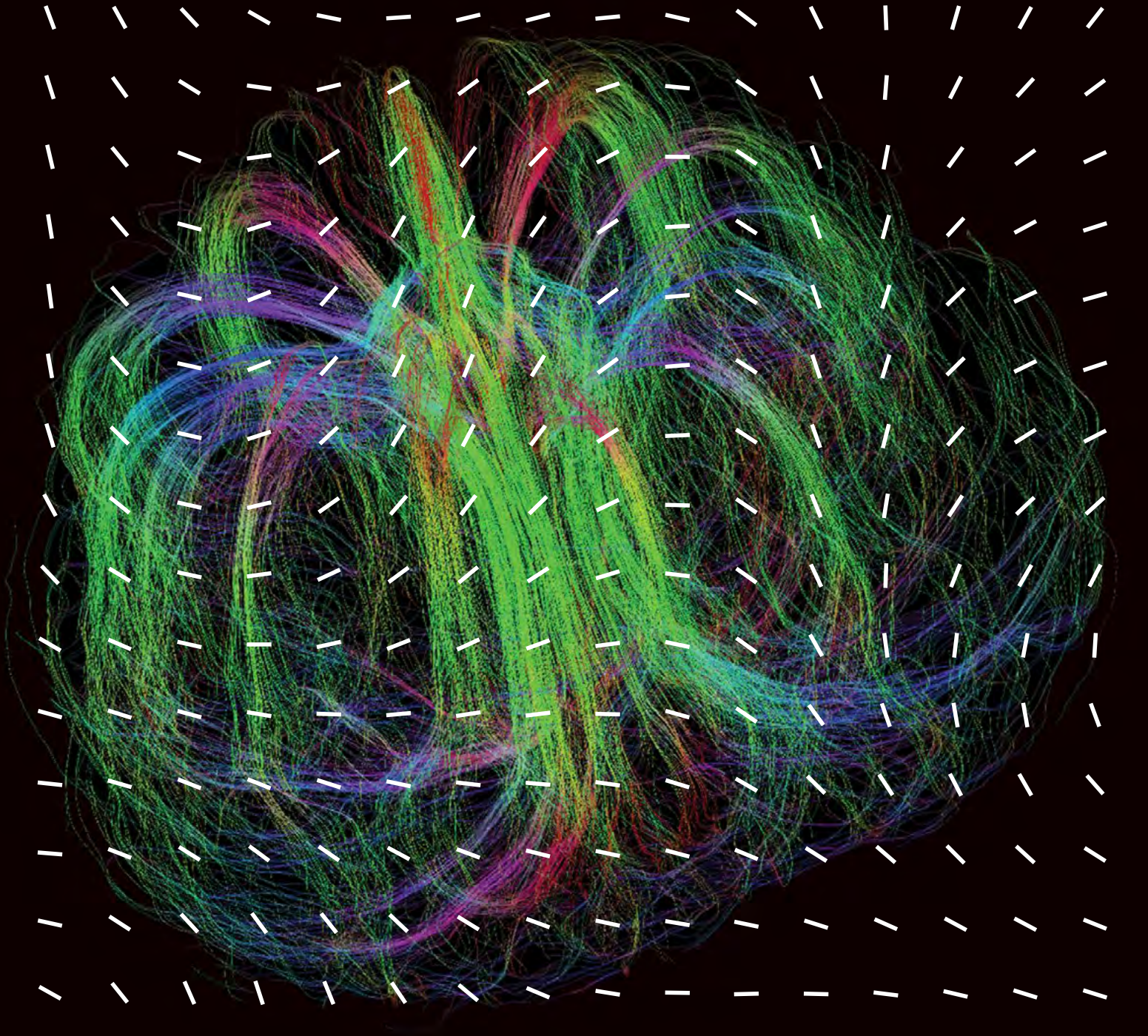
NATIONAL IMAGING FACILITY

NCRIS
National Research Infrastructure for Australia
An Australian Government Initiative

Impact Report 2025



We acknowledge and pay respects to the Elders and Traditional Owners of the lands on which we operate.

COVER IMAGE:
DIFFUSION MRI TRACTOGRAPHY HAS BEEN USED TO MAP A DEVELOPING BURDEKIN PLUM TO STUDY THE TISSUE DEVELOPMENT DURING FRUIT GROWTH NON-DESTRUCTIVELY, SPECIFICALLY THE FIBROUS STRUCTURES THAT SUPPLY NUTRIENTS. FRUITS WERE IMAGED USING STRUCTURAL, RELAXATION AND DIFFUSION MRI ACQUISITION PROTOCOLS AT 9.4T AT THE AIBN/CAI, THE UNIVERSITY OF QUEENSLAND. IMAGE COURTESY OF THE AIBN.

NATIONAL IMAGING FACILITY

Impact Report 2025

National Imaging Facility is Australia's advanced imaging network.

Our vision is to enable Australian imaging science to unlock solutions to major challenges.

Our mission is to make cutting-edge imaging capabilities accessible to Australian researchers and industry, to enable significant impacts on national health challenges and to accelerate Australian innovation.

Contents

THIS CENTRE FOR ADVANCED IMAGING (AT UQ) INSTRUMENT, ALBIRASI SPECT/CT, IS DESIGNED FOR MOLECULAR RESEARCH FOR SMALL ANIMALS, COMBINING PET, SPECT AND CT TECHNOLOGIES. IMAGE COURTESY OF CAI.

Chair's Report

PROFESSOR MARGARET HARDING – CHAIR 2020–2025, NATIONAL IMAGING FACILITY

As Chair of the National Imaging Facility's (NIF) independent Governing Board, I am proud to present the first NIF Impact Report.

NIF is an unincorporated joint venture of 14 Partner organisations across Australia (see p. 30) and is governed by an independent Board (see p. 11) which provides oversight and strategic guidance for all NIF activities and investments. Under the Board's direction, NIF has advanced significantly during the last 5 years and continues to increase its impact across Australia's advanced imaging ecosystem. I would like to thank my fellow Board members for their guidance, expertise, and energy throughout the year.

The last 12 months have been marked by significant progress during a period of continued growth and innovation in Australia's advanced imaging research and capabilities.

In 2024, NIF helped deliver 1,729 projects across our 30 sites, delivered by our 14 institutional Partners and more than 190 of Australia's most experienced imaging experts. NIF supported 341 clinical trials and saw a 173% increase in user-generated revenue over the past 5 years.

NIF and other National Collaborative Research Infrastructure Strategy (NCRIS) capabilities contributed to Australians with early Alzheimer's disease being able to access a new treatment that, for the first time, is proven to slow the disease *(*see p. 16–17); incredible new protocols that led to pregnant patients' PET/CT scans being undertaken with safety and diagnostic usefulness *(*see p. 18–19); our MRI scans that have helped precision medicine break postcode and time barriers for people living with epilepsy; the amazing Australian journey of an ovarian cancer breakthrough that has now entered human trials (see p. 22–23); and we helped contribute to a huge MRI study that collected 762 leg scans over 6 years to benefit children with cerebral palsy (see p. 24–25).

These achievements show the power of NIF's national network and the value of imaging from discovery to real-world health impact.

NIF's 14 institutional Partners are fundamental to our success. Without their commitment and collaboration, we could not deliver NIF's strategy across Australia. Working together as a national network enables us to address Australia's strategic research priorities, support industry, and improve health outcomes in ways that no single institution could achieve alone.

