capabilities.

BIOTECHNOLOGY - THERAPEUTICS AND DIAGNOSTICS

Queensland is a hub for therapeutics and diagnostics with a robust ecosystem of research institutions, universities, and innovative companies. It boasts world-class biomedical research institutions like QIMR Berghofer and an education and industry sector actively engaged in cutting-edge research.

Queensland's pharmaceutical and biotechnology industry is thriving, focusing on drug discovery, development, and manufacturing. The state's clinical trial infrastructure is well-equipped, making it an attractive destination for testing new medical interventions.

Queensland offers globally recognised infrastructure for research, translation, manufacture, and supply to the highest international standards of therapeutics and diagnostics. Queensland has collaborative research across the state and partnerships internationally to develop expertise in infectious diseases, immunology and other biomedical areas in therapeutics and diagnostics.

QIMR Berghofer

QIMR Berghofer is one of Australia's largest and most successful translational research-intensive medical research institutes.

Situated in the Herston Health Precinct, Queensland's largest hospital campus, we provide partners with access to our world-leading scientists, cutting-edge research infrastructure, clinicians, clinical trial sites, and our on-site GMP cell therapy contract manufacturing facility, Q-Gen Cell Therapeutics. QIMR Berghofer provides patients with better health through impactful medical research, with scientific discoveries, novel therapeutics and diagnostics for oncology, infectious, immunological, and neurological diseases.

QUEENSLAND POSSESSES THE FOLLOWING CAPABILITIES, INFRASTRUCTURE AND RESEARCH IN THERAPEUTICS AND DIAGNOSTICS:

- Aegros Group
- Gold Coast Health and Knowledge Precinct
- Herston Health Precinct
- The University of Queensland
- AITHM
- QIMR Berghofer Medical Research Institute
- Clinical Trial Unit, Griffith University
- BASE mRNA Facility
- James Cook University
- Boggo Road Innovation Precinct
- Centre for Bioinnovation
- Springfield BioPark
- Patheon - Thermo Fisher Scientific
- University of the Sunshine Coast
- Servatus
- Translational Research Institute
- CSIRO
- Queensland University of Technology
- TropiQ - Townsville Tropical Intelligence and Health Precinct

BIOTECHNOLOGY - R&D SERVICES

Queensland has established a global reputation for science excellence and research capability, aided by its world-leading biomedical research facilities and infrastructure. It has a collaborative, innovative and supportive environment for conducting health and medical research.

Queensland's thriving biotechnology ecosystem extends to cell culture, contract manufacturing organizations (CMOs), contract research organizations (CROs), and diagnostic services. Our world-class research capabilities are wide-ranging and include expertise in a variety of sectors, with a particular focus on tropical medicine and infectious diseases and vaccine research.

Our infrastructure » Translational Research Institute

The Translational Research Institute (TRI) is Australia's largest, state-of-the-art, biomedical hub and a global leader in the effective translation of medical research and innovation into improved health outcomes.

TRI is a partnership of Queensland Health; The University of Queensland (UQ); Queensland University of Technology (QUT); and Mater Research.

TRI is home to more than 800 researchers, 10 biotech companies and varied service providers. The recently launched Translational Science Hub (TSH), a partnership of Sanofi, Griffith University, UQ and the Queensland Government, focused on mRNA technology and vaccine platforms, is housed at TRI. Our unique ecosystem provides space for early-stage biotech's to undertake discovery research, product development and prototyping.

TRI is now building TM@TRI – Translational Manufacturing @TRI, a first of its kind in Australia to support mid-stage biotechs as they mature, expand and scale up product manufacturing. A crucial addition to TRI and the Boggo Road Innovation Precinct to support home-grown innovations and discoveries to remain in Australia.

QUEENSLAND CONTAINS THE FOLLOWING CAPABILITIES, INFRASTRUCTURE, AND RESEARCH AND DEVELOPMENT SERVICES:

NQ Spark » Environmental Advanced Simulation and Training Facility

Centre for Bioinnovation

AITHM

Clinical Trial Unit, Griffith University

Gold Coast Health and Knowledge Precinct

Queensland University of Technology

QIMR Berghofer Medical Research Institute

Boggo Road Innovation Precinct

BASE mRNA Facility

TRI

James Cook University

Patheon - Thermo Fisher Scientific

CSIRO

Herston Health Precinct

Sanofi

The University of Queensland

University of the Sunshine Coast » Centre for Bioinnovation

TropiQ - Townsville Tropical Intelligence and Health Precinct

MEDICAL TECHNOLOGY

Queensland has a growing and diverse medical technology sector with strong capabilities in diagnostics and medical devices. Medical device manufacturing in Queensland is a significant and growing industry that contributes to the development of innovative healthcare solutions.

The Brisbane 2032 Olympic and Paralympic Games will put focus on Queensland's sports performance and sports tech capabilities, with human performance support and measurement crossing over between the sports, health and defence industries.

The region has a strong focus on diagnostic and device development, with collaboration between academia, research institutions, and industry as well as start-ups and companies in the sector.

Queensland has a focus on future and emerging technologies that could benefit the life sciences ecosystem, with expertise in research and Queensland companies that have capabilities to support.

Queensland Quantum and Advanced Technologies Strategy

The Queensland Quantum and Advanced Technologies Strategy sets out our exciting and ambitious plan to strengthen and build upon our capabilities in quantum and related 'deep' technologies to drive high value job creation, scaled-up advanced manufacturing, investment in promising home-grown start-up companies and take-up of transformative solutions across our emerging and traditional industries.

As a first stage to seize this opportunity, the Queensland Government has supported the establishment of the Australian Research Council Centre of Excellence in Quantum Biotechnology (2023-2030) (QUBIC), headquartered at The University of Queensland. This is the first nation-spanning centre in quantum biotechnology anywhere in the world. It will create a first-class Australian environment for pioneering research at the quantum-bio interface, with its core in Queensland and nodes in New South Wales, South Australia and Victoria. QUBIC has partnerships with leading Australian and international universities and companies, such as MIT, Johns Hopkins, CSIRO, IBM and Olympus.

