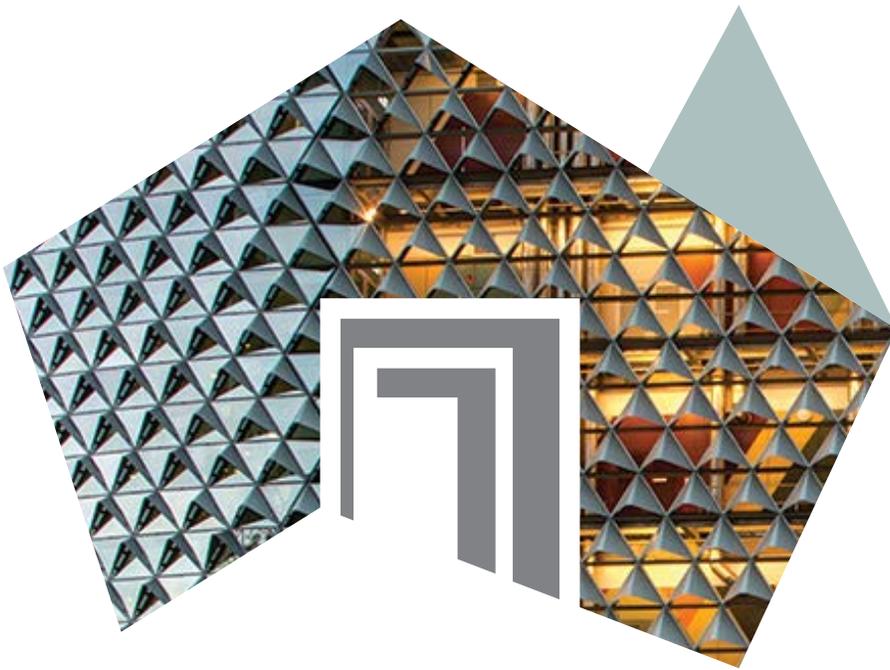


South Australia

Data driven health innovation



Government
of South Australia



Contents

Why South Australia	4
South Australia – your gateway for clinical trials in Australia	6
Our complete clinical trial ecosystem	8
Leading the nation in AI in healthcare	20
Pioneering medtech commercialisation	29
Health and life sciences innovation precinct	39
Health and life sciences research	46
Global technology companies in Adelaide for innovation	54
Advanced technology infrastructure	56
Sustainable renewable energy	57
Invest, innovate and scale in South Australia	59
Incentives	60
Cost competitive business environment	62
Skilled talent pipeline	63
Benefits of living in South Australia	65
Let's talk	68

Why South Australia

South Australia's world-class, highly connected health and life sciences precinct links the most complete clinical trial ecosystem in Australia with world-leading AI and data analytics capabilities and a thriving cluster of medtech companies. This makes our state the perfect location to collaborate, innovate to develop and test new products to commercialise globally.

Adelaide BioMed City, an AUD\$3.8 billion health and life sciences precinct, connects clinical research, education and care within the CBD with a focus on translation to advance patient outcomes globally. Companies can collaborate with clinicians who are co-located across research and patient care.

South Australia is the nation's leader for early phase clinical trials with a strong, sophisticated and diverse health and medical research ecosystem. We have a global reputation for clinical trials excellence with the most complete clinical trial ecosystem, globally recognised investigators, an existing and collaborative network of premium providers where repeat business has built an enviable standing amongst our peers. Our clinical trial capabilities, skilled workforce and specialised infrastructure make South Australia the leading state in Australia to conduct your business.

Our state is home to two of the world's leading artificial intelligence and data analytics capabilities – the Australian Institute for Machine Learning (AIML) and Massachusetts Institute of Technology (MIT) bigdata Living Lab. AIML has Australia's largest AI capability with more than 140 researchers and is the only Australian member of the Global Alliance of AI Centres in Medicine. The alliance includes Stanford University, Harvard University and Mayo Clinic. The MIT bigdata Living Lab links South Australia to one of the world's leading data analytics capabilities. Both capabilities are based at Lot Fourteen, Australia's premier hi-tech innovation precinct.

With Adelaide BioMed City and Lot Fourteen within walking distance of each other on North Terrace, South Australia has a unique environment where health and life science research and clinical care is deeply embedded with technology innovation.



South Australia is rapidly growing our medical product manufacturing industry with clinical trials being an essential path to commercialisation of medical devices. Our successful first in human clinical trial expertise provides the best incubator to test, validate and scale up opportunities for medtech commercialisation and growth. Our advanced manufacturing capability is combined with the expertise in medical technology, biotechnology and pharmaceuticals to develop world-leading medical products such as innovative devices, vaccines, drugs and diagnostics.

Our state offers a range of cost advantages that no other state in Australia can match, with a highly competitive environment and ease of doing business that supports and improves your bottom line.

South Australia has a deep talent pool, Australia's highest staff retention rates and an attractive and affordable lifestyle. Our capital city, Adelaide, is Australia's most liveable city and recognised as the third most liveable city in the world by the Economist Intelligence Unit's 2021 report. South Australia is proud to be the nation's Knowledge State with five highly regarded universities ranking in the top two per cent globally and the largest concentration of clinical research in the Southern Hemisphere.

Highly connected and collaborative, with strengths across clinical trials and medtech, supported by AI and data analytics' driven hi-tech innovation, South Australia is the perfect location for your company.

South Australia's landscape



Complete clinical trial ecosystem

World's fastest regulatory framework for early-phase clinical trials for submission to global regulatory agencies, e.g. US FDA



World-class health and life sciences ecosystem

One of the largest and most technologically advanced in the Southern Hemisphere



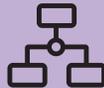
World-class hi-tech capabilities

World-leading AI and data analytics capabilities – top five in the world for computer vision



Pioneering medtech commercialisation

We're leading the way with a proven manufacturing track record buoyed by our clinical trial expertise and hi-tech capabilities



Australia's best longitudinal clinical data set

Single electronic medical record across a universal healthcare system for 1.7million people with a unique ID for each patient



World-leading R&D collaboration and education

Largest concentration of clinical research in the Southern Hemisphere



Leader in cancer research, clinical translation and care

The Bragg Comprehensive Cancer Centre (BCCC) will transform cancer research, care, support and preventative measures globally



Connected locale

Walk between our centres of excellence in health and life sciences, research and hi-tech innovation



Skilled and educated workforce

South Australia offers a highly-skilled talent pipeline for drug development and manufacturing



Competitive labour costs and high staff retention rates

Adelaide is ranked the most cost-competitive city in Australia by global services company KPMG

South Australia – your gateway for clinical trials in Australia

South Australia and Adelaide provide the best possible gateway for exploring and developing clinical trials in Australia. Our complete ecosystem delivers end-to-end across all elements of the supply chain, for trials of drugs, medical devices and digital health products. South Australia has the most established and experienced providers in the clinical trial field in Australia, including well aligned GMP manufacturing.

Adelaide is a hub for companies and researchers in biotech and clinical trials, medical devices, ageing well, research, digital health, AI and data analytics.

It provides deep skillsets and resource opportunities, particularly for frontier technologies such as use of artificial intelligence for health innovation, robotic vision and decision making, machine learning, as well as proton therapy. Our clinical research is highlighted by key opinion leaders such as Professor Guy L Ludbrook and Dr Ganessan Kichenadasse.

Our state has decades of experience in automotive, defence and aerospace manufacturing underpinning deep medical device manufacturing capability, with highly skilled workers and sustainable supply chains.

Based in South Australia, the Tonsley Innovation District is Australia's first innovation cluster, and focuses on advanced manufacturing, robotics, and materials, particularly for medical devices.



South Australia's cutting-edge innovation ecosystems deliberately pull together and connects capabilities from health and medical, space, defence and energy sectors. This provides an ideal resource for projects to leverage this depth across artificial intelligence, science, engineering, mathematics and nanotechnology in the life science sphere.

Our world-class creative industries ecosystem brings capabilities for simulation, augmented and virtual realities, as well as 3D and gaming technologies into our health and medical industries (as well as defence and our other key sectors). Medical tourism is providing opportunities for international healthcare treatments and showcases the state's world-class capabilities within the health and medical industries sector.



A complete clinical trial ecosystem in South Australia

Along with the most complete clinical trial ecosystem, South Australia provides the fastest pathway to early phase clinical trial conduct for submission to global regulatory agencies. South Australia is an ideal location for clinical trials for both healthy individuals and patients including specialised patient populations.

The State's major hospitals have world-class infrastructure with dedicated clinical trial units allowing for access to dedicated investigators committed to clinical research.

South Australia is the best choice for early phase clinical trials due to:



Speed

You can commence your trial quickly in South Australia, our efficient regulatory framework and experienced clinical trial companies mean you can start in as little as six weeks.



Quality

Globally accepted data delivered in line with the highest quality standards for clinical trials, for submission to regulatory agencies, including the US FDA, UK HMRA, EU EMA and Japan PDMA.



Cost

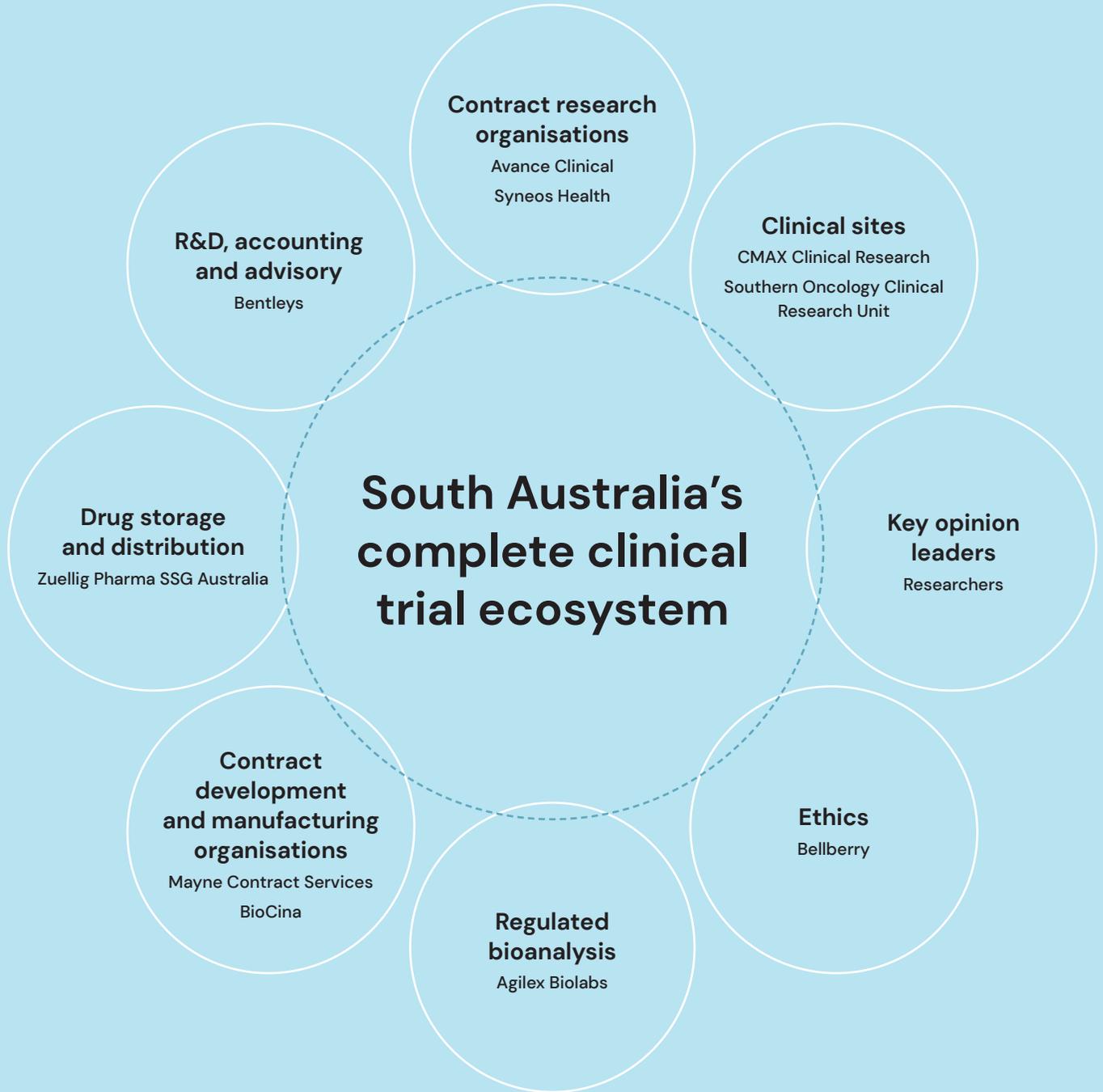
Globally, South Australia is extremely cost effective including efficiencies through our skill base, comprehensive ecosystem, and services scale and diversity. Your company might be eligible for a tax refund of up to 43.5 per cent.



Experience

We have the country's most experienced companies and they operate in a complete clinical trial ecosystem optimised for FIH to the highest global regulatory guidance. The high reputation is underlined by successful recent audits by FDA and EMA.

**Delivering end-to-end
clinical trial solutions through
innovation, collaboration and
thought leadership**



Contract research organisations



Avance Clinical

Avance Clinical is an Australian owned Contract Research Organisation (CRO) that has been providing high-quality clinical research services fit for global regulatory standards to the local and international drug development industry for 24 years.

Avance Clinical specialises in supporting biotech companies with their early phase clinical trials leveraging the world-class early phase clinical trials ecosystem in Australia.

Avance Clinical offers some of the most extensive in-house clinical services including:

- ClinicReady – pre-clinical services
- Clinical Monitoring Management
- Data Management
- eClinical Solutions
- Safety and Pharmacovigilance
- Medical Writing
- Project Management Statistics and Pharmacokinetics
- Quality Assurance

Avance Clinical has a global reputation for outstanding service to our biotech clients in the United States, United Kingdom, Japan, China, South Korea, Taiwan and Europe.