I would like to take this opportunity to thank the NIF Central Team, led by Chief Executive Officer, Wojtek Goscinski, and Chief Operating Officer, Sarah Flaim. The Central Team provides leadership, operational support, coordination, and marketing expertise to support our Partners, and ensures NIF operates efficiently as national collaborative research infrastructure.

Finally, I would like to welcome the new Chair of the Governing Board, Emeritus Professor Annabelle Duncan who commenced on 1 January 2026. Professor Duncan is a distinguished leader in science, higher education and public policy with extensive experience in strategic leadership, research management, and governance across universities, government agencies, and scientific organisations. I wish her well.

In closing, I would like to thank all members of the NIF community for a rewarding 5 years as Chair of NIF. I wish NIF every success in the future and am confident that NIF will continue to deliver impactful imaging science that advances discovery, improves health outcomes, and benefits Australia into the future.

Professor Margaret Harding
Chair 2020–2025, National Imaging Facility

Our Strategy 2024—2028

Expertise

Goal
Strengthen Australia's community of world-leading imaging experts and users.

Driver
World-leading imaging magnifies the productivity and impact of outstanding researchers, but it is sophisticated and difficult to use, requiring experts with deep imaging knowledge.

Actions
Transition to a new expertise model that is scalable, sustainable and flexible.

Advocate for the critical role of imaging research infrastructure experts and leaders in imaging and its applications.

Expand Australia's community of users through training and increasing accessibility.

Technology

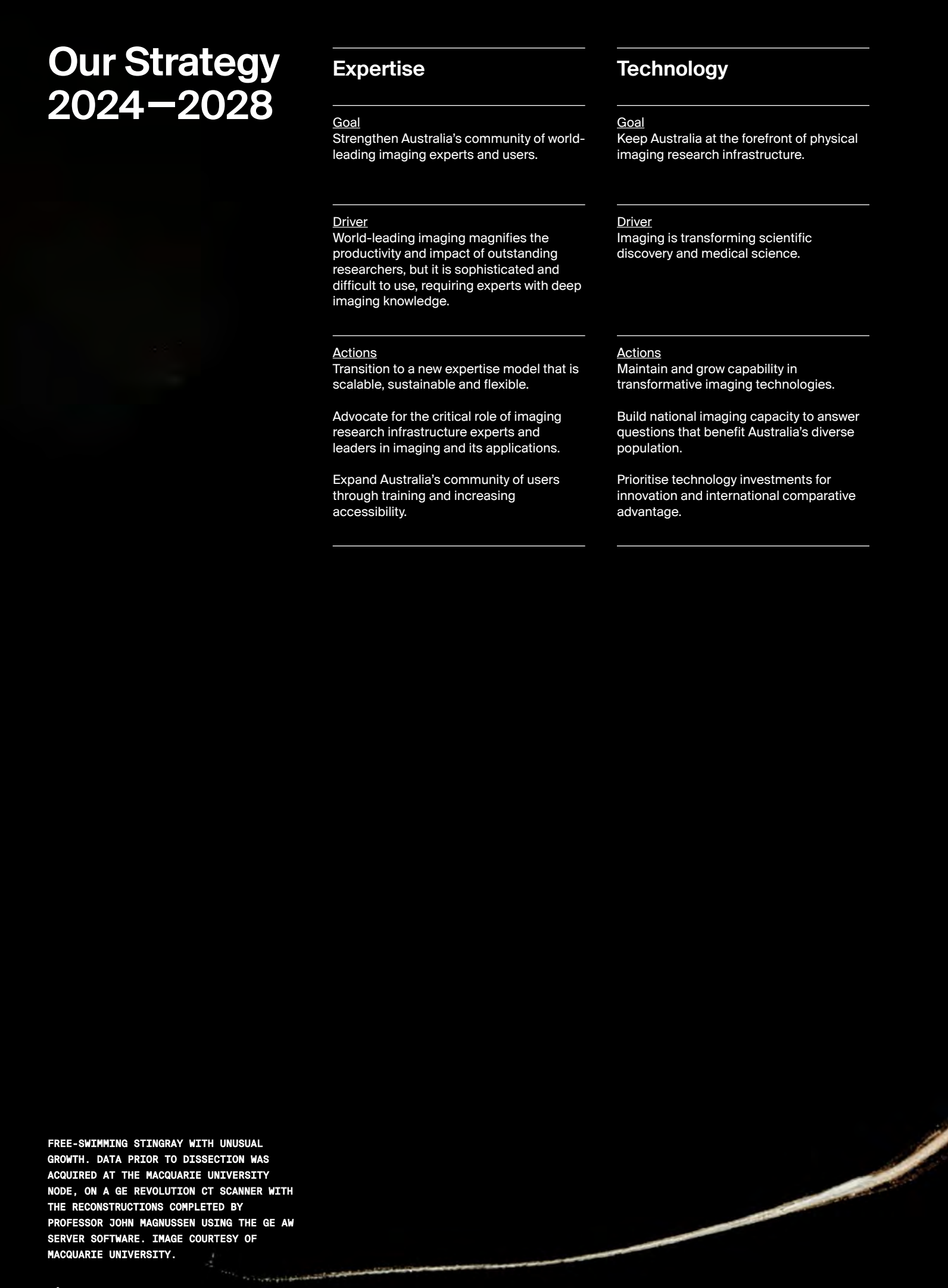
Goal
Keep Australia at the forefront of physical imaging research infrastructure.

Driver
Imaging is transforming scientific discovery and medical science.

Actions
Maintain and grow capability in transformative imaging technologies.

Build national imaging capacity to answer questions that benefit Australia's diverse population.

Prioritise technology investments for innovation and international comparative advantage.



FREE-SWIMMING STINGRAY WITH UNUSUAL GROWTH. DATA PRIOR TO DISSECTION WAS ACQUIRED AT THE MACQUARIE UNIVERSITY NODE, ON A GE REVOLUTION CT SCANNER WITH THE RECONSTRUCTIONS COMPLETED BY PROFESSOR JOHN MAGNUSSEN USING THE GE AW SERVER SOFTWARE. IMAGE COURTESY OF MACQUARIE UNIVERSITY.

Impact

Goal
Facilitate the translation of research to benefit national health challenges and the broader economy.

Driver
Imaging is a core technology for translating research, and strongly aligns with policy objectives of the Australian Government and state governments.

Actions
Invest in the infrastructure and people that help translate research.

Support an end-to-end imaging translation pipeline that helps move research through to practice in the health system, product development or commercialisation.

Support and promote the impact of imaging research.

Data

Goal
Generate valuable imaging data collections that answer important medical research questions.

Driver
Imaging data collections are exploding in size and complexity, while artificial intelligence techniques can provide researchers a wealth of new knowledge.

Actions
Partner with organised research communities to create national imaging data assets.

Operate national-scale digital research infrastructure for imaging to help facilities and their users tackle data challenges.

Foster the application of artificial intelligence methods to imaging data.