QUEENSLAND POSSESSES THE FOLLOWING CAPABILITIES, INFRASTRUCTURE AND RESEARCH IN MEDICAL DEVICES AND TECHNOLOGIES:

- **NQ Spark »** Environmental Advanced Simulation and Training Facility
- **Thermo Fisher Scientific**
- **AITHM**
- **Gold Coast Health and Knowledge Precinct**
- **The University of Queensland**
- **James Cook University**
- **NeuTex Image-Guided Therapy Training and Robotics Centre**
- **Australia Research Council Centre of Excellence in Quantum Biotechnology**
- **CSIRO**
- **Boggo Road Innovation Precinct**
- **Centre for Bioinnovation**
- **Herston Health Precinct**
- **QIMR Berghofer Medical Research Institute**
- **Stryker**
- **Clinical Trial Unit, Griffith University**
- **Queensland University of Technology »** Medical Engineering Research Facility, Centre for Biomedical Technologies and Jamieson Trauma Institute (MAIC & QUT)
- **University of the Sunshine Coast »** Advanced Instrumentation Facility, Thompson Institute
- **TropiQ - Townsville Tropical Intelligence and Health Precinct**

DIGITAL HEALTH

As the most decentralised of Australia's mainland states, digital health is paramount in providing equitable access to health services to support patients across Queensland in the prevention, diagnosis, treatment and management of health and medical conditions.

Digital health aims to put consumers and clinicians at the centre of their care and provides the digital capabilities and innovations needed to achieve enhanced outcomes.

Queensland is at the forefront of testing, trialling and developing digital health initiatives. eHealth initiatives in Queensland include integrated electronic medical record (ieMR), telehealth, and the national My Health Record.

The digital hospital — Princess Alexandra Hospital

The Princess Alexandra Hospital (PAH) is a large tertiary healthcare centre in Brisbane, with over 100,000 patient admissions and 60,000 emergency department patients annually. The hospital is one of Australia's leading research health centres and provides acute medical, surgical, mental health, cancer, rehabilitation and allied health services.

The PAH is a fully digital hospital using the Queenslandwide Integrated Electronic Medical Record (ieMR), including electronic medications management and functionalities for anaesthetics and clinical research. All aspects of delivering clinical care at the PAH are electronic.

Following the successful implementation of the ieMR at the PAH in April 2017, eight more Queensland Health facilities have gone digital by the end of 2018.

Digital Health 2031 — A digital vision for Queensland's health system

The Queensland Government has developed the Digital Health 2031 - Digital Health 2031 - A digital vision for Queensland's health system strategy, which outlines a vision to improve health outcomes for all Queenslanders through digital innovation.

The key themes are:

1. Empowered customers
2. Digitally-enabled population health
3. Connected and insight-enabled workforce
4. Health service modernization for sustainability

Find out more at www.health.qld.gov.au

QUEENSLAND POSSESSES THE FOLLOWING CAPABILITIES, INFRASTRUCTURE AND RESEARCH IN DIGITAL HEALTH:

- QIMR Berghofer Medical Research Institute
- CSIRO
- Patheon - Thermo Fisher Scientific
- Boggo Road Innovation Precinct
- The University of Queensland
- James Cook University
- Queensland University of Technology
- TRI
- Herston Health Precinct
- AITHM
- University of the Sunshine Coast
- TropiQ - Townsville Tropical Intelligence and Health Precinct
- Sunshine Coast University Hospital

BIOTECHNOLOGY – OTHER

Queensland is known across the globe as a world leader in high quality agricultural produce and processes that are clean, green, reliable and secure. Our ability to maintain quality, security and sustainability is due to our best practice management, smart regulation and continued breakthroughs in agricultural innovations as well as research and development.

The Agtech and Logistics Hub is Australia's home of digital agriculture and premier agribusiness innovation hub. The Hub boasts the country's only agribusiness ecosystem that brings together the best talent and technology to help businesses solve their challenges, commercialise and grow.

Our expertise covers the breadth of precision agriculture, tropical agriculture and management, biosecurity and quarantine measures. Queensland is transitioning its traditional strengths in agriculture and life sciences to future industries in the biofutures sector with a focus on future foods and sustainable aviation fuel.

The Queensland Alliance for Agriculture and Food Innovation (QAAFI) is a world-class research institute at the forefront of agricultural and food innovation. Operating as a partnership between the University of Queensland (UQ) and the Queensland Government, QAAFI conducts cutting-edge research to address some of the most pressing challenges facing agriculture and food production globally.

With a multidisciplinary team of scientists, QAAFI explores innovative solutions across the entire food supply chain, from plant genetics and crop improvement to sustainable farming practices and food processing technologies. Their work not only drives advancements in agricultural productivity and sustainability but also plays a pivotal role in ensuring food security and enhancing the quality and nutritional value of food products. QAAFI's commitment to research excellence and industry collaboration positions it as a leading force in shaping the future of agriculture and food systems, not only in Queensland but on a global scale.

Queensland also hosts capabilities, infrastructure and inputs for the biofutures and synthetic biology industries. The Queensland Government has partnered with Cauldron Molecules to deliver on a $1 million election commitment to develop an industry-led business case, to attract industry or university sectors to co-develop a Future Foods BioHub in Mackay. The potential declaration of a State Development Area in Mackay, across the separate locations of Rosella and Racecourse Mill would provide opportunities for the proposed developments.

The QUT Mackay Renewable Biocommodities Pilot Plant (MRBPP) is a research and development facility that converts biomass into biofuels, green chemicals and other bioproducts. This puts Queensland is an enviable position to become an Asia-Pacific hub in biomanufacturing and bio-refining. The recent investment in the Pilot Plant through the Palaszczuk Government's $350 million Industry Partnership Program will expand the common user research and development facility and enhance the development of regional biomanufacturing industries, attracting further investment and creating local jobs.

The CSIRO BioFoundry is a state-of-the-art facility providing bioengineering capability to industry and the R&D community and is based at the Ecosciences Precinct at Dutton Park. Providing high-throughput bioengineering capability, the CSIRO BioFoundry uses hardware and software solutions to rapidly design, build and test new biotechnologies. It is envisioned as a focal point of cutting-edge technology and will serve as a hub for the synthetic biology community, and a collaboration between industry and academia.

CLINICAL TRIALS

Queensland is a global epicentre for cutting-edge clinical research and development, offering a one-stop shop for seamless end-to-end clinical trial solutions. With a state-of-the-art network encompassing hospitals, research institutions, universities, and private companies, we provide a robust and collaborative platform for the full spectrum of clinical trials from Phase I to Phase IV.

Clinical Expertise Across the Spectrum

Queensland possesses an unparalleled breadth of clinical expertise covering every stage of the clinical trial process, from innovative trial design to ethical conduct and rigorous data analysis. With clinical trials in private and public health settings, we offer an ecosystem that nurtures scientific exploration and patient care.

Why Choose Queensland for Clinical Trials?

ROBUST RESEARCH INFRASTRUCTURE

Queensland boasts world-class medical facilities, academic institutions, and research organisations. Our well-developed infrastructure is equipped with the latest technologies, making Queensland an ideal setting for conducting clinical trials efficiently.

Queensland has strong government support through investment in innovation initiatives, attracting businesses to relocate or establish new projects in the state. This creates jobs throughout the state, increasing regional growth and innovation building more local supply chains.