Syneos Health

Syneos Health is the only fully integrated biopharmaceutical solutions organisation. With both a Contract Research Organization (CRO) and Contract Commercial Organization (CCO) under the same roof, Syneos Health is purpose-built to accelerate customer performance to address modern market realities.

Syneos Health have a unique Biopharmaceutical Acceleration Model[®], which supports companies at all stages in the development of their product or where their specific needs are, Syneos Health will act as a virtual pharma company, developing customised solutions that will help companies achieve a better valuation for their business or product by reducing time to market, increasing efficiency and reducing cost.

Clinical sites



CMAX Clinical Research

CMAX Clinical Research has been a leader in delivering early phase clinical trials for over 28 years, making it one of the most respected clinical trial businesses in Australia.

Since 1993 CMAX has delivered more than 700 early phase clinical trials, including more than 150 first time in human studies for our national and international clients which include pharmaceutical, biotechnology and device companies.

CMAX's modern facility is equipped with 66 inpatient beds, separate screening and outpatient clinic and has ready access to state-of-the-art facilities, equipment and world-class medical and pharmacology specialists. An expansion planned for 2022 will see more inpatient beds and specialist treatment areas added to the facility. CMAX has also recently launched a new service offering, Fusion Clinical Research, enabling later phase clinical trials in the community through engagement with General Practitioners. CMAX's services are eligible for the generous Australian R&D Tax Incentive scheme.



Southern Oncology Clinical Research Unit

Southern Oncology Clinical Research Unit (SOCRU) is a leading-edge research facility located in South Australia. Run by a team of five experienced oncologists, SOCRU provides people with cancer the opportunity to contribute to innovative cancer research whilst receiving the highest quality, evidence based clinical care from skilled health professionals.

SOCRU focuses on conducting early phase cancer trials which forge the path to breakthrough therapies, including a variety of interventions such as cytotoxic, targeted therapies, immunotherapy and oncolytic viral therapies. All research tasks are conducted by qualified and experienced staff in compliance with ICH-GCP and all other regulatory requirements.

Ethics

Bb Bellberry Limited
supporting research and ethics

Bellberry Limited

Bellberry Limited is a national, private not-for-profit organisation providing streamlined scientific and ethical review of human research and social science projects across Australia. Bellberry's aim is to promote and improve the welfare of research participants and the quality, efficiency and effectiveness of research.

As a not-for-profit company, Bellberry donates surplus funds back into the research community.

National Health and Medical Research Council (NHMRC) certified and recognised in the McKeon review as a best practice example, Bellberry Human Research Ethics Committees (HRECs) are professionally managed and operate 24/7 through a dedicated electronic portal providing a paperless and secure HREC process. Bellberry HRECs provide high quality, independent ethics reviews.

Bellberry's 12 committees accommodate multiple meetings each week, with an application decision outcome typically achieved within 20 business days of the application residing with our HRECs. Dedicated staff provide support at every stage of the process.

Regulated bioanalysis



Agilex Biolabs

Agilex Biolabs is Australia's largest bioanalytical and toxicology laboratory supporting preclinical and clinical drug development.

With a 25-year track record of performing regulated bioanalysis, the Agilex team has successfully accelerated numerous biopharmaceutical and pharmaceutical clinical trials from around the world. Their FDA-inspected Australian bioanalytical facilities have OECD GLP recognition with NATA and ISO 17025 Accreditation.

Agilex Biolabs offers a range of toxicology services and have expertise with all types of molecules, laboratory species, routes of administration, and non-clinical studies. As a global leader in providing flexible solutions, Agilex Biolabs has expedited large and small molecule programs from APAC, USA and Europe.

Contract development and manufacturing organisations



Mayne Contract Services

Mayne Contract Services is South Australia's largest full-service contract development and manufacturing organisation (CDMO).

They are experts in complex oral and topical dosage forms – from concept to commercialisation. With over 40 years of global compliance, Mayne Contract Services' 200-strong team is ready to support most pharmaceutical projects.

Expertise includes:

- bioavailability enhancement
- modified-release drug technologies
- spray drying
- taste masking
- handling select potent compounds and controlled substances, including cannabinoids.

From its TGA/FDA GMP certified facility, Mayne Contract Services partners with clients to deliver innovative pharmaceutical formulations and analytical services for clinical and commercial manufacture.



BioCina

BioCina is a biologics contract development and manufacturing organisation (CDMO) specialising in process development and cGMP manufacture of microbial-based therapeutics, from preclinical to commercial production.

Biocina's site, approved by the FDA for commercial manufacturing in 2020, has 35+ years of microbial fermentation experience and over the past 15 years, has worked on over 50 different products and has partnered with more than 30 customers globally. With customised services, BioCina has successfully performed multiple technology transfers and developed unique solutions to address technical issues for customers' programs.

BioCina strives to provide high-quality, cost-effective microbial process development and manufacturing solutions to customers worldwide.

In 2022, BioCina's capabilities and services will include end-to-end manufacture of mRNA vaccine and plasmids.

Drug storage and distribution



Zuellig Pharma SSG Australia

Zuellig Pharma SSG Australia (formerly Flinders CTS) is part of Zuellig Pharma, which is one of the largest healthcare services groups in Asia. The Australian depot has supported over 1000 clinical trials, predominately supplying sites in Australia and New Zealand and working with a wide range of research groups.

Services include storage and distribution of clinical trial supplies in a facility that is TGA GMP certified for clinical trial drug storage and secondary packaging, including release for supply.

Additional services include importation, export permits, controlled drugs, SAS and Direct to Patient supply. The depot is a modern purpose design with validated controlled ambient, cold chain and frozen storage facilities to GMP standards.

R&D, accounting and advisory



Bentleys

Bentleys is an international network of advisors and accountants with expertise in audit and assurance, business advisory, corporate recovery, financial planning, superannuation, wealth management, trusts and estates, taxation and R&D tax incentives.

Bentleys R&D Incentives delivers a best practice, full service and low-cost solution for non-Australian controlled Biotech/MedTech enterprises seeking to create a presence in Australia and make use of the R&D Tax Incentive, a program that enables up to 43.5 per cent of R&D expenses in Australia to be refunded to eligible entities.

Bentleys has been supporting foreign controlled R&D entities undertaking phase 1 and 2 clinical trials in Australia since 2012, with a full range of services under one roof including subsidiary incorporation, R&D Incentive registration, accounting and tax compliance, virtual CFO, resident director, inter-company agreements and international tax structuring.

Key opinion leaders

Professor Derek Chew

Cardiology
MBBS, MPH, FRACP

Professor Chew is a clinical and interventional Cardiologist as well as a clinical trialist and outcomes researcher in cardiovascular medicine. His clinical and research career is centred on the translation of current and future therapies and technologies in cardiology to improved patient outcomes in a clinically effective manner.

Professor Timothy P. Hughes

Oncology: chronic myeloid leukaemia
MD, FRACP, FRCPA, MBBS, FAAHMS

Professor Hughes had a significant leadership role in the establishment of the molecular response criteria and kinase domain mutation screening guidelines that are used world-wide to monitor response and resistance in chronic myeloid leukaemia (CML). He has been a principal investigator on many of the key Global and Australian CML trials that have shaped the way tyrosine-kinase inhibitors (TKI's) are selected and sequenced. He has been a leader in the area of treatment-free remission (TFR) and influential in the recent recommendations to make TFR a mainstream goal of therapy.

Professor Chris Karapetis

Oncology (lung, gastro-intestinal, colorectal cancer, predictive biomarkers, epidemiology)
MBBS, MMedSci (Clin Epi), FRACP

Professor Karapetis has been the principal investigator on over 160 clinical trials and specialises in medical oncology and innovation in cancer.

Dr Ganessan Kichenadasse

Oncology: (brain, gynaecological, genitourinary, sarcomas, breast, thyroid, rare cancers)

MBBS, FRACP

Dr Kichenadasse is an Oncologist and a Pharmacologist with special interest in the management of variety of cancers such as brain, gynaecological, genitourinary (bladder, kidney, prostate), sarcomas, breast, thyroid cancers, cancer of unknown primary and other rare cancers. His other passion is conduct and design of all phases of clinical trials for cancer therapies with a focus on early phase (first in human) drug trials.

Professor Guy L Ludbrook

Anaesthesia, neurology, First-In-Human
PhD, MBBS, FANZCA

Professor Ludbrook is Director of an early phase clinical trials unit, PARC Clinical Research, located within the Royal Adelaide Hospital. He has been principle investigator on multiple clinical trials, both commercial and investigator-initiated, and sits on data safety monitoring boards for multiple international clinical trials.

Professor Maria Makrides

Nutrition - mothers and babies
PhD, BSND, BS

Professor Makrides is the Theme Leader for SAHMRI Women and Kids at the South Australian Health and Medical Research Institute. Maria leads a multi-disciplinary research group of over 60 staff who are highly skilled in conducting and translating nutrition intervention trials involving mothers and babies. Maria has over 300 peer reviewed publications including a number in the prestigious journals The Lancet, The Journal of the American Medical Association and the British Medical Journal.

Professor Helen Marshall

Infectious diseases
MBBS, DCH, MPH, MD

Professor Helen Marshall is a medical researcher with specialist training in child health, public health and vaccinology and has been an investigator on 108 implementation, clinical and epidemiological studies. She was the recipient of the Australia Day Council, Inspiring South Australian Women Award in 2020.

Dr Tom Polasek

Clinical Pharmacology: modelling and simulation
BSc, BPharm (Hons), PhD, MD

Tom is a Medical Officer at CMAX Clinical Research Pty Ltd. Tom's research interests include all aspects of clinical pharmacology and is particularly focused on the clinical application of modelling and simulation approaches to improve the quality use of medicines. Tom is the author/co-author of more than 80 peer-reviewed articles and conference presentations.

Dr Amitech C Roy

Oncology (lung, gastro-intestinal cancer, melanoma, neuroendocrine tumours)
MD, FRACP, MSc (UK), AFRACMA

Dr Roy has been named as an investigator on a number of grants relating to medical oncology clinical trials and principal investigator in clinical trials.

Professor Sepehr Shakib

Clinical pharmacology, First-In-Human clinical trials
MBBS, FRACP, PhD

Professor Shakib has worked with CMAX as a Principal Investigator for more than 20 years and is a recipient of multiple awards and grants and has over 100 publications in a range of areas. He has been involved in over 250 first in human clinical trials in a wide range of therapeutic areas.

Leading registries

South Australia's quality data and patient information has, over decades, translated into some of the best registries in the world, with many bringing together unique insights, diversity, timeframes and research connectivity.

Biobanks and registries

State registries

- SA NT Datalink (SANT)
- Coronary Angiogram Database of South Australia (CADOSA)
- South Australian Cancer Registry (SACR)
- South Australian Prostate Cancer Clinical Outcome Collaboration (SA-PCCOC)
- South Australian Birth Defects Registry (SABDR)



National / ANZ registries – initiated/managed within Adelaide BioMed City Precinct

- Registry of Senior Australians (ROSA)
- Australian Cardiac Outcomes Registry (ACOR)
- Australia and New Zealand Dialysis and Transplant Registry (ANZDATA)
- Australian Spinal Cord Injury Registry (ASCIR)
- Orthopedics Joint Replacement Registry (AOANJRR)
- The Australian Corneal Graft Registry (ACGR)
- Australian Bone Marrow Donor Registry (SA)



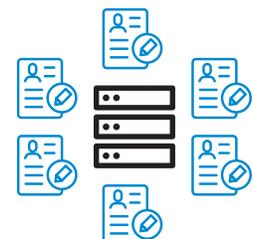
National / ANZ registries – contributed to by South Australia

- National Mortality Database (NMD)
- National (Insulin-dependent) Diabetes Register (NDR)
- Australian Mesothelioma Registry (AMR)
- Australian Diabetes and Obesity Lifestyle Study
- Dental Implant Registry
- Australian New Zealand Clinical Trials Registry (ANZCTR)
- Australian Cancer Database (ACD)
- National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection
- National Perinatal Data Collection (NPDC)
- National Perinatal Mortality Data Collection (NPMDC)
- National Rheumatic Heart Disease Data Collection (NRHDC)
- National Staphylococcus aureus Bacteraemia Data Collection
- Australian and New Zealand Thyroid Cancer Registry (ANZTCR)
- Australian Bleeding Disorders Registry (ABDR)
- Myeloma and Related Diseases Registry



Biobanks

- South Australian Cancer Research Biobank (SACRB)
- Brain Cancer Biobanking Australia (BCBA)
- David Serisier Respiratory Biobank (DSRA)
- The Australian Cerebral Palsy Biobank
- Australian Prostate Cancer BioResource





Leading the nation in AI in healthcare

Adelaide is Australia's home for AI and data analytics driven innovation and is leading the nation in AI in healthcare.

The Australian Institute for Machine Learning (AIML), ranked in the top five globally for computer vision (csrankings.com), is Australia's largest AI capability. The Massachusetts Institute of Technology (MIT) bigdata Living Lab links South Australia through to MIT's world leading data analytics capabilities. Together they are the foundation of the state's knowledge ecosystem, generating new knowledge and technologies.

The Australian Research Centre for Immersive and Virtual Environments (IVE) completed more augmented reality research than any other institution or university globally and adds world-leading capabilities in narrative visualisation and human centred design to our innovation ecosystem.

The Australian Cyber Collaboration Centre (A3C) is also based in Adelaide and is a central connection point for organisations looking to improve their cyber resilience and data protection capabilities.

South Australia's position as a global leader in AI has attracted some of the world's most innovative and forward-thinking organisations. Amazon Web Services, Google Cloud, Microsoft Azure, Nokia, Accenture, Deloitte, PwC, MTX Group and Telstra Health (Dr Foster) have established operations in South Australia, focused on delivering AI innovation. By partnering with AIML and MIT bigdata Living Lab, these organisations will leverage innovation developed in Adelaide to deliver their competitive advantage and further their global ambitions.