Collaboration

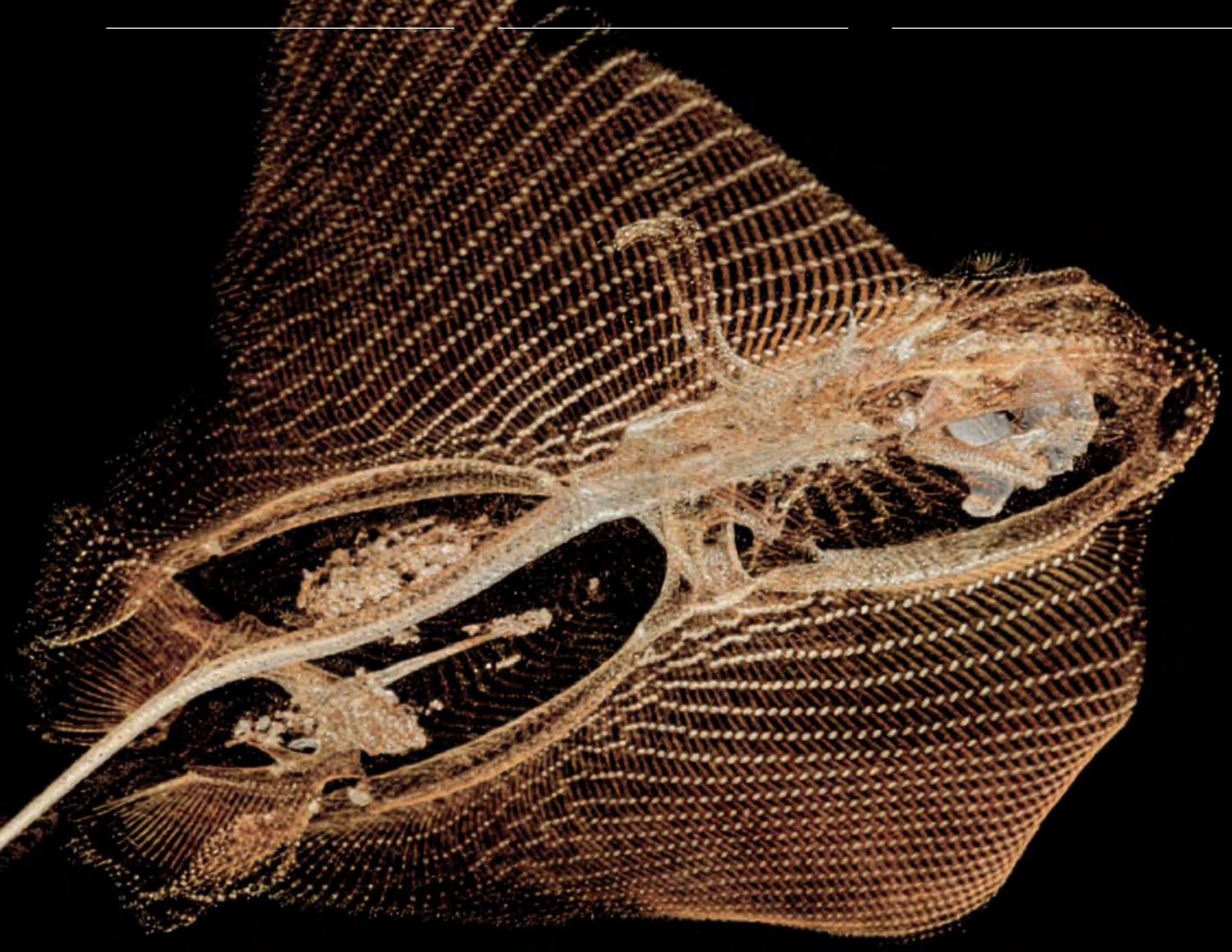
Goal
Ensure that NIF has the partnerships and resources to deliver on its vision.

Driver
The increased demand for imaging capabilities in science, medicine and industry requires strong collaboration and funding to operate effectively and deliver maximum impact.

Actions
Operate as an accessible, national-scale research imaging platform.

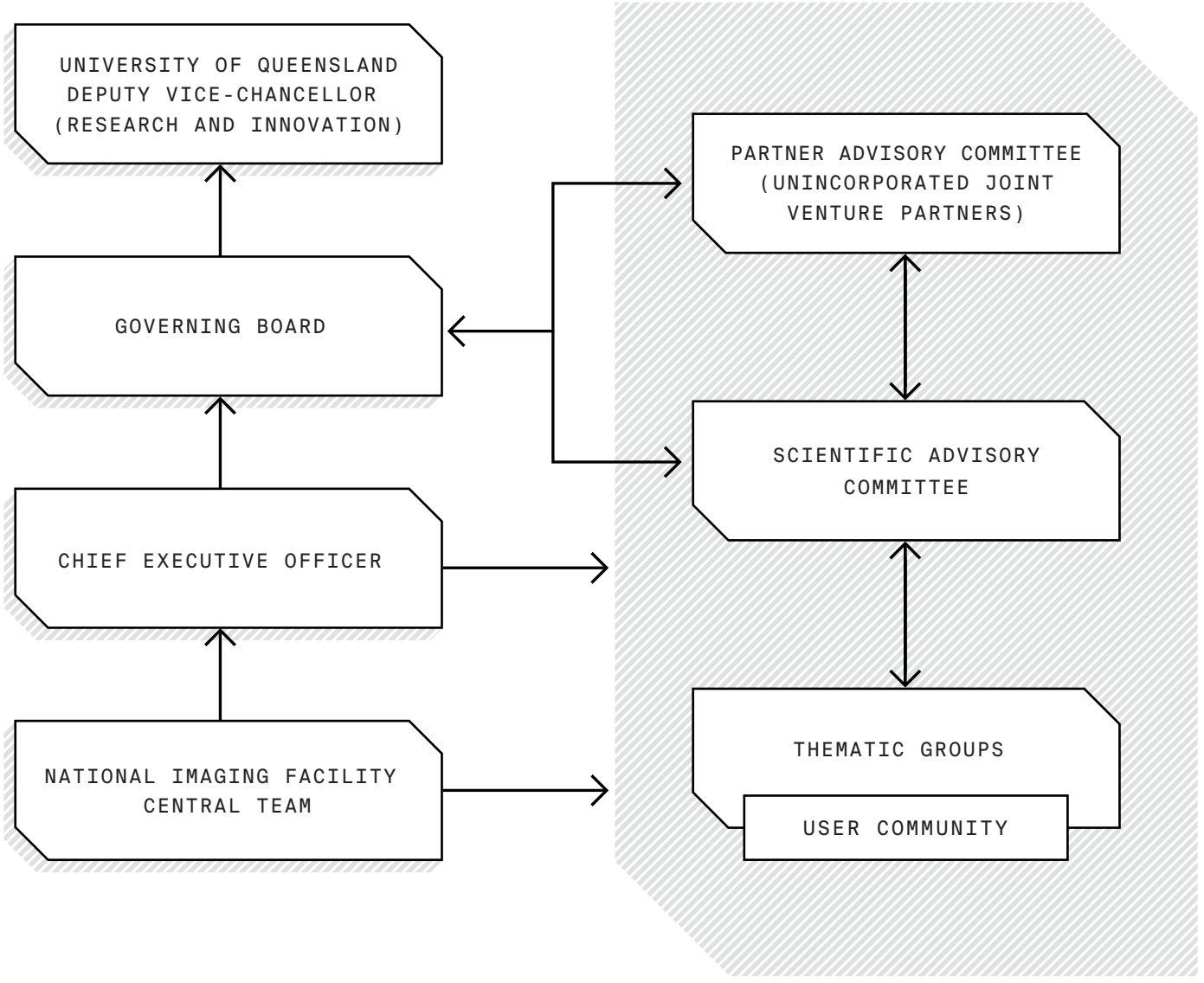
Collaborate with Australian communities that are addressing national challenges and like-minded international organisations.