AUSTRALIAN TELETRIAL PROGRAM

Queensland Health is the lead agency for the Australian Teletrial Program bringing clinical trials to regional, rural and remote areas reducing travel for patients and providing geographical and population diversity for participation in clinical trials. As part of the Federal Budget announcement in 2020, Queensland Health was awarded a grant of $75.2 million through the MRFF's 'Enabling Infrastructure for Rural, Regional, and Remote Clinical Trials' initiative. This grant supports the Australian Teletrial Program, connecting patients in regional and remote areas to leading-edge clinical trials.

REGULATORY ADVANTAGE

Australia's favourable regulatory environment is yet another strong point. The Clinical Trials Notification (CTN) Scheme expedites the study start-up process, often allowing trials to commence within 6-8 weeks following ethics approval.

Queensland has a stable socio-political environment, robust intellectual property frameworks and a simple and efficient regulatory framework for clinical research.

GLOBAL DATA RECOGNITION

Research data from Australia is globally acknowledged and respected, supporting applications to international regulatory bodies such as the U.S. Food and Drug Administration and the European Medicines Agency. This accelerates market entry and reduces overall costs.

DEMOGRAPHIC AND GEOGRAPHICAL BENEFITS

Our location in the Southern Hemisphere and a diverse population enable year-round recruitment for trials, including those focusing on seasonal and tropical diseases.

COLLABORATIVE RESEARCH ENVIRONMENT

Queensland thrives on collaboration between academia, healthcare providers, and pharmaceutical companies. This ecosystem expedites trial processes and offers a wealth of shared resources.

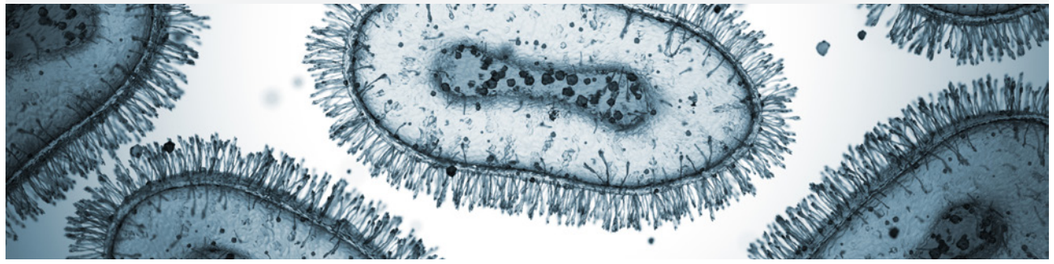
PARTNERS AND INSTITUTIONS

Queensland is home to a multitude of institutions contributing to our vibrant clinical trial landscape. Please visit the Queensland Clinical Trials Portal for a comprehensive listing - clinicaltrialsqld.com.

In summary, Queensland offers a robust, collaborative, and innovative environment for clinical trials. Our world-class facilities, regulatory advantages, and a strong focus on rural and remote access make Queensland an unparalleled choice for leading the future of global healthcare research.

For more information, don't hesitate to get in touch with the Queensland Clinical Trials Coordination Unit, Office of Research and Innovation, Queensland Department of Health.

Email: qctcu@health.qld.gov.au



LIST OF FACILITIES:

- Office of Research and Innovation (ORI, Quensland Health)
- Beyond Drug Development
- Adjutor Healthcare Pty Ltd
- QIMR Berghofer Medical Research Institute
- Novotech
- EMF Emergency Medicine Foundation
- IQVIA
- Q-Gen Cell Therapeutics (QIMR)
- Australian Institute of Tropical Health and Medicine (AITHM)
- Clinical Engineers Australia and NZ
- Model Answers
- University of Queensland Centre of Clinical Research
- BGI Australia
- Tropical Australian Academic Health Centre
- Translational Research Institute (TRI)
- Centre for Integrated Preclinical Drug Development (UQ)
- Queensland University of Technology
- Agilex Biolabs Pty Ltd
- ERA Consulting Group
- BMS Consulting
- N-of-1 Hub
- Australian Clinical Labs
- Queensland Regional Clinical Trials Coordinating Centre
- CMIC Asia-Pacific (Australia)
- EthicsReady
- Australian National Fabrication Facility
- My Medical Department
- Scientific Services – QIMR Berghofer MRI
- Studies&Me
- Flow Cytometry (QIMR)
- CROW Clinical
- Farmout medical
- THC Pharma
- Clinials
- Pathology Queensland
- RDC Clinical, RDC Global
- Resolian
- PRAXIS Australia

TROPICAL HEALTH

Queensland is not only celebrated for its stunning natural landscapes but also for its expertise in tropical health and medicine. Situated in the northern part of the country, the State is ideally placed to lead national efforts in tropical health biosecurity.

The region's tropical climate and unique ecological diversity, combined with our renowned researchers, health professionals and medical research facilities, have led to a focus on the prevention, treatment and diagnosis of infectious and chronic diseases found in the tropics. Queensland's network of infectious disease scientists and clinicians is committed to working to enhance research capabilities to address future pandemics and other viruses, along with the threat of antimicrobial resistance.

Approximately 50% of Queensland's landmass is in the tropical zone, covering diverse landscapes of wet and dry tropics, coastal, marine, urban and industrial environments. Science for the tropics, not surprisingly, is one of Queensland's key strengths, encompassing health and medicine, environment, food, agriculture and bio-commodities.

QUEENSLAND'S WORLD-LEADING INFECTIOUS DISEASE RESEARCH, DEVELOPMENT AND TRANSLATION SITS ACROSS FOUR KEY THEMES

DISEASES

- Tropical and vector-borne
- Virus associated diseases and cancers
- Chronic and acute respiratory infections
- Pathogenesis and immunity
- Prevention and control
- Rural and remote communities