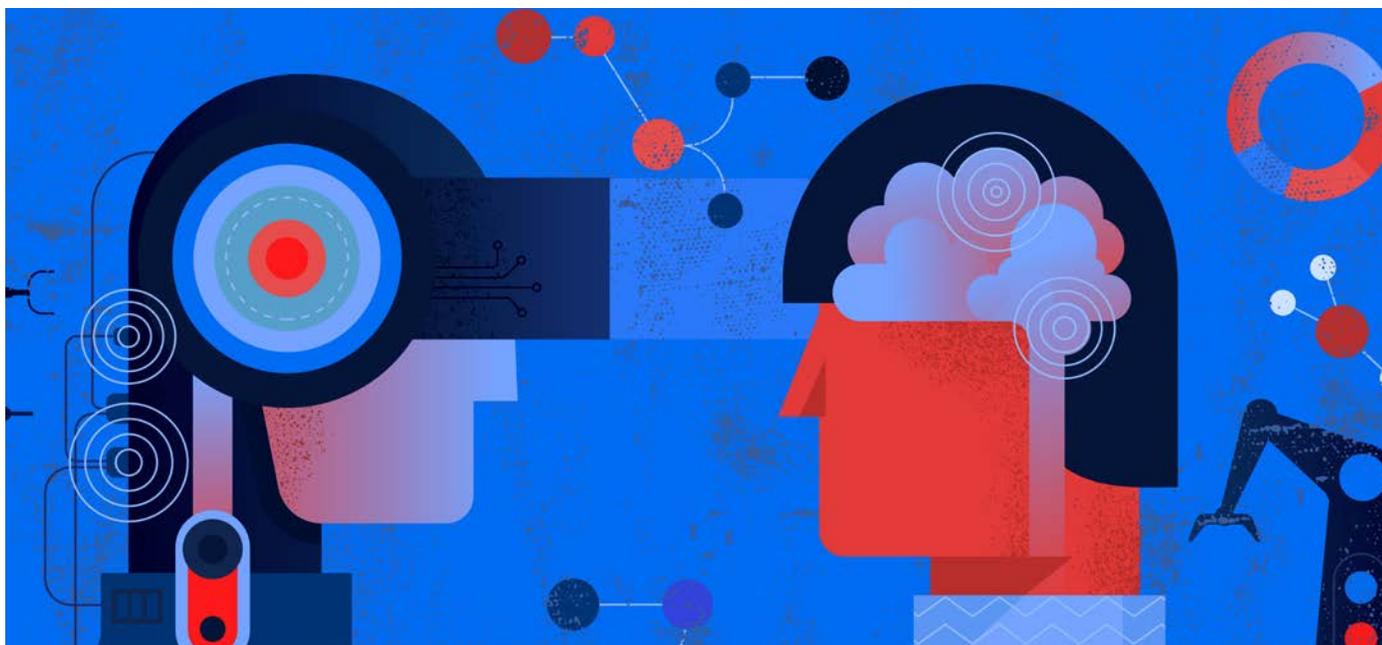
South Australia's robust healthcare and data management systems see us uniquely positioned for developing, applying and commercialising AI solutions for global health problems.

South Australia is embracing the ability for AI to deliver the biggest transformative impact to health care in decades. Government, industry and academia work together to transform health system efficiency, driving better operational and clinical decision-making and improving patient outcomes.

World-leading AI research capabilities

- Australian Institute for Machine Learning
- Centre for Augmented Reasoning
- MIT bigdata Living Lab
- Digital Health CRC
- Research Centre for Immersive and Virtual Environments
- Amazon Web Services Applied Sciences





Australian Institute for Machine Learning

The Australian Institute for Machine Learning (AIML) is working with companies including Roche, GSK, Siemens, Google, Apple, Lockheed Martin, BAE Systems and BHP Billiton. AIML is a key anchor tenant of Lot Fourteen, Australia's leading hi-tech innovation precinct.

AIML ranks in the top five worldwide in computer vision (csrankings.com) and is the top site in Australasia for AI research generally, with world-class expertise in the methods that support this; AI, computer vision and deep learning.

The institute is led by Professor Simon Lucey, who spent 10 years with Carnegie Mellon University's Robotics Institute and was the Principal Scientist at Argo AI – a USD\$1billion start-up company that builds self-driving cars.

AIML's Centre for Augmented Reasoning leads the research and development of new augmented systems and improves machine learning technology across a range of applications, which include:

- collaborating with world-leading companies and government, to develop hi-tech products and solutions
- carrying out world-leading research in one of the most competitive fields globally;
- machines that continually learn new things while interacting with the environment
- machines that work with data analysts to optimise business processes
- machines that can ask people questions in ways that are more natural and easier than filling in forms

- robots that can understand and follow instructions from people; and
- factories where people and machines work seamlessly together without the need for constant reprogramming of software.

AIML's major research themes:

- deep learning
- computer vision and robotic vision
- natural language processing and visual question answering
- medical machine learning
- space
- defence; and
- agriculture.

AIML is globally recognised as:

- largest Machine Learning Group in Australia – 140+ people, and growing
- top five in the world in publications in the key conferences in computer vision (csrankings.com)
- first – PASCAL Visual Object Classes repeatedly
- first – NIH – MEDICAL VQA CHALLENGE 2020 (IMAGECLEF)
- first – REFUGE Retinal Fundus Glaucoma Challenge 2019
- first – Nuclei Segmentation Challenge 2019
- first – European Space Agency Pose Estimation Challenge 2019
- second – Oz Minerals Explorer Challenge 2019
- first – Volkswagen Logistics Innovation Day in Shanghai, 2019
- first – Facebook Visual Question Answering 2.0 challenge
- first – CityScapes in 2018; and
- second – ImageNet Scene Parsing 2016.

Australian Institute for Machine Learning – Medical

AIML has established clinical research-focused partnerships with both state-funded and commercial organisations.

AIML is Australia's only member of the Global Alliance of AI Centres in Medicine. The alliance includes:

- Stanford University
- Harvard University
- Mayo Clinic
- Cleveland Clinic
- Duke University
- NYU Langone
- Children's Hospital of Orange County; and
- University of Bern.

Global pharma, biotech and technology partners:

- Roche
- GlaxoSmithKline
- Siemens Healthineers
- MIT bigdata Living Lab
- Amazon Web Services; and
- LBT Innovations.

AIML's local clinical research partners:

- SA Health
- South Australian Health and Medical Research Institute (SAHMRI)
- Royal Adelaide Hospital (RAH)
- Women's and Children's Hospital
- SA Pathology
- SA Pharmacy
- SA Medical Imaging; and
- BreastScreen SA.

AIML clinical areas of focus:

- clinical trials/drug development/testing
 - treatment response leukemia
- proteomics, lipidomics, metabolomics
 - lipidomics to predict cardiovascular disease and treatment response
 - breath analysis
- genomics/Statewide Genomics Centre
- immunotherapy response imaging
 - cardiovascular imaging
 - gastrointestinal colonoscopy
 - colorectal cancer
 - chest computed tomography/X-ray
 - orthopaedics
 - ophthalmology
 - critical care; and
 - breast cancer.

Centre for Augmented Reasoning

AIML's Centre for Augmented Reasoning leads the research and development of new augmented systems and improves machine learning technology across a range of applications, which might include:

- machines that continually learn new things while interacting with the environment
- machines that work with data analysts to optimise business processes
- machines that can ask people questions in ways that are more natural and easier than filling in forms
- robots that can understand and follow instructions from people; and
- factories where people and machines work seamlessly together without the need for constant reprogramming of software.

AIML is part of the University of Adelaide.

MIT bigdata Living Lab

One of only three such labs outside of the United States (the others being in Beijing and Istanbul), this collaborative research initiative led by the South Australian Government in partnership and participation with Massachusetts Institute of Technology (MIT), Bank SA, Optus and DSpark, the bigdata Living Lab works to better understand social interactions within the various communities across South Australia.

The bigdata Living Lab utilises MIT's world-leading secure data analysis tools and methodology to ensure data privacy is maintained and private and public organisations will be able to safely and securely analyse data to identify growth opportunities, improve government decision making and improve socioeconomic outcomes.

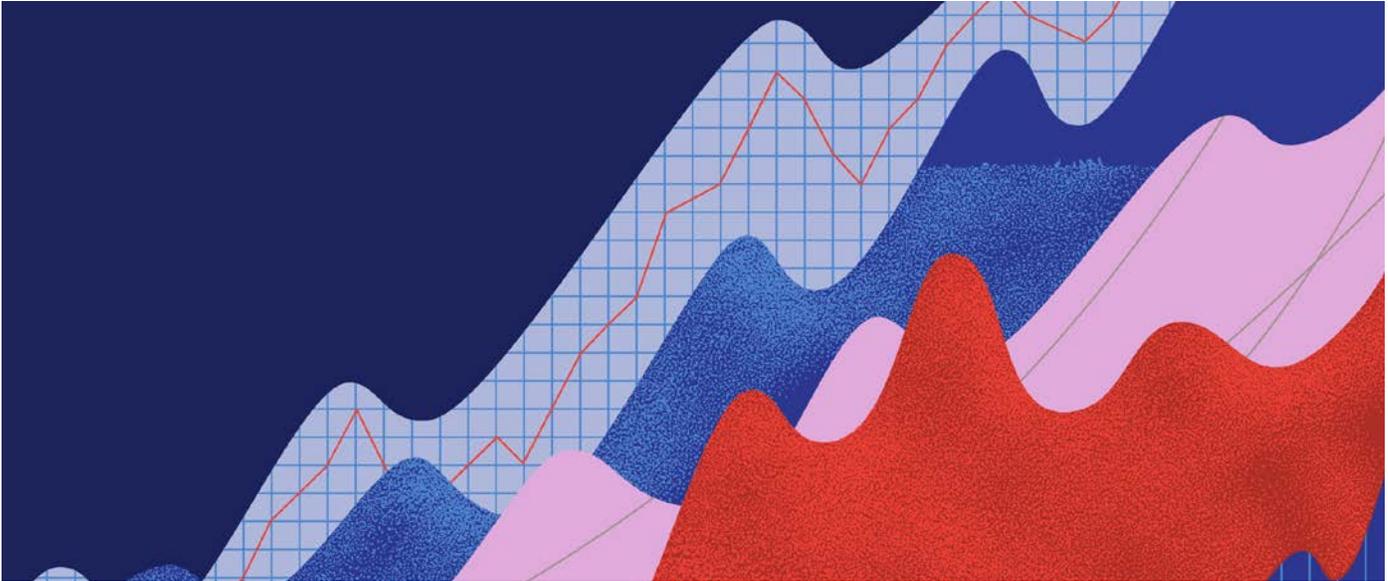
A raft of aligned projects is forming including health initiatives, blockchain and cyber security bringing in a wide range of stakeholders both locally and internationally.

Global organisations at the forefront of digital transformation are choosing to base themselves in South Australia's innovation hubs to innovate, scale and commercialise.



Working with MIT bigdata Living Lab will:

- protect the community's private data through world-leading tools, methodologies and data governance
- define the right question to ask of the data to give insights that lead to better decision making and improved socioeconomic outcomes; and
- unlock greater insights by securely accessing multiple bigdata sets across government and industry without compromising privacy.



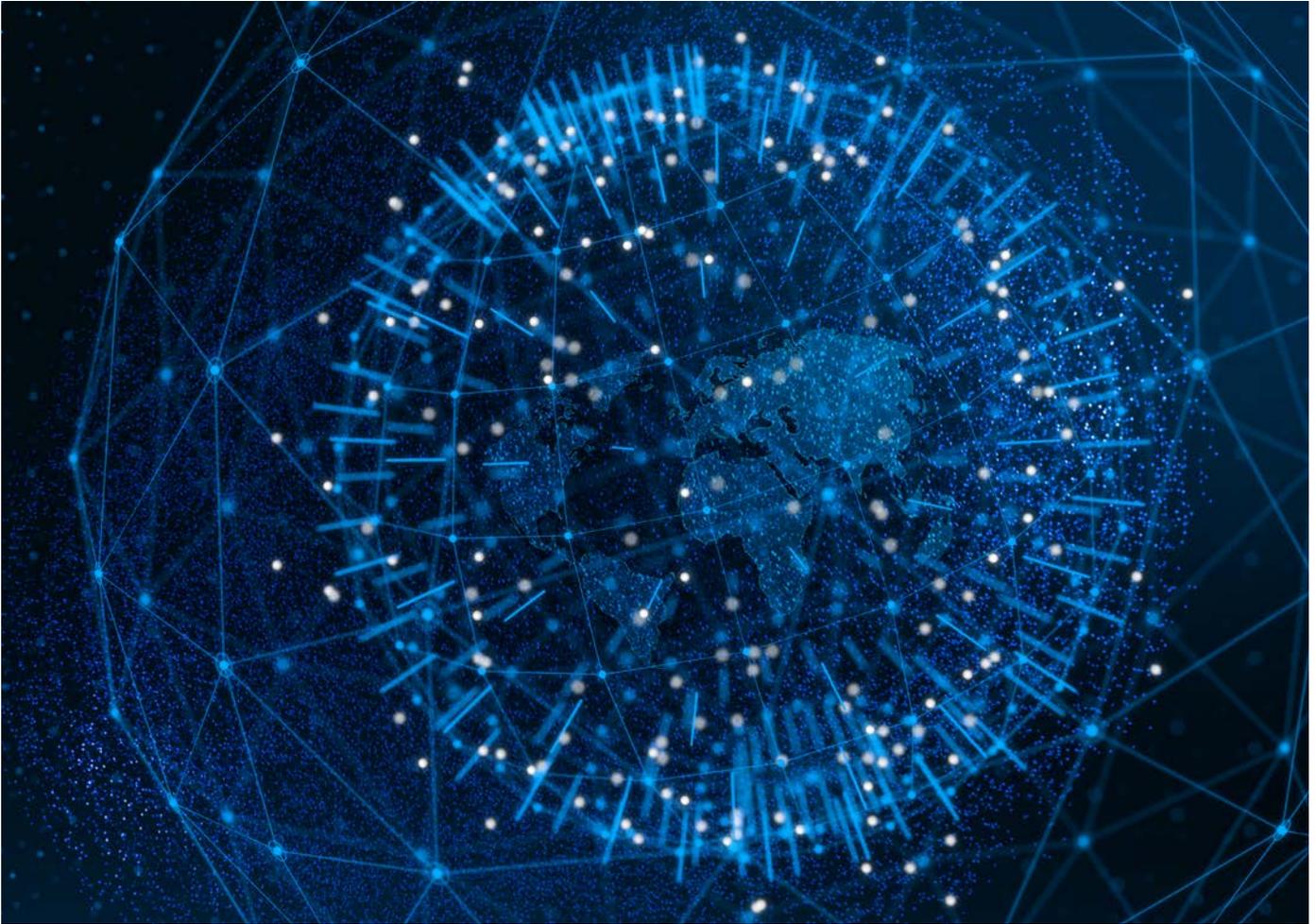
Case study – MIT bigdata Living Lab and SA Health

Partnering with MIT bigdata Living Lab, SA Health has initiated a project that leverages Adelaide's AI ecosystem to improve capacity planning for the South Australian hospital network.