Attract and leverage diverse investment to maximise NIF's capacity and capability.



NIF Governance and Executive

NIF is governed by an **independent Board** and managed by a Central Team. NIF operates as an Unincorporated Joint Venture of 14 Partner organisations across Australia.



The **Governing Board** provides NIF with strategic direction and monitors performance. It oversees and reviews NIF's financial management and activities.

In 2025, Margaret Harding completed a 5-year term as NIF Governing Board Chair and will be replaced by Annabelle Duncan in 2026.

The NIF **Central Team** provides leadership, operational support, co-ordination and marketing expertise to support our Partners. It ensures NIF operates efficiently at a national level.

The **Partner Advisory Committee** is made up of representatives from NIF's Partner organisations and provides strategic advice to the Board on the broader Research and funding policy landscape. The Committee also plays a key role in ensuring that the NIF network operates in a collaborative, coordinated and cohesive way.

The **Scientific Advisory Committee** shapes NIF's future direction by providing scientific and technical expertise to guide strategic planning. This includes advice on current and emerging infrastructure capabilities, as well as national and international collaborations and partnerships. Comprising NIF's Facility Directors, the Committee meets to coordinate delivery, foster collaboration and maximise research outcomes.

Board

MARGARET HARDING
OUTGOING CHAIR 2020-2025

ANNABELLE DUNCAN
INCOMING CHAIR 2026

PAUL BONNINGTON

CHIEN HO

KAREN JONES

ANNE-MARIE LANSDOWN

KAREN REYNOLDS

ELANE ZELCER

Executive

WOJTEK GOSCINSKI
CHIEF EXECUTIVE OFFICER

SARAH FLAIM
CHIEF OPERATING OFFICER

Our Programs

NIF offers a comprehensive suite of advanced imaging capabilities, spanning preclinical and clinical imaging, human and animal imaging, radiochemistry, and a national digital program.

↙ CLINICAL AND RESEARCH IMAGING CENTRE (CRIC) AT THE SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE. IMAGE COURTESY OF SAHMRI.

→ AUSTRALIA'S NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION. IMAGE COURTESY OF ANSTO.

Advanced Human Imaging

The **Advanced Human Imaging Program** equips and operates Australia's most advanced human imaging capabilities, instruments and expertise. It plays a vital role in understanding health, disease and ageing, and in developing new pharmaceuticals and medical devices.

The program supports high-priority research that helps reduce Australia's disease burden, including large-scale studies of dementia, epilepsy, multiple sclerosis, stroke, mental health and cognition.

Major initiatives in 2025:

→ expansion of total-body PET facilities

→ established the Human Molecular Imaging Network

→ established a Low-Field Magnetic Resonance Network

→ undertook national consultation on High-Field Magnetic Resonance

→ made upgrades and replacements of 3T Magnetic Resonance instruments

→ integrated Human Photon Counting CT capabilities.

Preclinical and Frontier Imaging

Preclinical and Frontier Imaging provides infrastructure for advanced imaging of preclinical models, plants, specimens, materials and minerals – all supported by specialised expertise. The program plays a vital role in advancing Australia's medical, manufacturing and environment industries, and digitising unique national-priority collections.

Major initiatives in 2025:

→ made upgrades and replacements of key preclinical infrastructure, including molecular imaging and magnetic resonance systems

→ integrated Photon Counting CT technology.

Data Collections and Partnerships

Data Collections and Partnerships develops imaging data collections of national priority and provides the digital infrastructure and expertise to turn them into valuable knowledge. The program partners across sectors to build and manage imaging data assets that advance next-generation medical research and accelerate the translation of imaging AI into healthcare and industry.

Major initiatives in 2025:

→ commenced a cross-NIF digital infrastructure program to develop and deploy consistent digital tools across all NIF sites

→ developed an AI strategy and a strategy to improve research access to clinical imaging data.

Radiopharmaceuticals

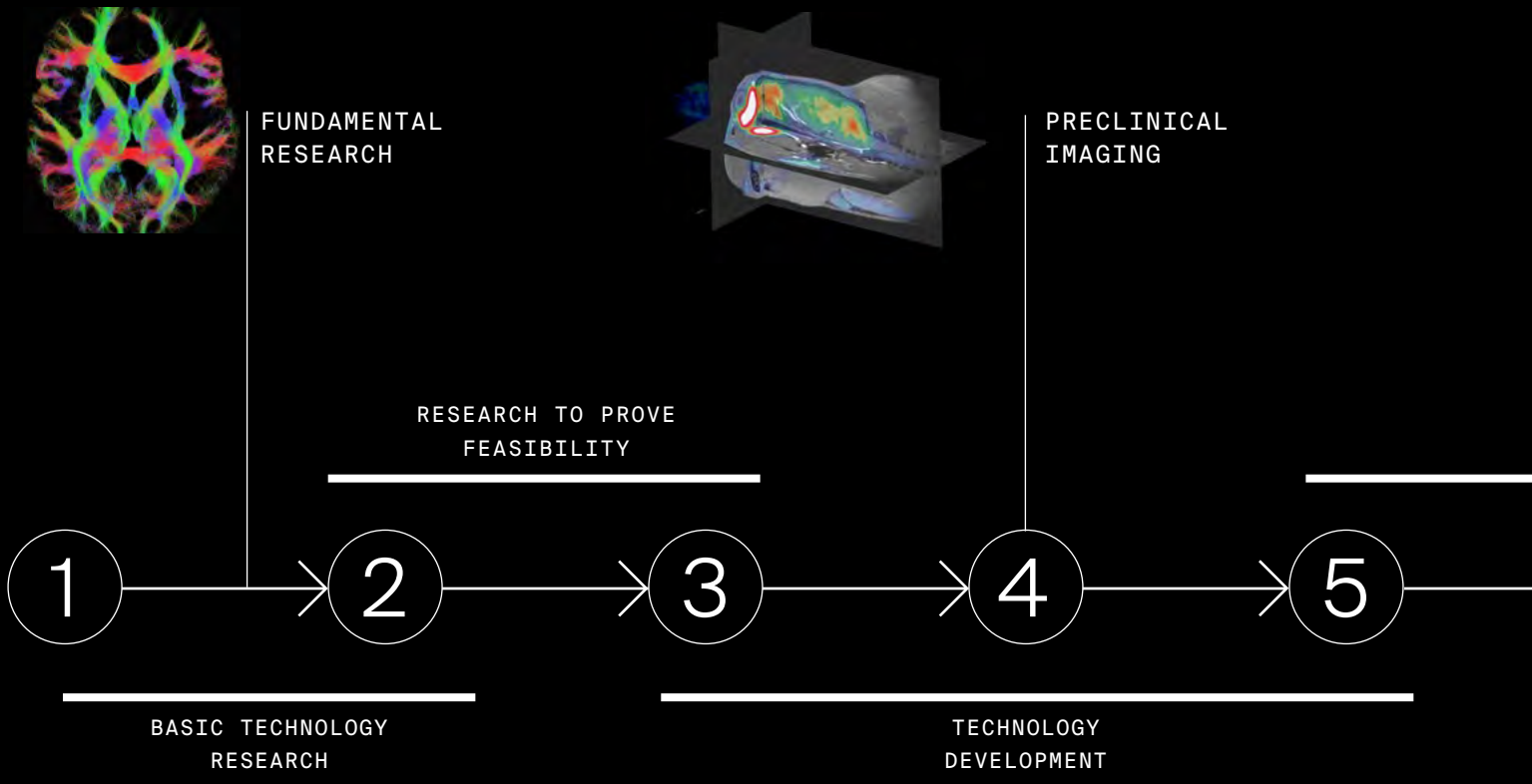
Radiopharmaceuticals are a vital nuclear medicine product used for visualising biological processes, critical for medical diagnosis and therapy. The program supports the development of new radiotracers, enables open access to cyclotrons and provides a coordinated supply of radioisotopes for research and industry.