DIAGNOSTICS

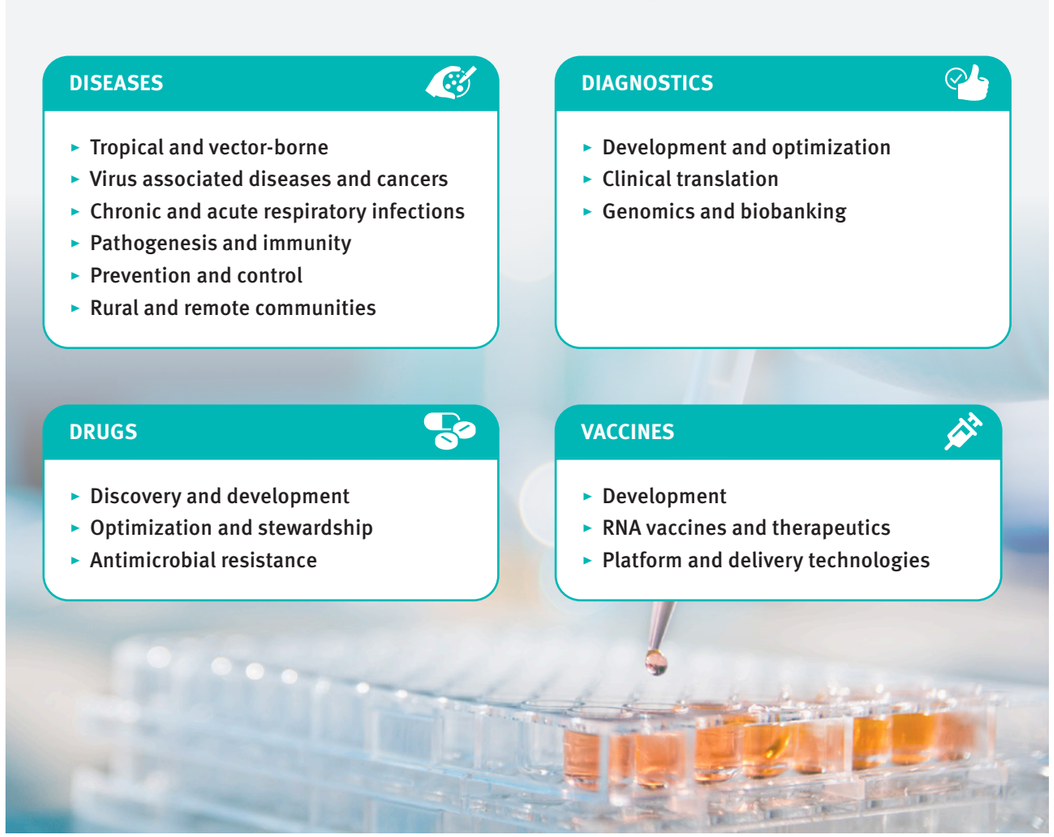
- Development and optimization
- Clinical translation
- Genomics and biobanking

DRUGS

- Discovery and development
- Optimization and stewardship
- Antimicrobial resistance

VACCINES

- Development
- RNA vaccines and therapeutics
- Platform and delivery technologies



Clinical Expertise Across the Spectrum

- **THE AUSTRALIAN INSTITUTE OF TROPICAL HEALTH AND MEDICINE (AITHM)**
  A flagship research institute of James Cook University, based in the tropics of North Queensland. AITHM is Australia's only dedicated tropical health and medicine research institute, and is focused on tropical health and medical research, improved biosecurity and supporting better health for people in the tropics worldwide.
- **THE AUSTRALIAN INFECTIOUS DISEASES RESEARCH CENTRE**
  a multidisciplinary network based at the University of Queensland and QIMR Berghofer Medical Research Institute, combining basic and clinical research and utilising leading technologies to identify, understand and prevent infectious disease.
- **THE HERSTON INFECTIOUS DISEASES INSTITUTE (HEIDI)**
  aiming to deliver innovative infectious diseases research as a world-class, collaborative clinical research institute.
- **COMMUNITY FOR OPEN ANTIMICROBIAL DRUG DISCOVERY (CO-ADD)**
  a not-for-profit initiative led by the University of Queensland aiming to help researchers worldwide to find new antibiotics to combat drug-resistant infections.
- **QUT'S CENTRE FOR IMMUNOLOGY AND INFECTION CONTROL**

FAST FACTS

QUEENSLAND IS HOME TO **160+** INFECTIOUS DISEASE GROUP LEADERS & INDEPENDENT RESEARCHERS

COLLECTIVE OUTPUTS INCLUDE (PAST 5 YEARS):

$1.0b+ IN FUNDING

>$257m
NHMRC, MRFF AND ARC FUNDING AS LEAD INVESTIGATOR

$50m
IN FUNDING FOR UQ'S MOLECULAR CLAMP VACCINE PLATFORM

$280m
PARTNERSHIP
between Sanofi, Queensland Government, UQ and Griffith University to establish a Translational Science Hub for mRNA vaccines

$90m
IN COMMERCIAL REVENUE
from cellular therapies developed by QIMR Berghofer

40
HIGHLY CITED PAPERS
(past 5 years)

LIST OF FACILITIES:

- Griffith University's Clinical Trial Unit
- BASE Facility (UQ)
- Centre for Bioinnovation
- Protein Expression Facility (UQ)
- Griffith Institute for Drug Discovery
- Prorenata Biotech
- Australian Infectious Diseases Research Centre (UQ – QIMR Berghofer)
- James Cook University
- Herston Biofabrication Institute
- Southern RNA
- Herston Imaging Research Facility
- Griffith University's Nanomedicine Biofoundry
- Institute for Glycomics (Griffith University)
- TropiQ – Townsville Tropical Intelligence and Health Precinct
- Q-Gen (QIMR Berghofer)
- Queensland Emory Drug Discovery Initiative (UQ)
- Herston Infectious Diseases Institute
- National Biologics Facility – QLD Node
- Community for Open Antimicrobial Drug Discovery (UQ)
- University of Queensland's ULTRA Clinical Trials Program
- TRI Clinical Research Facility
- National imaging Facility Queensland Node
- Queensland Digital Health Centre (UQ)
- CSIRO
- Queensland Translational Science Hub
- Queensland University of Technology
- The Centre for Immunology and Infection Control (QUT)
- AITHM

DIRECTORY

Our precinct partners, institutions and companies have a wealth of capabilities in the life sciences and biomed industry.

Most listed capabilities are defined from the Biotech Gate definitions listing at biotechgate.com/gate/v3/definitions.php

Aegros Group » aegros.com.au

PRECINCT: SPRINGFIELD BIOPARK

Aegros is an Australian technology leader in the US$20B global therapeutic plasma market. Its GMP licensed HaemaFrac® lifts process yields to over 85%, reducing cost and carbon emissions while enhancing product safety. The Company expects the clinical trials of its first product, a Covid-19 hyperimmune, to be completed in 2023.

Aegros is designing, constructing, validating and operating a 1 million litre HaemaFrac® facility with support from the Queensland Government's *Invested In Queensland* program which is expected to come online in 2026. This HaemaFrac® facility will produce Albumin, IVIG and other plasma products for the Australian and overseas markets.

CAPABILITIES

- Biotech: Antibodies
- Biotech: Anti-infectives
- Biotech: Proteins
- Biotech: Vaccines
- Pharma: Antibodies
- Pharma: Anti-infectives
- Pharma: Proteins
- Pharma: Vaccines

BASE mRNA Facility » basefacility.org.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

mRNA vaccines and therapies provide a new strategy to treat disease. The BASE facility is a leading national site for the manufacture and research of mRNA.