“The Office of the Chief Medical Information Officer, SA Health is developing innovative solutions to help clinicians access and use clinical data to improve patient care and patient outcomes.

By partnering with MIT bigdata Living Lab we are working to introduce ground-breaking protocols that protect the community's data while linking clinical data with broader community trends to generate insights that can transform care across the entire health service. This project promises to revolutionise how we think about health treatment in South Australia, enhancing preventative care, while focusing resources.”

Dr Santosh Verghese,
Chief Medical Information Officer, SA Health



Australian Research Centre for Interactive and Virtual Environments

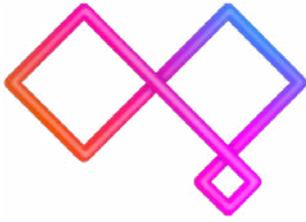
Leading-edge immersive capability, the Australian Research Centre for Interactive and Virtual Environments (IVE), is a world leader in augmented reality (AR) and virtual reality (VR) and have produced the most AR papers of any institute or university in the world.

Led by Professor Bruce Thomas as Director, IVE brings together a team of world-leading researchers in AR and VR. Professor Thomas is nationally and internationally recognised for his contribution to wearable computers, laptop interactions, augmented reality and user interaction. Also forming a part of the IVE leadership team is Deputy Director Professor Mark Billinghurst. Professor Billinghurst is recognised for his expertise in AR, exploring innovative computer interfaces that merge virtual and real worlds. He has received several accolades for his contribution to human interface technology research.

IVE explores how immersive technologies can be applied to improve the wellness of individuals through enhancing widely regarded therapies, the development of new therapies or creating environments that improve an individual's wellness. IVE looks to enhance health and medical procedures through applying mixed reality technologies in developing medical devices with AR and visualisation and sensory data analysis.

Working with IVE can put your company at the cutting edge of immersive environments for remote operations and delivers a deeply embedded user experience.

Combining computer science, industrial design, architecture, art and human factors, IVE applies a multi-disciplinary approach to solving challenging problems that helps pave the way for the delivery of new products and services.



digital
health
crc

Digital Health Cooperative Research Centre

The Digital Health CRC (DHCRC), the world's largest Digital Health Collaborative, is Australia's leading organisation for digital health innovation and commercialisation with a network of over 70 participants.

DHCRC connects the ecosystem of industry, government, providers, consumers, academia and research to solve the most pressing healthcare challenges.

Focused on a sustainable impact on health outcomes and increased efficiencies, DHCRC identifies, co-invests and supports projects, accelerating the implementation of digital health technologies, underpinned by research-driven evidence.

An incubator for partnerships, translation and commercialisation, the DHCRC has specific interest in the following themes.

Healthcare themes:

- chronic disease
- aged care
- women's health
- emerging infectious diseases
- Indigenous health
- cancer care transformation
- mental health; and
- neurological diseases.

Technology themes:

- virtual care
- telehealth
- consumer health; and
- data flow.

Digital Hive

Funded by the Commonwealth Government and industry partners with AUD\$200million, DHCRC is creating Digital Hive – Australia's first centre for digital health commercialisation.

Digital Hive will act as an intermediary service, intelligently connecting problem with solution, focusing on scalability and commercialisation.

A subsidiary of DHCRC, Digital Hive will solve national and global problems and accelerate digital health solutions and capabilities at scale.



AI in Health Hub

The South Australian Government has established the AI in Health Hub to catalyse use cases into projects that improve lives and deliver global commercial outcomes.

South Australia has world-leading AI and data analytics capabilities, the best longitudinal clinical dataset in Australia and a world-class universal healthcare system. This is complemented by the largest concentration of clinical research in the Southern Hemisphere, a complete clinical trial ecosystem and the presence of world-leading technology companies.

Working with the health system, research capabilities and commercial organisations, the AI in Health Hub will bring project partners together around use cases to develop proof-of-concept or pilot solutions that have the potential to solve global health problems

Each project will aim to introduce a non-South Australian company to deliver the project in collaboration with at least one of the Australian Institute for Machine Learning (AIML), Massachusetts Institute of Technology (MIT) bigdata Living Lab or the Research Centre for Interactive and Virtual Environments (IVE); or any other approved research and development capability in South Australia

The AI in Health Hub invites pharma, digital health and technology companies to leverage the State's health and hi-tech ecosystem and collaborate on innovation.

The South Australian Government has partnered with the Digital Health CRC (DHCRC) to optimise project success through applying the CRC's program management expertise and financial support.



Case studies – Digital Health Cooperative Research Centre

PreHaRM: a predictive harm response management algorithmic tool to reduce adverse events in healthcare settings.

Project Participants

Government of South Australia, Central Adelaide Local Health Network, Southern Adelaide Local Health Network and University of South Australia.

This project leverages the opportunity to apply advanced data science techniques to support clinical and executive decision-makers, including optimising patient data analytics to create value for health consumers and stakeholders.

It aims to develop, pilot-test and implement predictive harm algorithms for the two largest health networks in South Australia; Central Adelaide Local Health Network (CALHN) and Southern Adelaide Local Health Network (SALHN).

This tool will utilise existing software frameworks to build a visual, interactive program that will be accessible and reported via a dashboard summary for clinicians and administrators. This will allow them to view real-time insights that describe risk stratification in the hospital setting and produce their own assessments and predictions in real-time to forecast special considerations for safety measures to be implemented.

The project is using 18 months of source data from two major hospitals in CALHN, the Royal Adelaide Hospital and the Queen Elizabeth Hospital.

Pioneering medtech commercialisation

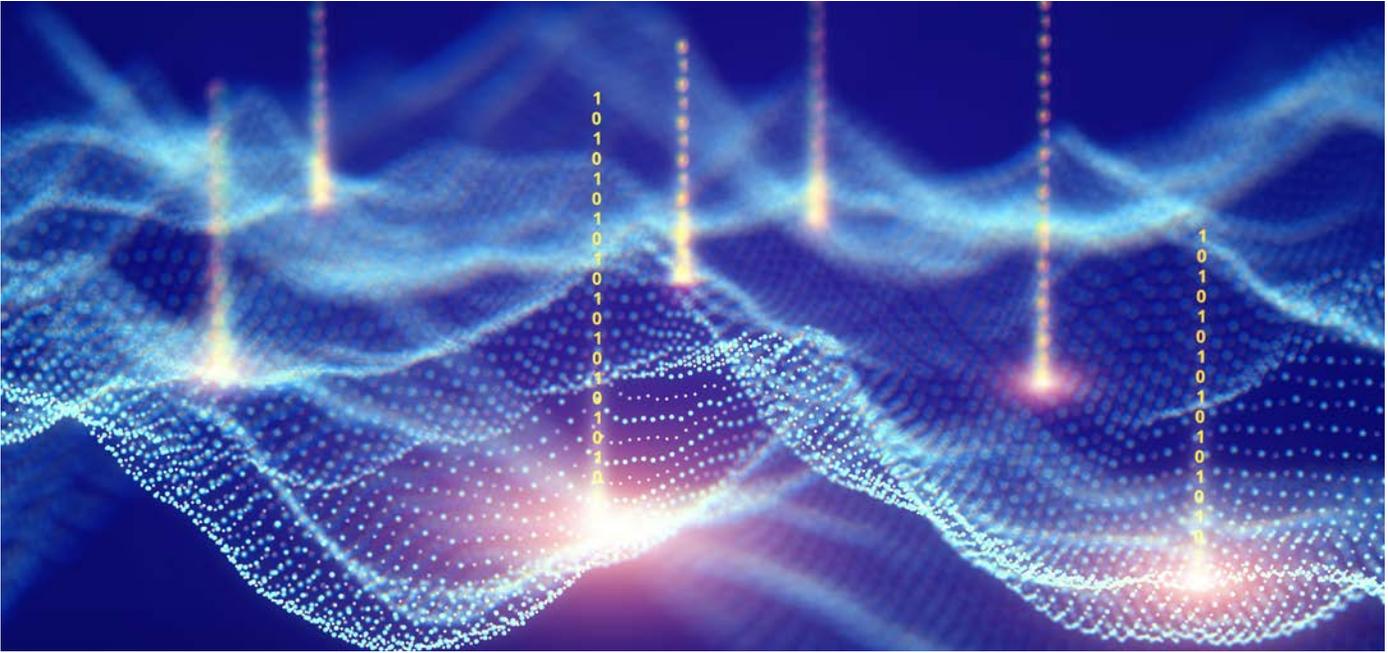


South Australia is pioneering excellence in medtech with a proven manufacturing track record buoyed by our clinical trial expertise and hi-tech capabilities. Our world-leading capabilities in artificial intelligence (AI), machine learning and data analytics are being leveraged by companies embracing innovation and transformation from product development to scaling business growth.

South Australia's highly connected medtech ecosystem is shaping the medtech landscape within Australia, from a company delivering 3D advanced manufactured, anatomically accurate, human body parts to an AI healthcare company improving pregnancy rates with a cloud-based AI system for patients receiving fertility treatments.

Recognised for their expertise in the design, development and manufacturing of medical devices, companies based in South Australia are supported by a highly collaborative network across research, industry and government. The Medical Device Partnering Program (MDPP) was established in 2018 to grow the state's medical technology sector and foster greater collaboration between industry and research. The initiative has been so successful that the MDPP is now operating nationally.

South Australia is the place for medtech companies to achieve key clinical milestones and accelerate the adoption and commercialisation of new devices.



Medical Device Partnering Program

The Medical Device Partnering Program (MDPP) is an award-winning industry and research engagement program established in South Australia. MDPP fosters collaborations between researchers, industry, end-users and government to develop medical technologies with global market potential.

The MDPP provides a mechanism to develop proof-of-concept, prototyping, clinical evaluation and commercialisation planning, enabling clients to leverage the best expertise, perspectives and networks.

The MDPP supports medtech solutions including;

- therapeutic devices
- diagnostics
- hospital equipment and accessories
- surgical instruments
- assistive technologies and software; and
- simulation tools.

The MDPP has considered over 650 ideas for new medical devices and completed over 170 collaborative workshops and 100 R&D projects since establishment.

Projects have included glasses that help frequent flyers and shift workers adjust their sleep cycle, a cancer-detecting probe that is improving surgical outcomes and a device to assist orthopedic surgeons when fixing bone fractures.

Medical Device Research Institute

The Medical Device Research Institute (MDRI) is uniquely multi-disciplinary, working closely with industry, the clinical community and government. MDRI collaborates on creative solutions to address global healthcare challenges.

Headquartered at Tonsley Innovation District within Flinders University's AUD\$120million hub, a dynamic environment that facilitates industry–researcher collaboration. MDRI is committed to advancing Australia's medtech sector and takes a holistic approach to research and teaching integrating engineering, medicine, allied health and information technologies.

MDRI operates with key themes:

- applied research
- facilities and equipment
- research translation
- workforce development.

Research capabilities include:

- Experimental biomechanics
- Motion analysis
- Computational biomechanics
- Sensors
- Signals and image analysis
- Data and cyber security
- Advanced prototyping
- Artificial intelligence and machine learning; and
- PPE testing.

Conducting research in close collaboration with industry and clinical partners, the MDRI also supports the Australian medtech sector through targeted initiatives including:

Alertness CRC

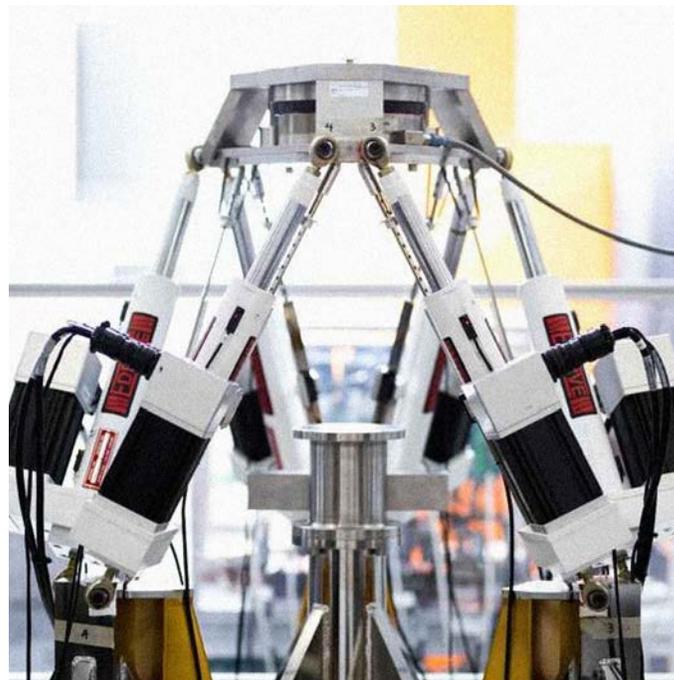
Alertness CRC is an industry-focused program addressing alertness, safety, productivity improvement and sleep research for the workforce. MDRI researchers work with Alertness CRC contributing to device planning, development and personalised sleep health management.

BridgeTech program

BridgeTech is a national professional development program training researchers and entrepreneurs on the commercialisation pathway of new medical technologies. MDRI is a consortium partner of the program led by the Queensland University of Technology.