Major initiatives in 2025:

→ made upgrades to radiochemistry facilities in New South Wales and Victoria

→ establishment of the Human Molecular Imaging Network.

The Imaging Translation Pipeline — Helping to translate discoveries into medical products



NIF supports research across all Technology Readiness Levels from fundamental discovery through to clinical trials

NIF provides a full suite of advanced imaging capability including preclinical and clinical imaging, human and animal imaging, radiochemistry, and imaging data analysis.

PHASE 2 AND 3
CLINICAL TRIALS

TECHNOLOGY
DEMONSTRATION

SYSTEM TEST, LAUNCH,
OPERATION

6 → 7 → 8 → 9

SYSTEM
DEVELOPMENT

FIRST-IN-HUMAN
PHASE 1
CLINICAL TRIALS

PHASE 4
CLINICAL
TRIALS

NIF helped provide the evidence that led to the approval of Australia's first dementia treatment

NIF'S NEWCASTLE NODE AT THE HUNTER MEDICAL RESEARCH INSTITUTE IMAGING CENTRE

"The day has finally arrived when Australians with early Alzheimer's disease can access a new treatment that, for the first time, is proven to slow the disease."

– PROFESSOR CHRISTOPHER ROWE MD FRACP, DIRECTOR OF THE AUSTRALIAN DEMENTIA NETWORK (ADNET)

PROGRAM:
ADVANCED HUMAN IMAGING

INFRASTRUCTURE/ EXPERTISE:
PET, MR

LEAD ORGANISATIONS:

SUPPORTING NIF PARTNERS:

NIF STORY

MRI and PET imaging provided essential evidence that supported the approval of donanemab.

Challenge

Dementia is a major health challenge in Australia, currently affecting nearly half a million people and ranking as the nation's second-leading cause of death. This number is expected to double by 2058.

Donanemab is a new disease-modifying therapy that uses monoclonal antibodies to target early-stage Alzheimer's disease.

Solution

NIF's advanced MRI and PET imaging infrastructure supported nationwide clinical trials run by Lilly and the Australian Dementia Network.

Precise imaging is vital for accurately tracking disease progression and determining whether treatments like donanemab are effective – critical information for researchers, clinicians, regulators and patients alike.

Impact

NIF's imaging capabilities were important in measuring Donanemab's safety and effectiveness, contributing to the evidence used in its approval by the Therapeutic Goods Administration.

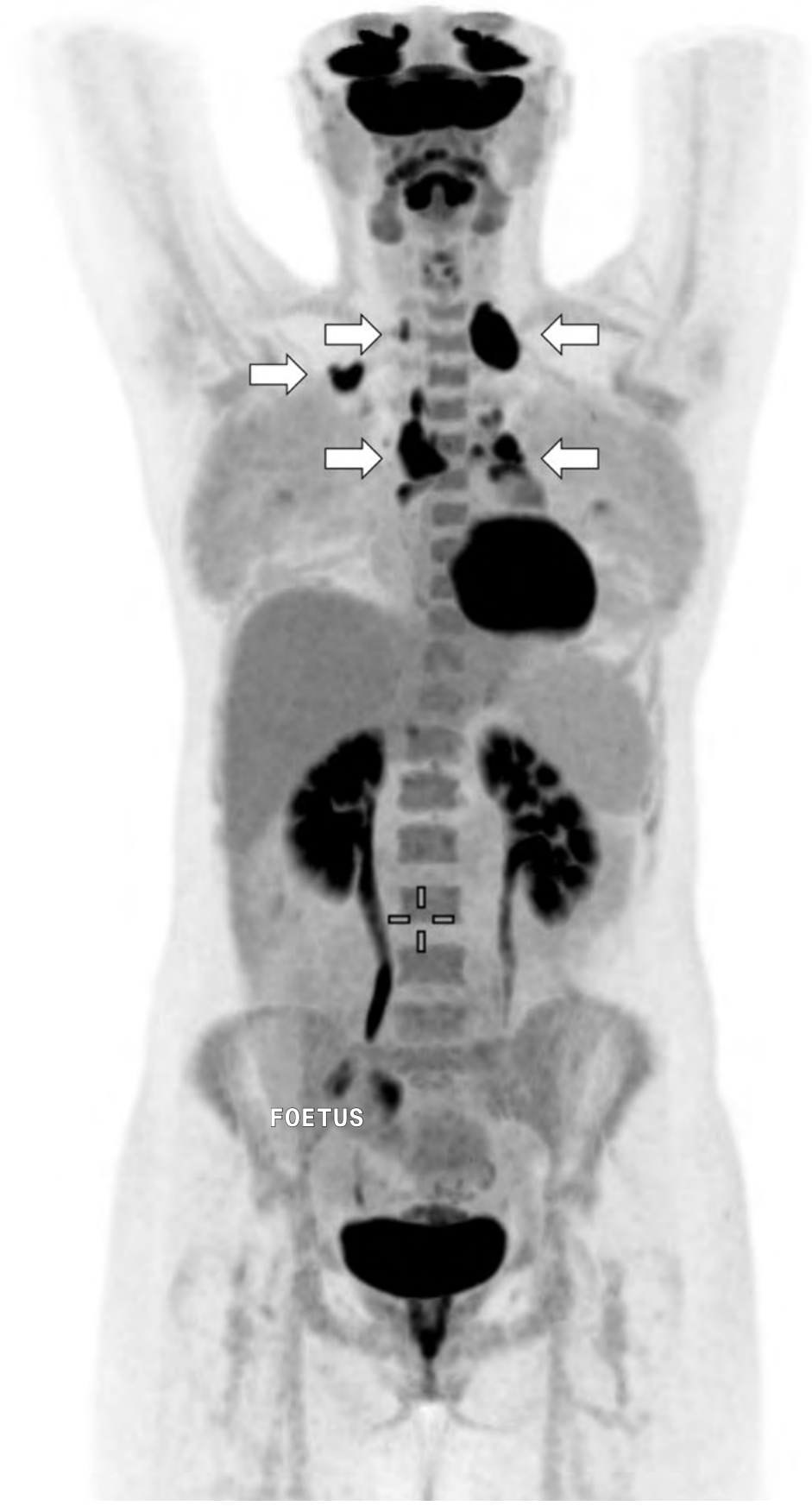
This milestone brings dementia treatment into the era of molecular therapies, similar to advances in cancer and other diseases.