We have experience making hundreds of mRNA vaccines and therapies for Australian scientists, and offer end-to-end services, including the design, manufacture and LNP formulation of mRNA. BASE can also provide expert research services that are tailored to your project requirements. We have successful experience in process development, mRNA drug development, and novel mRNA technologies. We are a passionate team of scientists who believe in the potential of mRNA, and can support the development of your mRNA vaccines and therapies to successful clinical outcomes.

CAPABILITIES

- mRNA Research Services (including mRNA vaccine and therapy development, advanced mRNA manufacture, process development)
- mRNA training and teaching
- mRNA Manufacture (research-use only)
- mRNA Manufacture (clinical Phase-1 manufacture – expected 2024)

Australian Institute of Tropical Health and Medicine (AITHM)
aithm.jcu.edu.au

PRECINCT: TROPIQ – TOWNSVILLE TROPICAL INTELLIGENCE AND HEALTH PRECINCT

AITHM is a research institute of James Cook University with state-of-the-art infrastructure spread across several sites in North Queensland, including Townsville, Cairns and Thursday Island. The focus of our research programs is on diseases of high burden to the tropics, with particular emphasis on infectious disease, vector-borne illnesses and parasitology, combined with computational modelling approaches for disease spread. Vaccine development and drug discovery programs underpin some aspects of this effort, along with more novel interventions.

Our proximity and close working relationships with colleagues in Papua New Guinea (PNG), the Pacific Island Countries and South-East Asia opens up unique access to disease-related resources of the Tropics. Combined with considerable investment into the research infrastructure of our three sites, and we are well placed to make major scientific contributions to the fields of tropical health. This includes an extensive insectary facility on the Cairn campus, equipped to handle all aspects of vector-borne disease. Extensive Mass Spectrometry facilities support drug discovery and toxicology programs. While extensive animal handling, PC3 facilities in Townsville allow for the experimental examination of a variety of infectious diseases. Our Thursday Island facilities open up quite novel opportunities to study tropical diseases, including the surveillance and monitoring of disease vectors that are migrating south, driven by major changes in climate and agricultural practices.

CAPABILITIES

- Vaccine development
- Drug discovery
- Vector-borne diseases
- Parasitology
- Microbiology
- Virology/immunology
- Computational modelling of disease threats
- Marine toxicology
- Circadian rhythms

Clinical Trial Unit, Griffith University
griffith.edu.au/griffith-health/clinical-trial-unit

PRECINCT: GOLD COAST HEALTH AND KNOWLEDGE PRECINCT

Griffith University's Clinical Trial Unit, located within the Gold Coast Health and Knowledge Precinct and adjacent to the Gold Coast University Hospital, provides state-of-the-art facilities and professional coordination services for phase I-IV clinical trials.

As a Core Research Facility of Griffith University, it supports staff and collaborators to conduct a wide range of investigator-initiated trials across a diverse range of therapeutic areas. They also provide trial services to commercial clients such as the biotech, pharmaceutical, nutraceutical and complementary medicine industries as well as clinical research organisations.

CAPABILITIES

- Biotech: Biosimilars
- Biotech: Microbiome
- Biotech: Vaccines
- Biotech R&D: CRO
- Biotech R&D: Screening
- Biotech: Nutraceuticals
- Medtech: Diagnostic devices
- Clinical trials

Commonwealth Scientific and Industrial Research Organisation (CSIRO) » csiro.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

As Australia's national science agency, CSIRO is solving the greatest challenges through innovative science and technology – from discovery to translation

CAPABILITIES

- Advanced Engineering Biology FSP
- Ecosurveillance
- CSIRO BioFoundry
- CSIRO Plant Health Molecular Diagnostics team
- CSIRO Weed (& Insect) Genomics team
- CSIRO Risk and Preparedness

Department of Agriculture and Fisheries » daf.qld.gov.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

The Ecosciences Precinct (ESP) is a highly collaborative working environment with state-of-the-art facilities including research and educational laboratories, insect houses, controlled environment rooms, greenhouses, offices and workshops.

The research laboratories are certified to Australian Standard Physical Containment Level 2 (PC2), which is the rating for a standard, low-risk research environment. This rating provides a clean and sterile environment for scientists to conduct research on organisms that are not dangerous to humans or animals. Some research at the precinct relies on access to quarantine facilities that are certified to Australian Standard Quarantine Containment Level 3 (QC3). This enables researchers to conduct secure and carefully controlled studies on insects and bacteria; these studies help control weeds that threaten Queensland's ecosystems. It also allows researchers to undertake controlled studies and diagnostics on pests and diseases that destroy crops.

CAPABILITIES

- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Industrial Biotech
- Biotech: Veterinary
- Biotech: other

Department of Environment and Science (DES) » science.des.qld.gov.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

The Department of Environment and Science's, Science Division located at Ecosciences Precinct Brisbane, Queensland, provides leading-edge science, data, information, and services across four areas:

- Water and Catchments
- Climate, Biodiversity and Information
- Science Development
- Office of the Queensland Chief Scientist

The Science Division delivers the best available science through complex modelling, monitoring, data analysis and projections in relation to climate, water, emissions, natural disasters, koala habitats, vegetation management, the Great Barrier Reef and natural capital markets. The Department of Environment and Science invests in science research, capability and infrastructure and deliver strategies and initiatives that maximise the value from the Queensland Government's local, national and international science partnerships. Science promotes Queensland's science and research and engage with Queensland's community, scientists, researchers and industry.

The Chemistry Centre Laboratory, located in the Ecosciences Precinct, has a long and proud history, spanning more than 100 years, starting with the first Agricultural Chemist in 1897. The Chemistry Centre provides analytical chemistry services accredited by the National Association of Testing Authorities (NATA) to inform research and decision-making in natural resource, water quality, environmental and agricultural management in Queensland, Australia and overseas. It partners with, and provides services for, state and national government agencies, research institutes, and private and natural resource management organisations. The Chemistry Centre performs more than 120,000 tests per year using over 150 analytical methods for water, soil, plant, and other samples.

CAPABILITIES

- Collaboration with industry and Academia
- Governmental organization
- Industry collaboration and research support
- Sustainability and global impact
- Analytical Chemistry – environment
- Analytical Chemistry – agriculture
- Analytical Chemistry – resource management
- Instrumentation

James Cook University » jcu.edu.au

PRECINCT: TROPIQ – TOWNSVILLE TROPICAL INTELLIGENCE AND HEALTH PRECINCT

Dive into the world of emerging infectious diseases and mosquito-transmitted diseases, from novel Tuberculosis vaccines to drug development and disease treatment, from regional health systems to allied health, JCU's work is transformative.