Biomedical Translation Bridge (BTB) program

An initiative of the Medical Research Future Fund, the BTB program provides up to AUD\$1 million in matched funding for research translation of new therapies, technologies and medical devices. Flinders University, through the Medical Device Partnering Program, is one of three lead partners responsible for assessing and supporting eligible medical technology applications for funding.



Cisco Health IoT lab / Digital Health Design Lab

The new Flinders Digital Health IoT Laboratory is a unique space promoting medical simulation, digital health design and IoT (internet of things) in health. It is a collaborative initiative with Cisco, the Digital Health Research Centre and MDRI working together on emerging technologies to improve healthcare.

Australia–China Centre for Personal Health Technologies

The Australia–China Centre for Personal Health Technologies, led by Flinders University, is a partnership between MDRI, La Trobe University, Motherson Innovations (an Adelaide-based manufacturer) and Chinese partners Nankai University, Shandong Academy of Science, South China University of Technology and Shenzhen AIEgen Biotech. Together, they are developing state-of-the-art personal medical devices incorporating smartphone technology for e-health services, real-time health insights and illness management.

The MDRI is headquartered at Tonsley Innovation District within Flinders University's AUD\$120 million hub, a dynamic environment that facilitates industry–researcher collaboration.



Fusetec

South Australian medical device company Fusetec is revolutionising medical training, using advanced additive manufacturing of human body parts for use as teaching aids during surgical training; complete with realistic and anatomically accurate bone, skin and muscle.

Fusetec opened the world's first 3D advanced surgical training clinic in January 2022, within Adelaide's BioMed City. This AUD\$6.8million investment is part of the company's AUD\$26.5million expansion plan in South Australia. The 25-bed clinic utilises Fusetec's fully operable, soft tissue, surgical training models to train surgeons to perform complex surgeries.

The 3D advanced manufactured, anatomically accurate human body parts disrupt the cadaver market by providing fully operable manufactured products with no harmful infectious diseases and pathology on demand. The clinic attracts surgeons and medical staff from around the globe to rehearse and upskill on rare and complex pathologies.

In a world-first, Fusetec's advanced medical devices and training facilities were demonstrated in 2021, with the University of Adelaide partnering with Hokkaido University to remotely train more than 200 surgeons in Japan in sinus surgical procedures using Fusetec's 3D models.

Fusetec's 3D clinic is the only location in the world where surgeons can upskill and rehearse on advanced manufactured models that translate to living patients and de-risk medical procedures for patients and medical professionals.

“There is a growing need globally for safe, affordable, customisable, and reusable medical devices... COVID has impacted the supply of ‘fresh’ cadavers for medical purposes, furthermore, the cost of purchasing them has risen substantially... Fusetec’s solution solves this and does not have any of the inherent risks associated with cadavers – there are no harmful bacteria, no strict storage and disposal protocols, and no regulatory burdens. Our medical devices are mass-produced, sterile, readily available, and come with pathology on-demand.”

Mark Roe, Chief Executive Officer at Fusetec



Nova Eye Medical

Formerly part of Ellex Medical Lasers Limited, Nova Eye Medical has more than 30 years' experience in ophthalmology and is committed to advancing clinical outcomes to improve patient quality of life. Nova Eye Medical designs, develops, manufactures and markets a portfolio of proprietary glaucoma treatment technologies.

Through close collaboration with teaching institutions, researchers and ophthalmic physicians, Nova Eye Medical is introducing a comprehensive portfolio of novel glaucoma treatment options which span the entire disease process – enabling physicians to intervene earlier, and more often, in the treatment of glaucoma. Its highly successful consumables, iTrack™ and Molteno3 devices, reduce intraocular pressure for patients with mild-moderate to severe and complex glaucoma.

AlphaRET, a wholly owned subsidiary of Nova Eye Medical Limited, has been established to drive commercial development of its 2RT® project. 2RT®, a rejuvenative retinal laser therapy that utilises a nanosecond laser pulse and unique pixelated laser beam profile, has the potential to provide selected patients with iAMD the opportunity to delay their progression to vision threatening, late-stage AMD.

In May 2022, through feedback from the United States Food and Drug Administration (FDA), AlphaRET announced that it has defined a clinical study plan and United States regulatory approval pathway for the 2RT® retinal rejuvenation laser for intermediate age-related macular degeneration (iAMD).

Nova Eye Medical is headquartered in Adelaide and has approximately 50 staff based in California and Adelaide.



Presagen (Life Whisperer)

Presagen's innovative use of AI is reducing the time to become pregnant and the cost of fertility treatments. An AI healthcare company based in Adelaide's innovation hub Lot Fourteen, Presagen's Life Whisperer system analyses the quality and viability of embryos and selects the healthiest embryos to transfer during in vitro fertilisation (IVF).

Life Whisperer offers new hope to improve pregnancy rates with a cloud-based AI system, trained on over 20,000 globally sourced 2D embryo images; a powerful basis for the Life Whisperer AI to quickly identify features invisible to the human eye.

Clinics around the world use Life Whisperer to help skilled embryologists identify the most viable embryos to focus on for their patients. With greater IVF certainty, more people can attempt IVF to build their family. The technology is complementary to IVF clinics' current workflow and embryo selection techniques. It eliminates subjectivity and ensures standardised grading within and across clinics.

According to Presagen's chief executive and co-founder Michelle Perugini, an international clinical trial involving 1,600 embryo images found Life Whisperer Viability was 25 per cent more accurate in assessing an embryo's viability than highly experienced embryologists alone and reduced the time it took to become pregnant by 15 per cent.

Life Whisperer is currently approved for use in Australia, Canada, Europe, Hong Kong, India, Japan, New Zealand, Singapore, United Kingdom and Vietnam.

Helixa Proprietary Limited

Helixa Proprietary Limited, a South Korean genetic analysis company, uses leading artificial intelligence on cancer samples for individualised treatment to predict the best outcome options. It offers a new generation of personalised care and is the first of its kind for cancer therapy in Australia.

Helixa Proprietary Limited is a commercial entity of the Samsung Genome Institute and is establishing in South Australia's Tonsley Innovation District.

The company's initial focus will be the introduction of services using Cancerscan and Liquidscan for in-vitro cancer sample analysis to predict treatment outcomes. Going forward, the company will also establish laboratory services and training in South Australia.

The company's capability and technology will have broad benefits to South Australia's health and medical industries' ecosystem through interactions with artificial intelligence, research and development and clinical trials.

Helixa Proprietary Limited chose to establish their laboratory in South Australia due to its leading health and medical facilities and valuable professional networks and associates.



“Helixa uses the most advanced methods known to deliver precision therapy, we use the genetic sequence of each cancer to predict the optimal validated drug that will improve the outcome of treatment. This avoids needless suffering for patients and increases doctor’s productivity.”

Dr Clay Matthews, Chief Executive Officer
at Helixa Proprietary Limited



AZ3D

AZ3D is a medical 3D printing startup aimed at enabling medical device companies, hospitals and research institutions to better integrate 3D printing for precision health care. AZ3D chose South Australia as the Asia-Pacific headquarters for its parent company Anatomiz3D.

Since establishing in South Australia in 2020, AZ3D has leveraged its expertise to contribute to South Australia's globally-networked medical 3D printing and bioprinting ecosystem. As a significant collaborator and innovator, AZ3D has enabled new developments in bioprinting together with South Australian universities and has secured partnerships and contracts domestically and internationally.

Products:

- anatomical models
- surgical guides
- implants
- cranial helmets; and
- education and simulation models.

Services:

- product design
- rapid prototyping
- research and development; and
- educational courses and workshops.



Additive Surgical

Additive Surgical is the first company in Australia to manufacture novel 3D printed titanium spinal implant products, using state-of-the-art, European IP. Established in 2020, they are the Australian subsidiary of Tsunami Medical SRL operating their manufacturing, marketing and sales of Tsunami Medical's second-generation implants to Australia.

Additive Surgical recently announced a move to South Australia to leverage our state's strengths in medical technology and advanced manufacturing capabilities to develop new products.

Additive Surgical works closely with Professor Karen Reynolds in the Medical Device Research Institute at Flinders University and six South Australian surgeons to perform R&D and develop new orthopaedic implant products which will be manufactured in South Australia.

Adelaide innovation and research hubs



Health and life science innovation precinct

Adelaide BioMed City

With more than 2,000 researchers and 10,000 staff, the AUD\$3.8billion Adelaide BioMed City precinct is home to expertise and capabilities that can deliver immediate value for your company. This health and life sciences precinct brings together institutes and centres from health and life sciences, clinical care, research, education and industry.

The precinct is built around the Royal Adelaide Hospital (RAH) and the South Australian Health and Medical Research Institute (SAHMRI), offering a true bedside-to-bench capability with a key focus on research translation to improve health outcomes for patients.

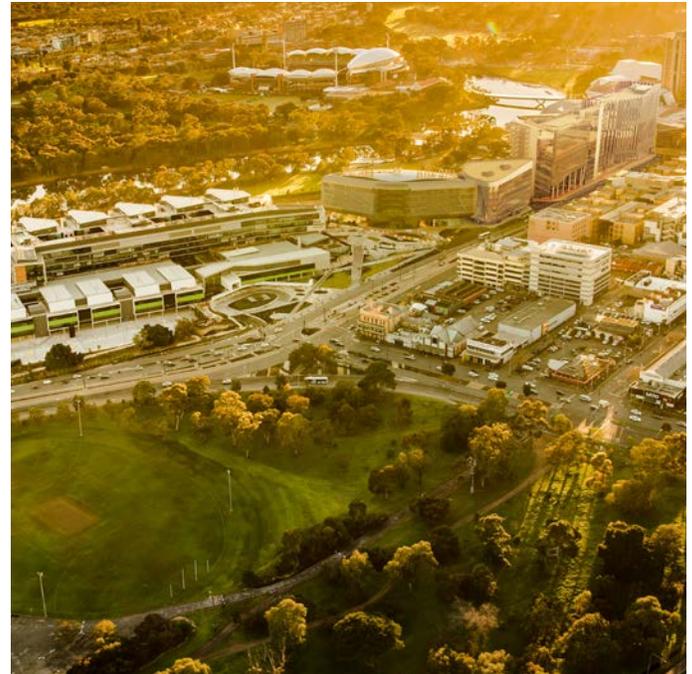
Opened in 2017, the RAH is one of the world's most expensive and technologically advanced healthcare facilities. With a single electronic medical record (EMR) and a statewide single patient identifier, the RAH is part of a healthcare network that includes three major teaching hospitals, the Women's and Children's Hospital, three acute care metropolitan hospitals and more than 67 regional facilities.

SAHMRI, the state's flagship research institute, has a key focus on research translation with precision medicine, lifelong health (mind and brain, nutrition and metabolism and heart health), women and children, and Aboriginal health as the major themes. SAHMRI hosts Australia's largest and most successful data registries.

The precinct is home to a range of specialist research institutes and organisations that are supported by a world-class genomics capability, a cancer research biobank and the country's largest public pathology and medical imaging capabilities.

In addition, Adelaide BioMed City incorporates state-of-the-art, FDA-accredited Good Manufacturing Practice (GMP) manufacturing, servicing research and development to commercial scale. This is supported by Line Zero, an Industry 4.0 research, development and innovation centre.

Combining Australia's most experienced end-to-end clinical trial supply chain with a regulatory framework that provides the fastest pathway to First-In-Human (FIH), Adelaide BioMed City enables clinical trial conduct for submission to global regulatory agencies.



With South Australia ranked above the number one Organisation for Economic Co-operation and Development (OECD) country for impact of research citations in chemical engineering, chemical science, mathematical science and computational theory, mathematics, ICT, artificial intelligence and image processing, the Adelaide BioMed City research and university capabilities produce the largest concentration of clinical research in the Southern Hemisphere and are ranked in the top two per cent globally.

South Australia has Australia's highest ratio of universities per capita. The University of Adelaide is ranked in the top one per cent of global universities, the University of South Australia is ranked 25 in the world for universities under 50 years old and 90 per cent of research at Flinders University is rated world-class.

Adelaide BioMed City has a pipeline of new projects that will soon position and deliver the AUD\$6billion precinct as one of the world's largest and most advanced including the Australian Bragg Centre for Proton Therapy, the South Australian immunoGENomics Cancer Institute (SAiGENCI), hi-tech new Women's and Children's Hospital (nWCH) and a new highly specialised pathology facility including pneumatic tubes to the RAH and nWCH.



Royal Adelaide Hospital

The Royal Adelaide Hospital (RAH) is the state's flagship hospital and is one of the world's most technologically advanced healthcare facilities. The RAH integrates the latest innovations across health, education and research to deliver high-quality care. It is the home to one of the biggest automated pharmacy distribution systems in the nation and is at the forefront of automated medication technology.

Celsus, the consortium that manages and maintains the RAH, has secured the world's largest healthcare sector green and social loan. This is groundbreaking, both in Australia and internationally, with the scale of the financing reflecting extraordinary credibility in the green and social market.



new Women's and Children's Hospital

Co-located with the RAH, the world-class new Women's and Children's Hospital (nWCH) will be Australia's first all-electric hospital, helping to avoid an additional 2,178 tonnes of greenhouse gas emissions each year. It will be entirely powered by the South Australian electrical grid – the cleanest in the country, through on-site electricity generation and storage.

The new hospital will improve the transition of care to adult services for adolescents, enhance mental health care facilities, and will further education, training and research capabilities with access to contemporary health services in a single location within Adelaide BioMed City.

Critical data for clinical care

Statewide Clinical Support Services

Statewide Clinical Support Services (SCSS) is the umbrella organisation that oversees pathology, pharmacy, breast screening and medical imaging. These services provide critical data to clinicians and patients to facilitate diagnosis and treatment. The SCSS governance structure provides a single point for engagement in relation to clinical trials and digital health. Combined, these four services capture 80 per cent of this health data from South Australia's population, including data from every child born.

SCSS has an ongoing partnership with AIML focused on leveraging these data assets to improve health outcomes for all South Australians.

SA Pathology

SA Pathology is the largest laboratory network in terms of volume, infrastructure and staff in South Australia. Performing over 42 million tests for the previous three financial years, complementing 80 years of historical pathology data, the organisation provides a critical service to clinicians and patients across the state, both within the community and across the vast public hospital network.