Looking ahead, NIF is leading a world-first initiative to standardise imaging tools for more precise tracking of disease progression.

These innovations will accelerate drug development and support healthier, longer lives for Australians living with dementia.

↑ KIM HUTCHINGS, SUPPORTED BY HUSBAND BOB, DISCUSSING THE BENEFITS OF HAVING ACCESS TO TREATMENT IN AUSTRALIA. IMAGE COURTESY OF NINE NEWS

Safer and more accurate scans for pregnant women and children



THE TOTAL BODY PET SCAN SHOWING THE PATIENT WITH LYMPHOMA AND HER FOETUS, COURTESY OF THE AUSTRALIAN NATIONAL TOTAL BODY PET FACILITY AT THE UNIVERSITY OF SYDNEY. IMAGE COURTESY OF UNIVERSITY OF SYDNEY.

"This is the first time we have been able to scan a pregnant patient with such a low effective dose of radiation to both mother and baby, without compromising image quality."

– PROFESSOR DALE BAILEY, A PHYSICIST IN THE FIELD OF NUCLEAR MEDICINE, ROYAL NORTH SHORE HOSPITAL; DEPARTMENT OF NUCLEAR MEDICINE, UNIVERSITY OF SYDNEY, FACULTY OF MEDICINE & HEALTH

PROGRAM:
ADVANCED HUMAN IMAGING

INFRASTRUCTURE/ EXPERTISE:
PET

LEAD ORGANISATIONS:

THE UNIVERSITY OF SYDNEY

ROYAL NORTH SHORE HOSPITAL

NSW Health Northern Sydney Local Health District

NIF STORY

The NIF-supported Australian National Total Body PET Facility creates benefits for both research translation and patient care.

Challenge

Exposure to ionising radiation is a significant concern for vulnerable patients – particularly pregnant women and children – who may require PET/CT scans for diagnosing or staging cancer, infection, or inflammatory diseases.

Traditional methods of reducing radiation often compromise image quality, limiting clinical value.

Solution

TB-PET offers dramatically increased sensitivity, enabling the use of new imaging protocols with lower radiotracer doses.

In a recent case, a pregnant patient with lymphoma was successfully scanned using a protocol that reduced total radiation exposure ten-fold – without compromising diagnostic quality.

Supported by a strong partnership between research institutions and the healthcare system, TB-PET is paving the way for safer, high-quality imaging during pregnancy and in other vulnerable patient populations.

Impact

Clinical–research partnerships enabled by NIF are improving patient outcomes by helping to implement new standards for ultra-low dose imaging and enhanced radiation safety – particularly for pregnancy, paediatric care, and repeated oncology scans.

This successful shared clinical–research model will be expanded with the arrival of two new TB PET/CT scanners at Alfred Hospital/ Monash University and the Peter MacCallum Cancer Centre/ Melbourne University, jointly funded by the Australian Cancer Research Foundation, Partners and NIF.

Research Impact

NIF Node Director leads WHO resolution to improve global imaging access

78TH WORLD HEALTH ASSEMBLY,
24 MAY 2025, GENEVA

“The time is now. By improving equitable access to medical imaging, healthcare providers around the world can also improve outcomes for patients.”

– CLINICIAN-SCIENTIST PROFESSOR ANDREW SCOTT AM, NIF NODE DIRECTOR OF THE OLIVIA NEWTON-JOHN CANCER RESEARCH INSTITUTE (ONJCRI).

PROGRAM:
ADVANCED HUMAN IMAGING, PRECLINICAL AND FRONTIER IMAGING, RADIOPHARMACEUTICALS, DATA COLLECTIONS AND PARTNERSHIPS

INFRASTRUCTURE/ EXPERTISE:
ALL

LEAD ORGANISATIONS:

World Health Organization

Olivia Newton-John Cancer Research Institute

LA TROBE UNIVERSITY

RESOLUTION

Increasing imaging capacity will reduce the rising burden of premature deaths from cancer and other diseases.

Challenge

Each year, about 17 million people die prematurely from cancer and other non-communicable diseases – and this burden is increasing.

Imaging plays a critical role in early cancer detection and more effective treatments. Better access to imaging will reduce this premature death toll.

Solution

Professor Andrew Scott AM co-led a Lancet Oncology Commission that generated conclusive evidence.

It demonstrated that globally scaling up imaging facilities and improving treatment and care for the 11 most prevalent cancers, 9.5 million deaths could be prevented and a return of $12.43 per dollar invested could be delivered.

He and colleagues drafted a Resolution to present to the World Health Organization (WHO).

Impact

The Resolution was adopted by the WHO on 24 May 2025 after its unanimous approval at the 78th World Health Assembly in Geneva.

Improving equitable access to medical imaging for early diagnosis and treatment will improve human health and economic wellbeing, despite upfront costs.

Medical imaging improves outcomes for a multitude of diseases, is an essential tool for clinicians, and is also absolutely critical for researchers developing new treatments.

Research Impact

NIF supports breakthrough ovarian cancer agent from early-stage design to first-in-human studies

RADIOCHEMISTRY
FACILITY AT Q-TRACE.
IMAGE COURTESY OF Q-TRACE.

"Having national research facilities has been a game changer. Without them, I couldn't have done what I have, and they came through at exactly the right time for the research that I was doing."

– PROFESSOR JOHN HOOPER, CANCER BIOLOGY RESEARCH GROUP LEADER, MATER RESEARCH INSTITUTE – UQ FACULTY OF MEDICINE

PROGRAM:
ADVANCED HUMAN IMAGING, PRECLINICAL AND FRONTIER IMAGING, RADIOPHARMACEUTICALS

INFRASTRUCTURE/ EXPERTISE:
PET, RADIOCHEMISTRY

LEAD ORGANISATIONS:

SUPPORTING PARTNERS:

MEDIA STORY:

Australian national infrastructure shepherded new agent through entire innovation pipeline

Challenge

Professor John Hooper has worked for decades to develop antibody 10D7, a beacon of hope for patients with advanced ovarian, prostate and bladder cancers.

Very few novel drugs are developed entirely in Australia, from their early stages through to preclinical models and first-in-human trials.

Solution

NIF and Therapeutic Innovation Australia supported this project from the discovery of the antibody to first-in-human trials.

The antibody offers potential for a theranostic – a diagnostic low-energy radioisotope that attaches to cancer cells for imaging, which can then be switched to a high-energy radioisotope therapeutic form to treat and eliminate those same cells.

NIF facilities supported:

→ efficacy checks using preclinical models at the Centre for Advanced Imaging

→ optimised manufacturing processes for the manufacture clinical-grade antibodies

→ first in-human clinical trials to check the radioisotope-labelled antibody's safety at the Herston Imaging Research Facility.

Impact

Clinical teams recently imaged the first ovarian cancer patient in the trial and have recruited the first bladder cancer participant.

Up to 30 patients with advanced ovarian cancer and 20 with advanced bladder cancer will be included.

This Australia-born project and the journey of the antibody toward optimisation and commercialisation demonstrate the critical importance of the availability and expertise of national research facilities.