The challenges of climate change, food security and disaster resilience in the Tropics are immense. To meet these challenges, JCU is innovating with AI and AgTech solutions to enhance aquaculture and counteract the threats posed by changing rainfall patterns. JCU protects Tropical Australia by setting the standards for buildings under Tropical conditions, and through the recently established the Centre for Tropical Biosecurity that pools expertise from diverse disciplines.

CAPABILITIES

- Biotech: Antibodies
- Biotech: Anti-infectives
- Biotech: Gene therapy
- Biotech: Immunotherapy
- Biotech: Microbiome
- Biotech: Molecular diagnostics
- Biotech: Natural compounds
- Biotech: Proteins
- Biotech: vaccines
- Biotech: other
- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Nutraceuticals
- Biotech: Veterinary
- Biotech R&D: Analytical services
- Biotech R&D: Bioinformatics
- Biotech R&D: Cell culture
- Biotech R&D: CRO
- Biotech R&D: Diagnostic instrumentation
- Biotech: R&D: Diagnostic services
- Biotech R&D: Genomics
- Biotech R&D: Proteomics
- Biotech: R&D: Screening
- Medtech: Biomaterials
- Medtech: Dental devices
- Digital: Artificial Intelligence
- Digital: Medical big data & analytics
- Digital: Online health communities
- Digital: Patient engagement companies
- Digital: Population health management
- Digital: Telehealth
- Digital: Predictive analytics

NeuTex Image-Guided Therapy Training and Robotics Centre
gchkp.com.au/home/precinct-projects/image-guided-surgery-and-robotics-training-centre

PRECINCT: GOLD COAST HEALTH AND KNOWLEDGE PRECINCT

NeuTex is a world-first facility for training physicians and innovating imaging-led technologies and robotics in treatments for stroke, cardiovascular disease, cancer and spinal conditions. It is the first facility of its kind in the world outside a hospital, pioneering the use of technologies including 3D printed patient-specific anatomical models, artificial intelligence and robotics in the treatment of brain aneurysms and other neurological conditions.

It is expanding to provide training and support innovative R&D in cardiovascular, peripheral vascular, spinal, surgical and orthopaedic specialties.

Global healthcare leader Philips partnered with Gold Coast University Hospital interventional neuroradiologists Dr Hal Rice and Dr Laetitia de Villiers to equip Neutex, which is centered on their cutting-edge Azurion image-guided therapy system.

CAPABILITIES

- Medtech: Imaging
- Medtech: Non-active implantable devices
- Clinical trials
- Endovascular surgical training
- Neurovascular devices training and R&D
- Pre-op surgical planning
- Specialist medical remote proctoring and mentoring
- Medical device promotion and launch facility
- Support facility for device and software clinical trials

NQ Spark Pty Ltd » nqspark.org

PRECINCT: TROPIQ – TOWNSVILLE TROPICAL INTELLIGENCE AND HEALTH PRECINCT

NQ Spark is North Queensland's premier Simulation Park, at the forefront of innovative technologies and methodologies. We provide a unique platform for research, training, education, test and evaluation, and development, with a direct impact on industries ranging from healthcare to defence. Our expertise in simulation technology, combined with our dedication to interdisciplinary collaboration, makes us an invaluable resource within the precinct. As an operational hub for innovation, NQ Spark is committed to driving progress in the region.

NQ Spark aims to consolidate and exploit the confluence of regional defence, science, health and knowledge expertise in Townsville to construct an Advanced Environmental Simulation Facility as the foundation infrastructure for a technology-oriented collaboration precinct, on a common boundary between Lavarack Barracks, James Cook University and Townsville University Hospital.

CAPABILITIES

- Training and education programs
- Interdisciplinary research and development
- Advanced simulation facilities
- Reconfigurable clinical simulation centre
- Reconfigurable command and control centre
- High-performance computing
- Operational test and evaluation capacity
- Collaboration with industry and academia
- Marine research, simulation and autonomous systems
- Research testing and translation to market
- Testing new technologies for the tropics in the tropics
- Emergency and disaster management simulation and training

QIC » qic.com.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

QIC has been appointed precinct developer for the above-ground Cross River Rail precincts at Boggo Road, Woolloongabba, Roma Street and Albert Street, leading the implementation of the Queensland Government's Precincts Delivery Strategy for the benefit of Queensland.

CAPABILITIES

- Professional services and consulting – Real Estate
- Government organisation

QIMR Berghofer Medical Research Institute » qimrberghofer.edu.au

PRECINCT: HERSTON HEALTH PRECINCT

QIMR Berghofer is one of Australia's largest and most successful translational research-intensive medical research institutes. Situated in the Herston Health Precinct, Queensland's largest hospital campus, we provide partners with access to our world-leading scientists, cutting-edge research infrastructure, clinicians, clinical trial sites, and our on-site GMP cell therapy contract manufacturing facility, Q-Gen Cell Therapeutics.

QIMR Berghofer provides patients with better health through impactful medical research, with scientific discoveries, novel therapeutics and diagnostics for oncology, infectious, immunological, and neurological diseases. QIMR Berghofer has been working with USA-based Atara Biotherapeutics' for phase II treatment for Multiple Sclerosis, ATA188, is an allogeneic T-cell therapy initially developed by QIMR Berghofer scientists.

CAPABILITIES

- Biotech: Antibodies
- Biotech: Anti-infectives
- Biotech: Cell therapy
- Biotech: Gene therapy
- Biotech: Immunotherapy
- Biotech: Vaccines
- Biotech: Other
- Biotech R&D: bioinformatics
- Biotech R&D: Cell culture
- Biotech R&D: Genomics
- Pharma: Antibodies
- Pharma: Cell therapy
- Pharma: Gene therapy
- Pharma: Immunotherapy
- Pharma: Molecular diagnostics
- Pharma: Peptides
- Pharma: Proteins
- Pharma: Small molecules
- Pharma: Stem cells
- Pharma: Vaccines
- Medtech: Regenerative medicine
- Digital: Electronic health records
- Digital: Medical big data & analytics
- Digital: Population health management
- Digital: Predictive analytics
- Cell therapy and manufacturing
- Clinical trials

Queensland University of Technology (QUT) » qut.edu.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT AND HERSTON HEALTH PRECINCT

Queensland University of Technology (QUT) is a major Australian university with a 'real-world' focus and a growing research output focused on technology and innovation. As 'the university for the real world', QUT is known for its strong links to industry, government, and community, and cutting-edge research that is relevant, transformative and addresses real-world challenges.