The ability to innovate and implement unique solutions is evidenced in SA Pathology's response to COVID-19. This included the world's first drive-through collection centre, with overall efforts and successes recognised with numerous awards including special recognition from the International Hospital Federation's Beyond the Call of Duty for COVID-19 response recognition program.

SA Pharmacy

SA Pharmacy provides a pharmacy service to South Australia's metropolitan public hospitals and at country hospitals with on-site pharmacy departments and associated outreach sites. This equates to over 650,000 patient interactions and over 1.15 million medications dispensed each year.

BreastScreen SA

BreastScreen SA is South Australia's dedicated breast cancer screening program, providing free screening mammograms (breast X-rays) every two years to women aged over 40.

This state wide service has seven fixed screening clinics and three mobile screening units throughout South Australia, screening around 100,000 women each year with the aim to detect breast cancer in early stage.

Since opening in 1989, BreastScreen SA has performed more than two million screening mammograms and reduced deaths from breast cancer by 52 per cent.

South Australian Medical Imaging (SAMI)

Established in 2012, South Australian Medical Imaging (SAMI) is the largest public imaging provider in Australia and provides specialist, integrated, multi-disciplinary medical imaging to public and private inpatients, outpatients and emergency department patients within seven metropolitan and four country South Australian hospitals. SAMI provides a 24/7 service and performs over 660,000 examinations each year, equally divided across inpatients, outpatients and emergency patients.

Research

SCSS and its research partners investigate many forms of cancers, immune and genetic disorders, infectious, lung and endocrine diseases, transplant treatments, burn therapies, spinal, joint and bone conditions, and advances in neuropathology and microbiology.

SCSS researchers conduct fundamental and translational research in world-class facilities to actively foster research and its translation into diagnostic testing. The fields of genetic and molecular pathology and cell imaging are areas where significant advances are being made in personalised medicine through innovative technology.



South Australian Genomics Centre

The South Australian Genomics Centre (SAGC) is a state-wide genomics facility that delivers state-of-the-art, end-to-end genomics services to the research and clinical communities in South Australia, nationally and internationally.

The SAGC is a partnership between SAHMRI, University of South Australia, Flinders University, the University of Adelaide, the Australian Genome Research Facility (AGRF) and the Australian Wine Research Institute (AWRI).

The SAGC provides a broad range of services including RNA sequencing, small RNA sequencing, exome and genome sequencing, epigenomics, metagenomics, single cell genomics and a range of custom methods.

These services are supported by a dedicated bioinformatics platform that supports users of the facility by developing advanced and customised approaches for data analysis, integration and visualisation. The SAGC supports researchers and clinicians from partner institutes, industry partners and other external clients.

All areas of genomics including animal, plant, environmental, microbial, and human genomics are supported.

The SAGC central hub is located in the SAHMRI building in Adelaide Biomed City and has additional nodes at the University of Adelaide's Waite Campus and Flinders University.



South Australian Cancer Research Biobank

The South Australian Cancer Research Biobank (SACRB) is the largest haematological disease biobank in Australia in terms of the total number of patients, specimens and individual diseases collected.

SACRB is a physical repository for biospecimens and clinical data collected from patients attending South Australian hospitals for a number of haematological and oncological disorders.

The repository includes existing and prospectively collected biospecimens and data. The key goal of SACRB is to provide infrastructure for the support of cancer research in South Australia to enhance scientific knowledge and improve patient treatment outcomes.

The SACRB has dedicated staff for specimen processing, storage and release, data management and quality assurance under the supervision of a scientific manager.

SACRB's biospecimen access policy and procedure focuses on the timely release of biospecimens for ethically approved projects.



SA-NT DataLink

SA-NT DataLink provides high quality data linkage services to support research, policy development, service planning and evaluation.

Located in Adelaide Biomed City at SAHMRI, the SA-NT DataLink provides access to accurate and unbiased information held by Government agencies and other organisations, enhancing SAHMRI's capacity to perform large-scale critical data linkage studies.

Using de-identified data linked for large or entire populations is more inclusive, representative and unbiased and more cost-effective and efficient than conventional studies based on sampling.

SA-NT DataLink's population research infrastructure has been established with high levels of security and best practices protecting the privacy of individuals while enabling widespread access to researchers.

SA-NT DataLink is a collaboration between South Australia and Northern Territory partners and part of an Australia-wide national data linkage network – the Population Health Research Network (PHRN).

Health and life sciences research



South Australian Health and Medical Research Institute

The South Australian Health and Medical Research Institute (SAHMRI) is our state's flagship health and medical research institute.

SAHMRI's key research themes are precision medicine, lifelong health (mind and brain, nutrition and metabolism and heart health), women and children, and Aboriginal health.

Within SAHMRI's precision medicine theme, the Blood Cancer Program researches in the areas of acute lymphoblastic leukaemia, acute myeloid leukaemia, chronic myeloid leukaemia, myelodysplastic syndromes and myeloproliferative neoplasms.

SAHMRI has significant clinical trial expertise and provides a central resource for conducting and coordinating clinical trials. The Institute's ability to collect, manage and store real life, large data sets coupled with its ability to apply AI including machine learning for insight and prediction through collaboration with AIML are central to SAHMRI's reputation as an internationally recognised leader in clinical trial coordination and completion.

Professor Steve Wesselingh, SAHMRI's Executive Director, asserts that AI has the potential for the greatest transformational impact on healthcare in decades and the Institute is working in partnership with AIML to realise this potential.

Data and AI are increasingly large parts of SAHMRI's diverse research programs. Data analytics, registries, data linkage, clinical trials and high-performance imaging are key components of the Institute's broader vision of ensuring the quality and sustainability of health care in Australia and globally.



The Australian Bragg Centre for Proton Therapy

Located within Adelaide BioMed City and set alongside SAHMRI, the Australian Bragg Centre for Proton Therapy will be Australia's first proton therapy unit and the first of its kind in the Southern Hemisphere. The centre will provide the most advanced precision proton radiation treatment to paediatric, adolescent and adult patients with rare cancer types.

Housing an additional 500 researchers, including key opinion leaders, over 14 levels, the building is expected to be completed in 2023.

The proton therapy machine will undergo 12–18 months of installation and testing before patient treatment commences.

Proton therapy delivers precise, non-invasive radiation that has the capacity to eliminate previously inoperable tumours while minimising exposure to surrounding healthy tissues. This will enable safer treatment of cancers in younger patients and cancers that are close to vital organs.

The Australian Bragg Centre for Proton Therapy will become Australia's primary capability for paediatric oncology and will incorporate a paediatric cancer biobank. The Centre will be an integral part in a global network undertaking proton therapy research. The technology is potentially beneficial in treating many other diseases and more research is set to be undertaken to consider and review this capability.

The Bragg Comprehensive Cancer Centre (BCCC) will be the new hi-tech cancer research centre to operate within the Australian Bragg Centre. The federal government recently announced it would invest AUD\$77million to establish the BCCC. The BCCC will transform cancer research, care, support and preventative measures for South Australians and people everywhere.

BCCC's principal partners are SAHMRI, the Central Adelaide Local Health Network, Women's and Children's Health Network and the University of Adelaide and is due for completion in 2025.

The centres will further position Adelaide as the best location for oncology patient treatment, clinical trial conduct and clinical research.



South Australian immunoGENomics Cancer Institute

The South Australian immunoGENomics Cancer Institute (SAiGENCI) is an independent cancer-focused medical research institute focusing on cancer research and clinical trials, which includes new cutting-edge technologies in immunotherapies and genomics.

SAiGENCI will be integrated with SAHMRI and the University of Adelaide to propel oncology drug development and enhance patient outcomes. Key opinion leader Professor Christopher Sweeney will lead the Institute, moving from Harvard University/Harvard Medical School/Dana-Farber Cancer Institute to Adelaide.

Cancer Research Institute

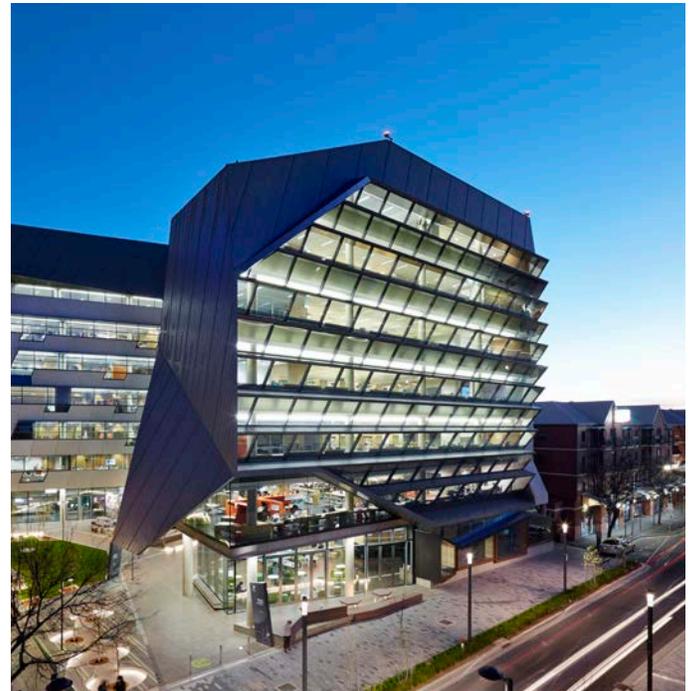
The University of South Australia Cancer Research Institute (UniSA CRI) is focused on personalised precision treatments, better diagnostics, prevention and survivorship. Research extends from discovering and developing new drugs, novel treatments, methods of detection and diagnosis, to improving prevention, screening, treatment and supportive care strategies.

Researchers include specialists in associated areas such as health economics, drug engineering, data and population health data. The following research centres are within UniSA CRI:

The Centre for Cancer Diagnostics and Therapeutics has seven research groups in drug discovery and development; mechanism in cell biology and diseases, experimental therapeutics, bone growth and repair, pharmaceutical innovation and development, nanostructure and drug delivery, and bioinorganic synthesis and imaging.

The Centre for Translational Cancer Research comprises of the Psychosocial Oncology Research Group conducting research into finding ways to improve the quality of life of people affected by cancer and the Medical Radiations Group consisting of research expertise across medical imaging, nuclear medicine and radiation therapy – all playing specific roles in diagnosis, staging, treatment and follow-up of cancers.

The Australian Centre for Precision Health (ACPreH) brings together a multidisciplinary group of leading experts in genomics, population health and evidence translation to create the next generation of solutions for global health problems.



Centre for Cancer Biology

The Centre for Cancer Biology (CCB) is an alliance between SA Pathology and the University of South Australia, currently hosting 22 full-time research group leaders and their teams.

CCB laboratories carry out research in leukaemia, breast cancer, prostate cancer, skin cancer, brain cancer and colon cancer, focusing on the specialised areas of gene regulation, molecular signaling, translational oncology and cancer genomics.

In addition to these laboratories, the Australian Cancer Research Foundation Cancer Genomics Facility provides access to state-of-the-art genomics research, equipment, computing technology and bioinformatics expertise to the Adelaide BioMed City precinct and the wider research community.

Translation of new discoveries into clinical practice is strengthened by the co-location of the laboratories within a single Institute, as well as its proximity and close collaboration with the Royal Adelaide Hospital, University of South Australia, the University of Adelaide and SAHMRI.

The CCB also has alliances with leading pharmaceutical companies to rapidly develop new discoveries.



Flinders Health & Medical Research Institute Cancer

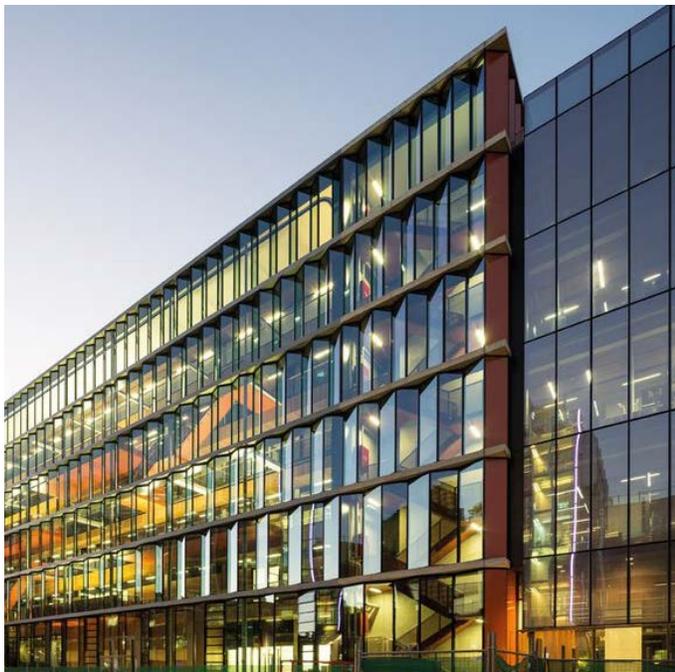
Flinders University is world-renowned for its cancer research, rated at well above world standard by the Australian Research Council's ERA 2018 assessment.

FHMRI Cancer brings together research laboratories, clinical and behavioural research facilities, state-of-the-art hi-tech research infrastructure, clinical trials and treatment in one flagship facility with more than 150 cancer-focused researchers and clinicians and patients.

FHMRI Cancer has made pivotal clinical discoveries that help prevent unnecessary chemotherapy through personalised medicine. The establishment of several biobanks, including the Flinders Biobank and the SA Neurological Tumour Bank provide an extensive library of tumour and matched normal tissue for analysis.

Flinders has been at the forefront of cancer prevention and early screening, with a significant role in the implementation of the National Bowel Cancer Screening program and the development of newer screening technologies, including the 2017 Eureka prize-winning Colvera blood test.





Institute of Photonics and Advanced Sensing

The University of Adelaide's Institute of Photonics and Advanced Sensing (IPAS) is a world-class research institute that brings together transdisciplinary teams of biologists, experimental physicists, chemists, material scientists, experimentally driven theoretical scientists and medical researchers to create disruptive new sensing and measurement technologies.