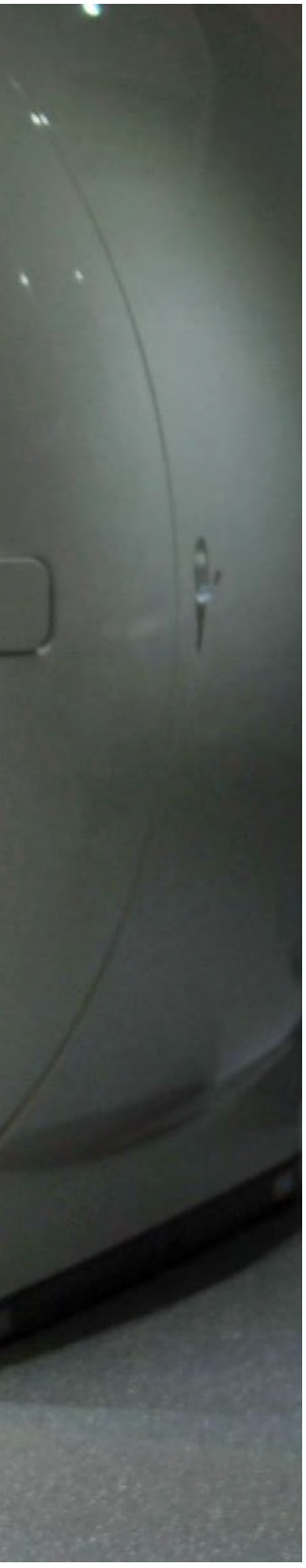
↑ OVARIAN CANCER PATIENT DANELLE SCALIA DISCUSSING HER DIAGNOSIS, TREATMENT AND THE IMPACT ON HER LIFE. IMAGE COURTESY OF NINE NEWS

World’s largest longitudinal muscle MRI study set to benefit children with cerebral palsy

MUGGLE STUDY PARTICIPANT, BARNABY, AT NEURA, AT THE NIF NODE UNIVERSITY OF NSW/NEURA. IMAGE COURTESY OF NEURA

“Not all treatment options for children with cerebral palsy are effective – some are controversial – and there’s little data on how these treatments affect muscle growth. I hope our techniques can start to change this.”

– DR BART BOLSTERLEE, NEUROSCIENCE RESEARCH AUSTRALIA (NEURA)



PROGRAM:
ADVANCED HUMAN IMAGING

INFRASTRUCTURE/
EXPERTISE:
MRI

LEAD ORGANISATIONS:

NeuRA

SUPPORTING
ORGANISATIONS:

UNSW SYDNEY

Cerebral Palsy ALLIANCE RESEARCH INSTITUTE

MEDIA STORY:

The completed MUGgLE study has produced vital data on muscle growth patterns and muscle underdevelopment in children with cerebral palsy.

Challenge

Cerebral palsy, the most common physical disability in children, affects ~34,000 Australians. It impacts movement and posture, often leading to muscle weakness and stiffening.

Previous studies have typically only examined muscle groups collectively – such as the ‘lower leg’ or ‘back’ – but lacked muscle-specific information needed by clinicians, surgeons and patients to guide treatment decisions.

Solution

Over 6 years, enabled by research-dedicated MRI infrastructure and support from NIF, Dr Bart Bolsterlee and his team conducted 762 scans of 280 children to monitor muscle growth.

Through targeted scanning and advanced image analysis, they isolated individual muscles and developed growth charts for each one.

The work gave unprecedented knowledge into the impairment of specific muscles, and uncovered other distinctions about growth patterns, growth spurts, and the development differences between bones and muscles.

Impact

The resulting muscle-growth charts answer key questions about muscle development in children with cerebral palsy. They allow clinicians to identify underdeveloped or impaired muscles relative to a child’s age.

This globally unique set of data is a now vital collection – researchers, clinicians, orthopaedic surgeons, radiographers and families can begin to make more informed decisions about treatment.

Investment to power cancer imaging breakthroughs

PROGRAM:
ADVANCED HUMAN IMAGING

INFRASTRUCTURE/
EXPERTISE:
PET

LEAD ORGANISATIONS:

SUPPORTING
NIF PARTNERS:

Two NIF-supported grants will deliver two new research-dedicated total-body PET/CT scanners to benefit Australian health research, as part of the Australian Cancer Research Foundation's 2024 grants. The foundation's goal is to support the most brilliant and promising research into all types of cancers.

Advanced total-body PET/CT imaging technology can scan the entire body in a single session with unprecedented detail and accuracy. Total-body PET/CT opens new avenues for research by enabling earlier and more precise detection of diseases, ultimately leading to more effective treatments and better patient outcomes.

NIF will contribute a total of $2.45 million to the grants under the Australian Government Department of Education's National Collaborative Research Infrastructure Strategy (NCRIS).

NIF CEO Professor Wojtek Goscinski said these two cutting-edge, total-body PET/CT instruments will be integrated into Australia's advanced imaging network at Alfred Hospital (through NIF's Partner Monash University), and Peter MacCallum Cancer Centre (through NIF's Partner University of Melbourne).

"This initiative will create a unique national-scale total body PET/CT network for research and clinical trials, offering a vital asset for both investigators and industry to advance the development of new cancer treatments," Professor Goscinski said.

These scanners will complement the existing NIF TB-PET system at the Royal North Shore Hospital and the University of Sydney. Through this investment, NIF is building a truly national TB-PET network – the first of its kind globally – to enable large-scale, multi-site clinical trials and research studies.

← THE GOVERNOR-GENERAL, HER EXCELLENCY THE HONOURABLE SAM MOSTYN AC ANNOUNCING THE AWARD OF AUSTRALIAN CANCER RESEARCH FOUNDATION'S 2024 GRANTS AT GOVERNMENT HOUSE IN CANBERRA. IMAGE COURTESY OF AUSTRALIAN CANCER RESEARCH FOUNDATION

NIF STORY

Measures of Success

NIF is Australia's advanced imaging network

190
world-class experts providing advice in imaging, data science and radiochemistry

100+
advanced open-access instruments

30
university, medical research and clinical sites across Australia

NIF's users and collaborators

1,729
supported projects (62% increase in 5 years)

209
organisations

173%
increase in user-generated revenue over the past 5 years

NIF publications are being cited ~3 times more than the global average

NIF's outcomes align with Australia's research priorities

341
supported clinical trials (190% increase in 5 years)

309
supported publications, with 80% ranked in the top quartile (Q1) for citations

321
patent documents citing NIF publications since 2011

Since 2023

$46m
investment in Australian imaging capabilities through NIF

→ resulted in

$101m
co-investment by government, universities and medical research institutes, industry, and health sectors

99% of users would recommend NIF facilities to a colleague

ALL DATA FROM 2024 AND 2025.

Our Network Partners

NIF delivers through 14 Partners located in major medical and innovation precincts, across 30 sites.

NIF works closely with Precinct Partners who host instruments or contribute substantial investment.

Our national-scale network ensures Australia's imaging investments:

→ operate using merit-based, open-access principles

→ enable multisite clinical studies and trials

→ lower barriers for accessibility by research and industry.

Through its national network of Partner organisations, NIF co-funds more than 80 scientists, who provide highly specialised expertise in imaging technologies for the Australian research community.

ANSTO
Science. Ingenuity. Sustainability.