QUT operates across 2 inner-city campuses and a number of distributed sites including the Translational Research Institute, QIMR Berghofer, the Centre for Children's Health Research in South Brisbane and the Jamieson Trauma Institute at Herston.

QUT's research strengths are channelled through purpose-built, multidisciplinary centres of critical mass including: Centre for Immunology and Infection Control (CIIC) who created the koala Chlamydia vaccine, the centre has expertise in vaccine technology, autoimmune diseases, respiratory viruses, pollen allergy, mosquito borne diseases and CNS immunology; QUT's Centre for Vision and Eye Research are world leaders in myopia prevention; Centre for Genomics and Personalised Health (CGPH) which drives discovery and translation in genomic instability and repair, pharmacogenomics, targeted treatments and epidemiology alongside a NATA-accredited diagnostic lab; Centre for Microbiome Research (CMR) which develops novel culture-independent molecular approaches, bioinformatics tools and meta-omics across health and environmental sciences; (ATCG) The Australian Translational Genomics Centre is a partnership between QUT, Metro South Hospital and Health Service, and Pathology Queensland providing NGS sequencing pathology, mutation detection, whole-exome or whole-genome sequencing and microarray services; and Centre for Biomedical Technologies (CBT) has expertise in medical device design and manufacturing, joint biomechanics, tissue engineering, stem cells, medical imaging and robotic technologies, and 3D printing of biomedical implants.

CAPABILITIES

- Biotech: Antibodies
- Biotech: Anti-infectives
- Biotech: Drug delivery
- Biotech: Immunotherapy
- Biotech: Microbiome
- Biotech: Molecular diagnostics
- Biotech: Natural compounds
- Biotech: Nucleic acid drugs
- Biotech: Peptides
- Biotech: Proteins
- Biotech: Small molecules
- Biotech: Vaccines
- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Industrial Biotechnology
- Biotech: Nutraceuticals
- Biotech: Veterinary
- Biotech R&D: Analytical services
- Biotech R&D: Bioinfomatics
- Biotech R&D: Cell culture
- Biotech R&D: genomics
- Biotech R&D: Proteomics
- Medtech: Biomaterials and Biofabrication
- Medtech: Coatings
- Medtech: Delivery devices
- Medtech: Imaging
- Medtech: Regenerative medicine
- Medtech: Wound care
- Digital: Health & Wellness
- Digital: Medical big data & analytics
- Digital: Mobile fitness/health apps
- Digital: Predictive analytics
- Education
- Clinical trials

Queensland Emory Drug Discovery Initiative (QEDDI) » qeddi.com.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

The Queensland Emory Drug Discovery Initiative (QEDDI), a division of UniQuest, is a small molecule drug discovery and development group dedicated to translating academic biomedical research into new medicines. QEDDI is a world class facility and the only example of its kind in an Australian university, with an industry-experienced team dedicated to advancing biomedical research into new candidate therapies to enable commercial partnerships and accelerate new drug development. QEDDI's pipeline is targeting new treatments for some of the world's most challenging diseases, including cancer, inflammatory diseases and neurodegenerative disorders, such as Alzheimer's and Parkinson's disease.

CAPABILITIES

- Commercialisation
- Drug discovery
- Drug development
- Therapeutics innovation

Southern RNA » southernrna.com.au

PRECINCT: SPRINGFIELD BIOPARK

In the rapidly advancing field of RNA therapeutics, managing to combine expertise, innovation, and commitment to a mission are the hallmarks of game-changing partner and organisation that will make a difference in this field. Southern RNA's vision is to drive this level of excellence in the sphere of nucleic acid production.

SRNA was founded on the bedrock principle that high quality nucleic acid production and raw material, including Plasmid DNA (pDNA) and Purified mRNA, Co-transcriptional Capping Reagent and Lipids, are paramount to enable rapid advancement of medical and biotechnological RNA therapies. Our prowess lies not just in understanding the complex processes involved but in mastering them, optimising them, and ensuring that we deliver products of the highest quality.

At Southern RNA, we are truly excited about the future of the RNA technology and it's potential for Australia's innovation role across the globe. SRNA is not just about what we produce; it's about the role we play in bridging ground-breaking benchtop discoveries to real-world, life-changing applications. Our vision is clear: to be the pivotal and trusted partner that enables researchers, institutions and organisation to transition their innovations seamlessly from laboratory environments to the patient's bedside or onto vast fields.

CAPABILITIES

- Plasmid DNA (pDNA)
- Cap Analog
- Purified mRNA
- Analytical development and QC services
- Co Transcriptional Cap – Co Cap™ A
- scalable manufacturing capacity

Translational Research Institute (TRI) » tri.edu.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

The Translational Research Institute (TRI) is Australia's largest, state-of-the-art, biomedical hub and a global leader in the effective translation of medical research and innovation into improved health outcomes.

TRI is a partnership of Queensland Health; The University of Queensland (UQ);

Queensland University of Technology (QUT); and Mater Research.

TRI is home to more than 800 researchers, 10 biotech companies and varied service providers. The recently launched Translational Science Hub (TSH), a partnership of Sanofi, Griffith University, UQ and the Queensland Government, focused on mRNA technology and vaccine platforms, is housed at TRI. Our unique ecosystem provides space for early-stage biotech's to undertake discovery research, product development and prototyping.

CAPABILITIES

- Clinical trials
- Preclinical & clinical imaging
- Biological research centre
- Gnotobiotics
- Flow cytometry
- Histology
- Microscopy
- Protemics
- T3 Cleanrooms
- cGMP clinical manufacturing
- Training facilities
- Collaboration and partnerships

UniQuest » uniquest.com.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT

UniQuest is the commercialisation company of The University of Queensland (UQ). In partnership with UQ researchers, we create impact through the commercialisation of UQ intellectual property (IP). Established in 1984, UniQuest's commercialisation track record positions UQ as the leader of research commercialisation in Australasia. UniQuest has formed more than 125 start-up companies built on UQ IP. These companies have raised more than A$1 billion to advance UQ technologies towards the market and have directly created more than 450 new jobs. UniQuest's track record and notable successes include the blockbuster cervical cancer vaccine GARDASIL® and start-up companies Spinifex Pharmaceuticals Inc and Inflazome Ltd, which were acquired in two of the largest university start-up exits in Australian history. Marketed products containing UQ IP licensed by UniQuest have generated gross sales of more than A$66 billion, significantly contributing to societal and economic impact. UniQuest has also established the Queensland Emory Drug Discovery Initiative (QEDDI), a world-class small molecule drug discovery and development group, dedicated to translating academic biomedical research into drug candidates for partnering.