Their research is creating new approaches to sensing to solve real world measurement challenges for:

- health and biotech
- space science and astrophysics
- defence and security
- energy, mining and resources
- advanced manufacturing; and
- agri-food and wine.

IPAS is led by global thought leader Professor Andre Luiten, with a focus on the development of state-of-the-art instruments across diverse fields of physics. Professor Luiten is also the co-founder and managing Director of QuantX Labs, developing the highest precision timing and sensor products including the world's most precise clock.

ARC Centre of Excellence for Nanoscale BioPhotonics

The ARC Centre of Excellence for Nanoscale BioPhotonics (CNBP) focuses on creating new light-based imaging and sensing tools to measure the inner workings of cells inside the living body, as well as in other dynamic biological systems.

Led by the University of Adelaide, the CNBP has international partners and draws from a pool of expertise in fields as diverse as engineering, physics, chemistry, materials science and medicine. This collaboration aims to create the biomedical and biosensing tools of tomorrow.

The advanced tools and techniques that the CNBP develops enable living cells and tissues to be examined in unprecedented detail, deepening our understanding of the human body and other living organisms.

Biomanufacturing and Materials Engineering Laboratories

The University of Adelaide has strong capabilities in biomanufacturing supported by AIML and the Institute for Photonics and Advanced Sensing (IPAS) and the Biomanufacturing and Materials Engineering Laboratories.

Global leaders in the field have been recruited to add to the existing capabilities including Professor Chun-Xia Zhao concentrating on microfluidics and nanomedicines. The University is offering a new Master of Biopharmaceutical Engineering program which will further strengthen the capabilities in Adelaide.



Tonsley Innovation District provides important connections between companies, researchers, grant programs, policy makers and market opportunities in the medical devices and assistive technologies sector.

Located in the middle of the southern hemisphere's largest corridor of health-related research institutions, companies and medical facilities including Adelaide BioMed City, the new Royal Adelaide Hospital and Flinders Medical Centre, Tonsley is ideally situated for businesses to develop, test, commercialise and manufacture next generation medical and assistive devices.

Tonsley is home to:

- Zeiss, an international optical and optoelectronics firm, is a leading developer, producer and distributor of microscopes, medical technology, eyeglass, camera and cine lenses, binoculars and semiconductor manufacturing equipment.
- Micro-X develops and manufactures innovative, ultra-lightweight, mobile x-ray imaging systems for medical and security applications in global markets.
- Medical Device Research Institute supports companies in the health and medical devices sector with research, development, testing and commercialisation of new technologies.

The Global Centre for Modern Ageing is creating an ecosystem that empowers people, businesses, researchers and governments to seek and develop solutions that reflect the opportunities for modern ageing.

Line Zero Factory of the Future

Line Zero Factory of the Future at Flinders University brings together education, industry and government to facilitate the implementation of Industry 4.0.

Bridging research, development and innovation, Line Zero Factory of the Future delivers a world-class, reconfigurable advanced manufacturing test bed, training and industry growth facility – the first of its kind in Australia. It connects industry with enabling technologies, research capabilities and training to modernise and transform manufacturing with advanced robotics, AI and customised technology allowing partners to integrate i4.0 tools into production.

“The value of Tonsley Innovation District is that it has established a connected ecosystem in medical devices; a cluster of research, industry, service providers and government organisations co-located within the same location. To identify opportunities for manufacturing within this sector you need to be part of that ecosystem.”

Professor Karen Reynolds – Director Medical Device Research Institute, Flinders University



Lot Fourteen is Adelaide's new innovation precinct. The precinct is home to the Australian Institute for Machine Learning (AIML) providing defence and security agencies with a means of handling large volumes of data more efficiently.

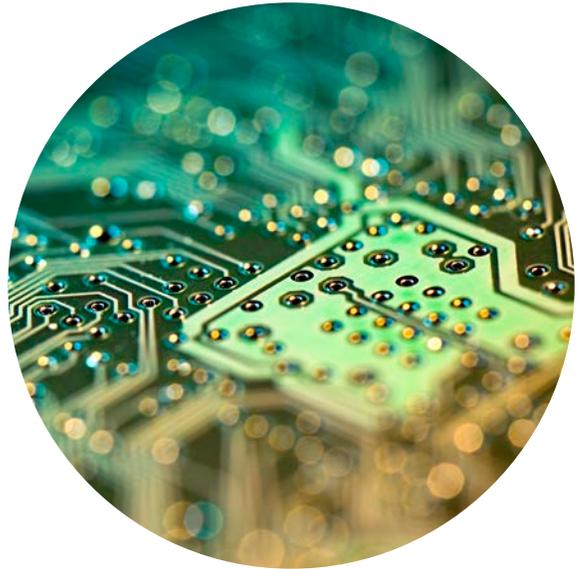
Focused on growing the industries of the future, from space and defence to cyber security, machine learning, health and medical. It's home to innovative companies like Life Whisperer employing non-invasive, artificial intelligence driven image analysis for IVF and Presagen creating diagnostic web-based medical imaging software. Lot Fourteen is also home to Australian Institute of Machine Learning (AIML), MIT bigdata Living Lab and Stone and Chalk Start-up Hub.

Other precinct partners:

- Digital Health CRC
- Life Whisperer
- MIT bigdata Living Lab
- Australian Space Agency, Australian Space Discovery Centre & Mission Control Centre
- Australian Cyber Collaboration Centre (A3C)
- Microsoft Azure
- Google Cloud
- Amazon Web Services
- Presagen

Global technology companies in Adelaide for innovation

The world's most innovative and forward-thinking technology companies have established innovation hubs in South Australia. These organisations are aligning their strategy for the next decade on the ability to deliver AI-focused projects and have selected Adelaide as the best location for AI and big data capabilities. This leading innovation will continue to build around our connected health and life sciences ecosystem delivering well into the future to drive your global business.



"We are incredibly proud of the success of our Adelaide Hub and the jobs growth we have been able to deliver in South Australia over the last year. Adelaide is a highly attractive destination for companies and first-class talent looking to deliver technological and scientific excellence and we are privileged to be a part of this momentum."
Peter Burns,
CEO Accenture Australia and New Zealand



"Amazon Web Services recognise that Adelaide has a really rich community of both innovation and entrepreneurship, and we are excited to be expanding our presence in South Australia."
Adam Beavis,
Managing Director for Amazon Web Services ANZ



"Adelaide's vision to become a centre for innovation and technology aligns with our focus to accelerate the digital agenda and sustainability ambitions of Australian businesses."
Jane Livesey,
CEO, Australia and New Zealand



"We have chosen Adelaide as the home of our first Australian Centre for Innovation and Technology because we have enormous confidence in the South Australian economy and the exceptional talent market that exists in the region."
Hendri Mentz,
Adelaide office Managing Partner



"Google Cloud immediately recognised the potency of Adelaide's technology ecosystem as a platform for globally relevant innovation and collaboration."
Michael Grantham,
Director Public Sector,
Google Cloud AUNZ



"Adelaide has established itself as the very heart of Australia's space industry. We've signed this agreement with South Australia's Department for Trade and Investment, and we have joined Adelaide's Lot Fourteen precinct where we are focused on innovating with and investing in the space industry."
Lynn McDonald,
Azure Space Lead, Microsoft Australia



"We identified Adelaide early on as the prime location for a Living Lab in Australia and the Indo-Pacific region due to its leadership in data analytics and machine learning."
Professor Alex 'Sandy' Pentland,
Massachusetts Institute of Technology



"Nokia is delighted to establish our National 5G Industrial Incubation Lab in South Australia, an important step forward to harnessing the power of 5G for all Australian industries."
Anna Wills,
Nokia Managing Director of Australia and New Zealand



Global technology companies in Adelaide for innovation

- **Accenture** announced a 2000-person practice in Adelaide driving innovation in AI, data analytics and cyber security for the Asia Pacific region.
- **Amazon Web Services** established their Australian applied sciences team in Adelaide to work with AIML to develop new AI applications.
- **Cognizant** are expanding operations into South Australia with the opening of a global delivery centre in South Australia, creating 1,600 digital roles.
- **Deloitte** announced a 500-person Centre for Innovation and Technology in Adelaide.
- **Google** established an innovation team in Adelaide to focus on AI applications in health.
- **Microsoft** established their Azure Space team in Adelaide.
- **MIT bigdata Living Lab**, the world's leading data analytics capability, are partnering with the State to build our hi-tech capabilities in health.
- **MTX Group** announced their first technology innovation hub in the APAC region for 500 staff will be based in Adelaide.
- **Nokia** announced their Australian 5G industrial incubator will establish in Adelaide and they are interested in projects with a digital health focus.
- **PwC** established 2000 staff with an innovation focus in Adelaide and they are interested in projects with a digital health focus.
- **Telstra Health's** digital innovation and international growth functions are both led from Adelaide.

Advanced technology infrastructure

Our advanced technology infrastructure supports our health and life sciences ecosystem and is driving our AI and data analytics innovation.

Cloud infrastructure

Cloud infrastructure in Adelaide is comprised of 24 colocation data centres, 72 cloud service providers, four network fabrics and 46 service providers.

Adelaide hosts one of Equinix ISO Certified Green ISO 14001:2015 data centres. This data centre has been awarded the Australian Data Centre of the Year three times (Frost and Sullivan).

Advanced bandwidth network 10 Gigabit Adelaide

10 Gigabit Adelaide is a revolutionary high-speed, high-performance fibre optic data network that has been rolled out to commercial buildings across the city of Adelaide. The network enables businesses and organisations to share and receive high volumes of data at phenomenal 10Gbps data speeds.

The transformational network delivers a wide range of new possibilities for businesses and organisations, without being inhibited by the restrictions and congestion often experienced with traditional internet services. Each service in the 10 Gigabit Adelaide suite has its own, dedicated and uncontested connection, meaning businesses can access the same upload and download speeds via a clean, superfast, low-latency connection.



SABRENet

SABRENet is a fibre only telecommunications network constructed to link South Australia's major education, research and innovation sites, including university campuses, innovation precincts, teaching hospitals, TAFE campuses and schools.

SABRENet's purpose is to raise South Australia's education, research and innovation performance through its fibre network, enabling specialist broadband and related services on behalf of its members and customers.

The SABRENet network extends over 400km of fibre optic cable and connects more than 230 locations in the greater Adelaide metropolitan area, typically at data speeds from one gigabit to 100 gigabits per second (Gbps).

Removing constraints on available bandwidth for education, research and innovation to create a critical mass of interconnected sites, users and applications, is the advantage that SABRENet has helped create in South Australia.

South Australia leading your low-carbon future



South Australia is Australia's clean energy powerhouse: a world-leader in green energy production and the ideal destination for any company wanting to reach zero carbon targets.

Leading Australia's energy market in low-cost and renewable energy, South Australia has already reached a world-leading average of over 70 per cent share of wind and solar generation for the 2021-2022 year to date. (OpenNEM, March 2022).

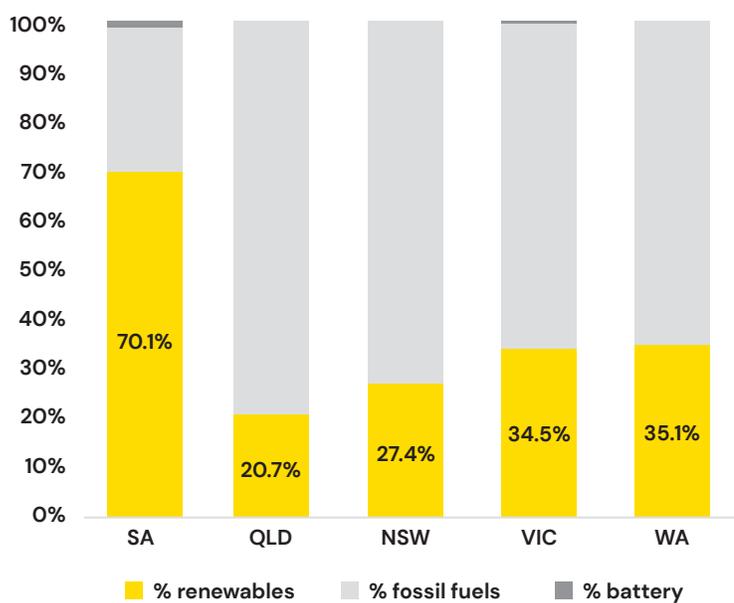
South Australia is leading the world in its transition to renewable energy. In 2016 coal-generated production of electricity was ceased. South Australia is on track to replace our remaining energy generated by natural gas and transform to a net zero emissions economy and a national and international exporter of clean energy by 2030. The plan estimates a level of renewable energy production by 2050 that is more than 500 per cent of current local grid.

South Australia's renewable energy and storage projects have already attracted over AUD\$6billion in large-scale projects to date, with over AUD\$20billion in the investment pipeline (South Australian Department for Energy and Mining, February 2022).

South Australia is home to the Hornsdale Power Reserve, one of the world's largest lithium-ion batteries, and Hydrogen Park South Australia's 1.25MW electrolyser, Australia's first renewable gas project, blending hydrogen and natural gas into the existing gas network (5 per cent hydrogen blend).



Contribution to electricity generation (%)



“South Australia is better equipped to respond to the challenges and opportunities of climate change than any other Australian state and nearly all of the world’s sub-national jurisdictions.”

Professor Ross Garnaut,
September 2020



Invest, innovate, and scale, in South Australia

Competitive business environment

Exponential changes in economics, geopolitics, climate change, health and technology have pushed us to focus on sustainability, innovation and transformation in every industry.

Our competitive business environment supports commercial success and scaling of operations. On offer are the nation's most competitively priced office rental space and energy with access to a suitably skilled and scaleable workforce.



Competitively priced
industrial land, office
space, and access to a
highly skilled workforce

Incentives

Financial incentives and support

Commonwealth

Research and Development Tax Incentive

The Research and Development (R&D) Tax Incentive is a Commonwealth Government program that supports companies to increase their investment in R&D activities, with eligible companies able to claim an offset equal to their corporate tax rate plus a premium.