CAPABILITIES

- Commercialisation
- Drug discovery
- Drug development
- Therapeutics innovation

The University of Queensland (UQ) » uq.edu.au

PRECINCT: BOGGO ROAD INNOVATION PRECINCT AND HERSTON HEALTH PRECINCT

Founded in 1909, The University of Queensland (UQ) is a public research university located in Brisbane, Queensland, Australia. It is one of Australia's oldest and most prestigious universities, known for its rigorous academic and research programs. UQ also has overseas establishments, including an office in Washington D.C. and the UQ-Ochsner Clinical School in Louisiana, United States. UQ is a member of the Group of Eight, an alliance of leading Australian universities recognised for their intensive research focus.

The University incorporates over 100 research institutes and centres and has world-class capability in biomedical and clinical research supported by advanced research infrastructure. This capability is particularly strong in the space of infectious diseases, vaccine, and therapy development, with this capability mainly distributed across various Institutes and centres in St Lucia and at the Translational Research Institute (TRI). It spans a diverse range of world-leading investigative resources, ranging from epidemiology and health service research to genomics, molecular pathology, digital pathology, digital health and pharmacology, advanced drug delivery systems, stem cell biology and tissue engineering.

CAPABILITIES

- Biotech: Antibodies
- Biotech: Antibody-drug conjugates
- Biotech: Anti-infectives
- Biotech: Cell therapy
- Biotech: Drug delivery
- Biotech: Immunotherapy
- Biotech: Microbiome
- Biotech: Molecular diagnostics
- Biotech: Natural compounds
- Biotech: Nucleic acid drugs
- Biotech: Peptides
- Biotech: Proteins
- Biotech: Small molecules
- Biotech: Stem cells
- Biotech: Vaccines
- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Industrial Biotechnology
- Biotech: Nutraceuticals
- Biotech: Veterinary
- Biotech R&D: Analytical services
- Biotech R&D: Bioinfomatics
- Biotech R&D: Drug delivery
- Biotech R&D: genomics
- Biotech R&D: Proteomics
- Biotech R&D: Screening
- Pharma: Antibodies
- Pharma: Antibody-drug conjugates
- Pharma: Anti-infectives
- Pharma: Cell therapy
- Pharma: Drug delivery
- Pharma: Immunotherapy
- Pharma: Microbiome
- Pharma: Molecular diagnostics
- Pharma: Natural compounds
- Pharma: Nucleic acid drugs
- Pharma: Peptides
- Pharma: Proteins
- Pharma: Small molecules
- Pharma: Stem cells
- Pharma: Vaccines
- Medtech: Biomaterials
- Medtech: Coatings
- Medtech: Delivery devices
- Medtech: Dental devices
- Medtech: Imaging
- Medtech: Regenerative medicine
- Medtech: Wound care
- Digital: Artificial Intelligence
- Digital: Electronic health records
- Digital: Health & Wellness
- Digital: Medical big data & analytics
- Digital: Mobile fitness/health apps
- Digital: Predictive analytics
- Education
- Clinical trials

University of the Sunshine Coast (UniSC) » usc.edu.au

PRECINCT: SUNSHINE COAST PRECINCT

We are more than a university; we are a catalyst for change within our communities. Deeply rooted in regional engagement, we pioneer healthcare access improvements through clinical trials, mental health research, and medical innovation.

CAPABILITIES

- Biotech: Molecular diagnostics
- Biotech: Small molecules
- Biotech R&D: Analytical services
- Biotech R&D: Bioinformatics
- Biotech R&D: Genomics
- Biotech R&D: Proteomics
- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Nutraceuticals
- Biotech: Veterinary
- Digital: Health & Wellness (IoT)
- Education
- Sustainability and global impact
- Interdisciplinary research
- Community engagement and healthcare innovation
- Industry collaboration and research support
- Thriving industry ecosystem
- Health & science
- Aviation and aerospace
- Agriculture and agribusiness
- Manufacturing
- Clean technologies
- Information and communication technology

University of the Sunshine Coast (UniSC) | Centre for Bioinnovation (CBI)
usc.edu.au/research/centre-for-bioinnovation

PRECINCT: SUNSHINE COAST PRECINCT

The Centre for Bioinnovation is located at the University of the Sunshine Coast (UniSC) – a young, ambitious, comprehensive university at the epicentre of progress with five campuses across South East Queensland.

As the world's only university operating within three UNESCO Biosphere Reserves and a UNESCO World Heritage Site, the Centre for Bioinnovation has a unique opportunity to capitalise on the wealth of significant environmental treasures surrounding us as we advance regional health, food, and environmental sustainability, for a better tomorrow.

For over a decade, the Centre for Bioinnovation (CBI) has been at the forefront of pioneering biotechnology advancements. Through bio-inspired approaches, CBI is contributing to drug discovery, disease diagnostics, and therapeutics.

We use bio-inspired approaches to contribute to drug discovery, disease diagnostics and therapeutics, including genomics, proteomics, and metabolomics across our five research themes: Aquaculture Biotechnology, Human and Animal Health and Disease, Biodiscovery, Applied Microbiology, and Conservation and Biodiversity.

CAPABILITIES

- Biotech: Anti-infectives
- Biotech: Biosimilars
- Biotech: Microbiome
- Biotech: Molecular diagnostics
- Biotech: Natural compounds
- Biotech: Peptides
- Biotech: Proteins
- Biotech: Small molecules
- Biotech: Vaccines
- Biotech R&D: Analytical services
- Biotech R&D: Bioinformatics
- Biotech R&D: Synthesis services
- Biotech: AgBio
- Biotech: Environmental
- Biotech: Food
- Biotech: Industrial Biotechnology
- Biotech: Nutraceuticals
- Biotech: Veterinary
- Molecular engineering and diagnostics
- Functional genetics and genomics
- Chemical analysis
- Conservation management

University of the Sunshine Coast (UniSC) | Clinical Trials Unit

usc.edu.au/community/unisc-clinical-trials

PRECINCT: SUNSHINE COAST PRECINCT

UniSC Clinical Trials Centre: Operating across five facilities in South East Queensland, pioneering research across trial phases for drugs, devices, and diagnostics, with a special emphasis on vaccines, cancer, chronic diseases, and malaria and COVID vaccine development.

UniSC Clinical Trials, through strategic partnerships with healthcare professionals across the Sunshine Coast and Moreton Bay, is strongly positioned to provide expert services in conducting all phases of drug and device clinical trials across an expanding portfolio of therapeutic areas.

We match each study to Principal- and Sub- Investigators who are experienced in the study's field, drawing from a knowledgeable pool of physicians with years of collective clinical trial experience.

With more than 40 drug and device studies completed and ongoing across phases I to IV, UniSC Clinical Trials possesses the experience required for your study.

CAPABILITIES

- Clinical trials

statedevelopment.qld.gov.au