Medical Research Future Fund

The Medical Research Future Fund (MRFF) provides grants of financial assistance to support health and medical research and innovation to improve the health and wellbeing of Australians. The Australian Government announced that the fund will be allocated AUD\$5 billion over 10 years from 2020–2022. It will place Australia at the leading edge of research in areas like genomics and will support the search for cures and treatments, including for rare cancers.

South Australia

Jobs and Economic Growth Fund

The Jobs and Economic Growth Fund allows for AUD\$200 million of funding over four years (from 1 July 2021) from the South Australian Government to support growth of existing industries, develop new industries, build international connections and attract foreign and national direct investment.

Research and Innovation Fund

The Research and Innovation Fund supports researchers, entrepreneurs and businesses to accelerate their progress through funding from the South Australian Government. Grant support ranges from AUD\$20,000 to AUD\$500,000 for eligible companies.

South Australian Chamber of Commerce

The South Australian Chamber of Commerce offers eligible companies up to AUD\$20,000 in grant funding to support business development.

South Australian Landing Pad

The South Australian Landing Pad has been established to support companies looking to make their first investment in the Asia-Pacific region, Australia or South Australia while helping to stimulate the local economy, create jobs and grow new industries. The program is now available with support, up to AUD\$100,000 over 12 months.

The South Australian Landing Pad offers support and assistance in the three key areas most important when establishing in a new jurisdiction, including:

- up to AUD\$60,000 to access professional support and advice;
- up to AUD\$40,000 to access our unique innovation and co-working hubs or alternative accommodation types; and
- case management to help you navigate, network and participate in the local ecosystem.

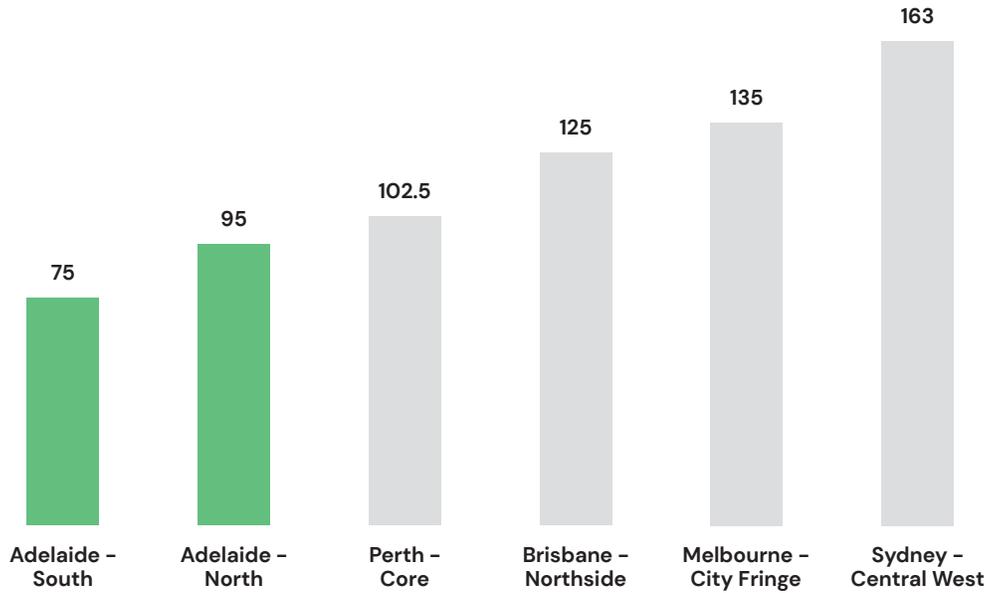
The program welcomes all the stages of growth (except seed-stage companies) including:

- early-stage and scale ups companies that have raised capital and are looking for a cost-effective environment to set up their business
- SMEs with global customers, partners and often strong investor support looking to establish a presence in the Asia Pacific region; and
- larger companies that would like to test a presence in a region before making a larger commitment.



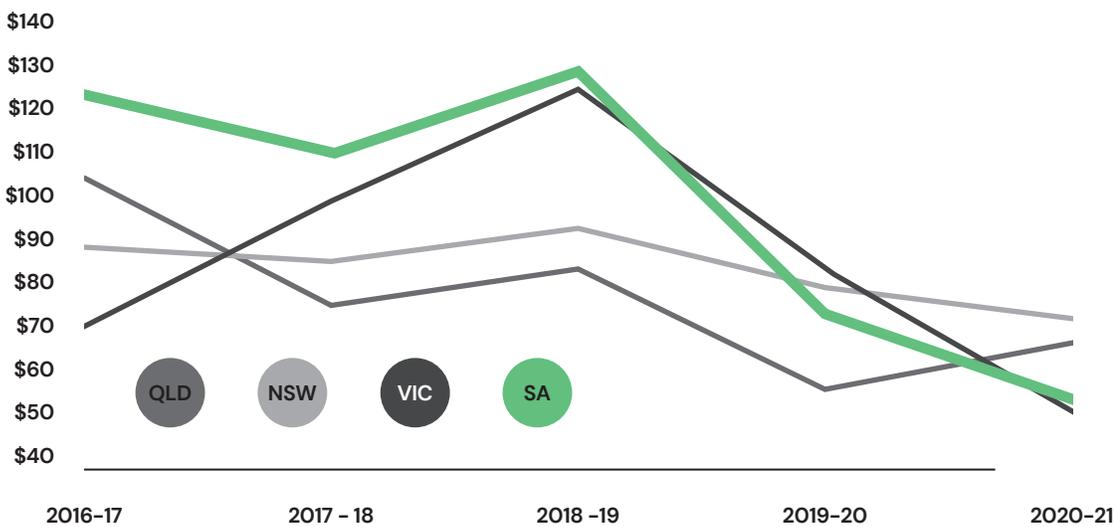
Cost competitive business environment

Prime industrial warehouse rental costs



Source: Savills Research National Industrial Q2 2021. Net Face Rent (\$ per sqm)

Increasingly competitive electricity prices



Electricity - Annual volume-weighted average spot prices (\$/MWh)

Source: Australian Energy Regulator

Skilled talent pipeline



South Australia has demonstrated the capacity to respond to the skilled knowledge-based workforce needs of at-scale companies and changing industries.

Our state prides itself on being the nation's 'knowledge state', with five world-class public universities, Australia's highest ratio of universities per capita and vocational training providers that work in partnership with business and the South Australian Government to co-design innovative programs that supply workforce-ready graduates.

Research commissioned by the Chief Scientist for South Australia found that South Australia ranks higher than the top performing OECD country for citation impact* in the following STEM research fields: physical sciences, macromolecular and materials chemistry, mathematical sciences, ICT, chemical engineering, interdisciplinary engineering, materials engineering, artificial intelligence and image processing, computational theory and mathematics and applied mathematics.

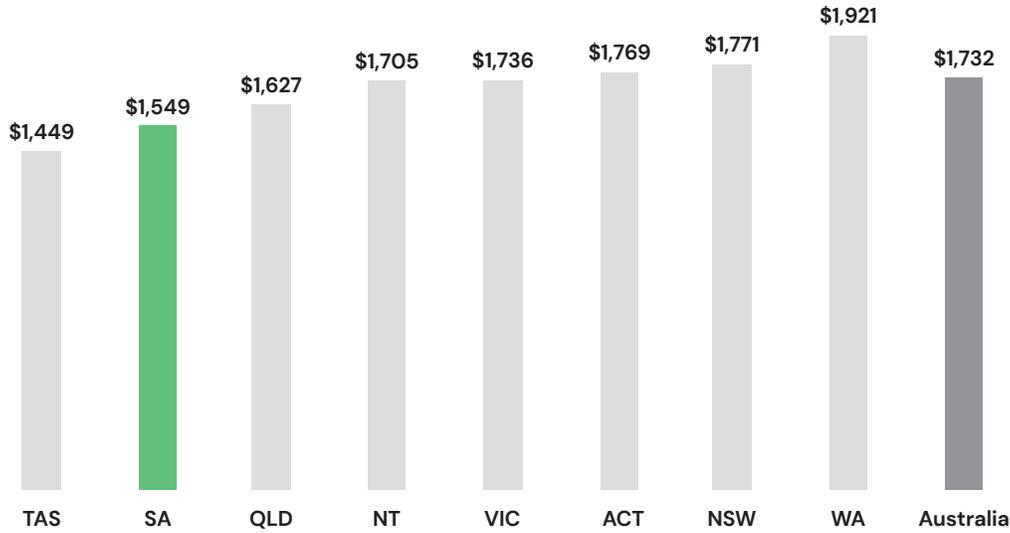
South Australia's performance is equivalent to the top three performing OECD countries for citation impact in the following STEM research fields: chemical sciences, engineering, nanotechnology, statistics, numeric and computational mathematics, and manufacturing engineering.



*Citation impact reflects the extent to which researchers across the world cite research publications with South Australian authors relative to the citation rate for all research publications in the world in the requisite field or subfield. This measure is used as a measure of research excellence by national and international bodies including the OECD.

Data report: Office of the Chief Scientist for SA (September 2021). Data source: Clarivate In Cites Database.

Competitive labour market



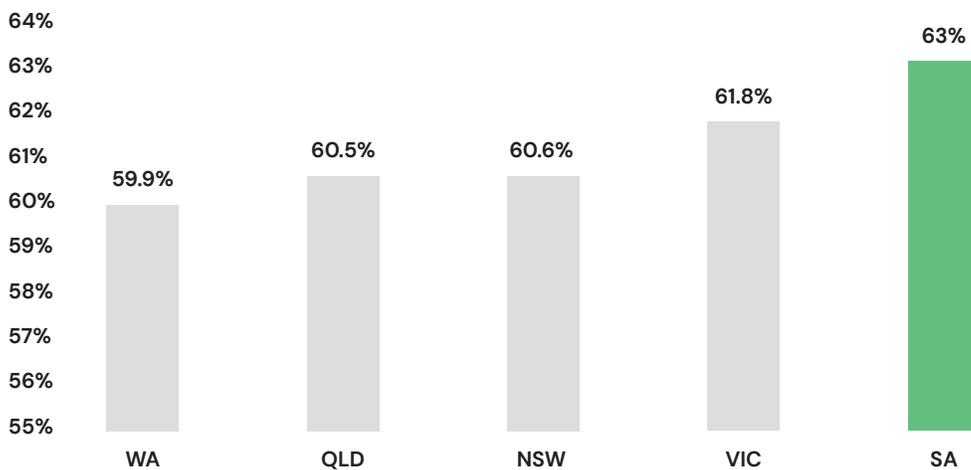
Access to staff, competitive labour costs and high staff retention rates rank as important attributes, unique to the South Australian workforce.

Private sector labour costs in South Australia are 10.6 per cent below the Australian average and our staff retention rate is among the highest in Australia.

Source: Australian Bureau of Statistics Catalogue 6302.0 Average Weekly Earnings, Australia, May 2021.

Better staff retention

% of employed persons with their current employer for 3+ years



Source: Australian Bureau of Statistics - employed persons by number of months with current employer or in own business.

Benefits of living in South Australia



Affordable housing

Adelaide has the cheapest property prices of all mainland capital cities in Australia, with property prices approximately half that of Sydney.

City	Established Houses	Attached Dwellings
Adelaide	AUD\$469,000	AUD\$382,000
Brisbane	AUD\$534,000	AUD\$385,000
Melbourne	AUD\$706,000	AUD\$565,000
Sydney	AUD\$900,000	AUD\$710,000

Source: ABS Catalogue 6416.0 Residential Property Price Indexes: Eight Capital Cities, March 2020.

Data from Domain highlights the median weekly rent in Adelaide is among the cheapest in the nation and 30 per cent cheaper than in Sydney.

City	House	Unit
Adelaide	AUD\$395	AUD\$320
Brisbane	AUD\$400	AUD\$380
Melbourne	AUD\$430	AUD\$415
Sydney	AUD\$530	AUD\$500

Source: Domain Rent Report June 2020.

Work commute times

Adelaide's short commute times compare favourably against all larger capitals.

City	Average daily time (mins)
Adelaide	56
Perth	59
Melbourne	65
Brisbane	67
Sydney	71

Source: Melbourne Institute: Applied Economic & Social Research, The Household, Income and Labour Dynamics in Australia Survey.



Affordable housing

Adelaide has the most affordable established house prices of all mainland capital cities in Australia, with property prices approximately half that of Sydney. Data from Domain highlights the median weekly rent in Adelaide is among the cheapest in the nation and 23 per cent cheaper than Sydney.

Median price of residential property (March 2021)

City	Established Houses	Attached Dwellings
Adelaide	525,000	420,000
Darwin	535,000	325,000
Perth	538,000	410,000
Brisbane	600,000	416,500
Hobart	600,000	455,000
Melbourne	824,500	605,000
Canberra	825,000	504,000
Sydney	1,050,000	750,000

Source: Australian Bureau of Statistics Catalogue 6416.0, Residential Property Price Indexes: Eight Capital Cities, March 2021

Rental costs for houses and units

City	House	Unit
Adelaide	425	350
Perth	430	365
Melbourne	430	375
Brisbane	440	400
Hobart	480	420
Darwin	550	430
Sydney	550	470
Canberra	600	500

Source: Domain Rent Report March 2021



Let's talk

With strengths across health and life sciences, supported by AI and data analytics driven hi-tech innovation, South Australia is the perfect location for your company.

Please contact Sandra Hack, Mark Wheeler or Megan Antcliff to discuss the investment opportunity detailed in this document.

Level 8, 250 Victoria Square
Adelaide, South Australia 5000

Dr Sandra Hack
Business Development Manager
Health & Medical Industries
T: +61 435 100 052
Sandra.Hack@sa.gov.au

Mark Wheeler
Director, Health & Medical Industries
T: +61 466 357 625
Mark.Wheeler3@sa.gov.au

Megan Antcliff
Deputy Chief Executive
T: +61 438 287 334
Megan.Antcliff@sa.gov.au

dti.sa.gov.au



The Department for Trade and Investment and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability and currency or otherwise. The Department for Trade and Investment and its employees expressly disclaim all liability or responsibility to any person using the information or advice.

This document is subject to change by the Department for Trade and Investment. Modifications to this document are not permitted.

June 2022