The Florey
Advancing Brain Research

La Trobe University

Olivia Newton-John Cancer Research Institute

Macquarie University
Sydney · Australia

Monash University

SAHMRI

Swinburne University of Technology

The University of Newcastle Australia

Hunter Medical Research Institute

The University of Melbourne

The University Of Queensland
Australia

UNSW Sydney

NeuRA
Discover — Conquer — Cure

The University of Sydney

The University of Western Australia

Western Sydney University

Precinct Partners

Austin Health

Peter Mac
Peter MacCallum Cancer Centre
Victoria Australia

Harry Perkins Institute of Medical Research

Metro North

Queensland University of Technology

QIMR Berghofer Medical Research Institute

Sir Charles Gairdner Hospital

The University of Adelaide

University of South Australia

HIRF
Herston Imaging Research Facility

→↓ DELEGATES AT THE 2025 ANNUAL SCIENTIFIC MEETING. IMAGE COURTESY OF NIF

National Collaborative Research Infrastructure Strategy

NIF is a $300 million portfolio of imaging capabilities, supported by investment from the Australian Government under the National Collaborative Research Infrastructure Strategy (NCRIS), state governments, and a network of 14 university, medical research institute, and government science agency Partners.

NCRIS gives researchers and industry access to equipment, data, services and expertise to enable world-leading research and development for the benefit of all Australians.

NIF is a member of the NCRIS Health Group which enables seamless access to Australia's world-class national health and medical research expertise and infrastructure to support innovation and translation.

NCRIS National Research Infrastructure for Australia An Australian Government Initiative

Australian Government

Our state government funders

Government of South Australia

GOVERNMENT OF WESTERN AUSTRALIA

NSW GOVERNMENT

Queensland Government

VICTORIA State Government

NCRIS Health Group

EMBL Australia

BIOPLATFORMS AUSTRALIA

THERAPEUTIC INNOVATION AUSTRALIA

Phenomics Australia *Enabling precision medicine*

ARDC Australian Research Data Commons

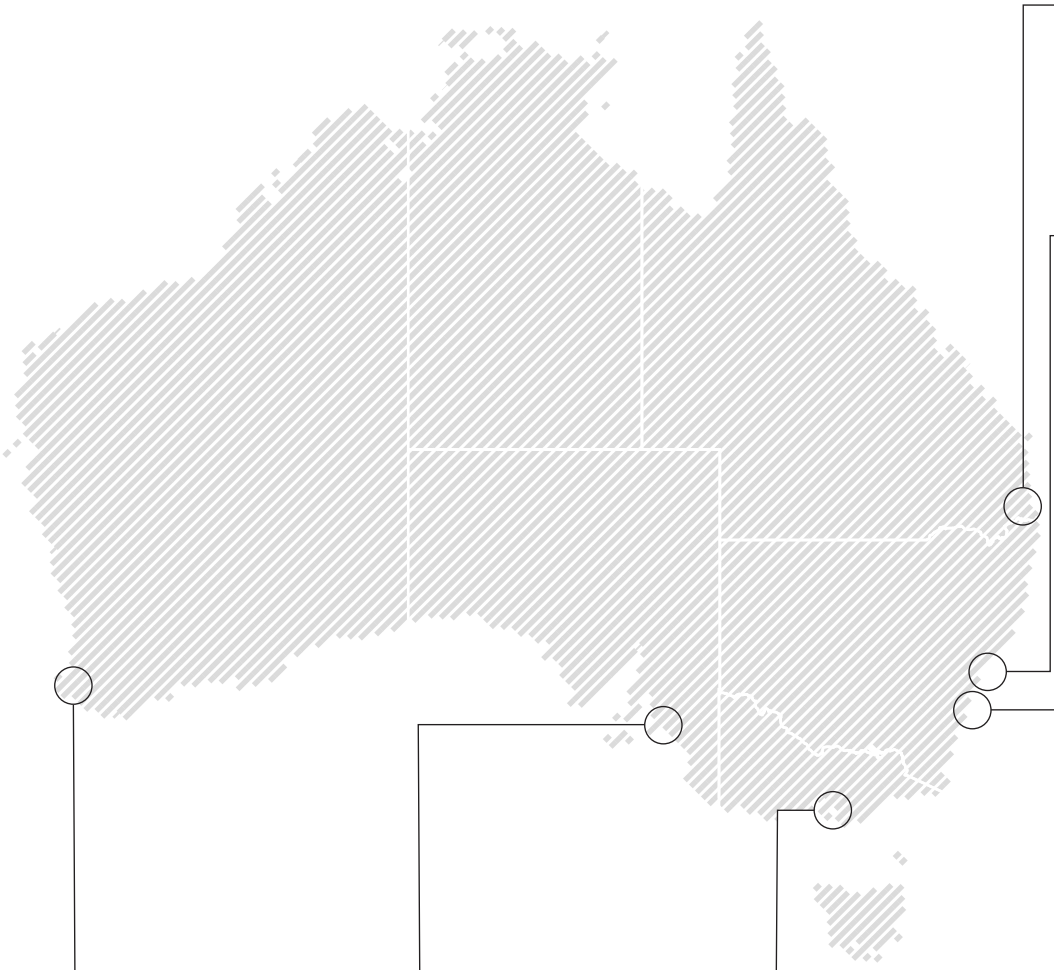
MICROSCOPY AUSTRALIA

ANFF

PHRN Population Health Research Network

Australian Government | ANSTO NATIONAL DEUTERATION FACILITY

National Footprint



Queensland Node
- → Centre for Advanced Imaging, The University of Queensland
- → Herston Imaging Research Facility, Metro North Royal Brisbane and Women's Hospital, Herston
- → Q-TRaCE, Metro North Royal Brisbane and Women's Hospital, Herston

University of Newcastle
- → Hunter Medical Research Institute Imaging Centre, Newcastle

Australia's Nuclear Science and Technology Organisation
- → Alpha Radiopharmaceuticals Facility, Lucas Heights

Macquarie University
- → Macquarie Medical Imaging, Macquarie Park
- → Australian Hearing Hub, Macquarie Park

UNSW (University of New South Wales)
- → Biological Resource Imaging Laboratory, Kensington
- → Neuroscience Research Australia (NeuRA), Randwick
- → Research Imaging New South Wales, Prince of Wales Hospital, Randwick

Sydney Imaging, The University of Sydney
- → Brain and Mind Centre, Camperdown
- → Charles Perkins Centre, Camperdown
- → Royal North Shore Hospital, St Leonards

Western Sydney University
- → Biomedical Magnetic Resonance Facility, Campbelltown

Western Australia NIF Node, University of Western Australia
- → Radiopharmaceutical Production and Development (RAPID) Centre, Sir Charles Gairdner Hospital, Nedlands
- → Royal Perth Hospital, Perth
- → Centre for Microscopy, Characterisation and Analysis, Harry Perkins Institute of Medical Research, Nedlands

SAHMRI (South Australian Health & Medical Research Institute)
- → Clinical & Research Imaging Centre, North Terrace
- → Molecular Imaging and Therapy Research Unit, North Terrace
- → Preclinical, Imaging and Research Laboratories, Gilles Plains

The Florey Institute of Neuroscience and Mental Health
- → MRI facilities, Heidelberg

La Trobe University – Olivia Newton-John Centre
- → Olivia Newton-John Cancer Research Institute, Heidelberg

Monash University
- → Monash Biomedical Imaging, Monash Clayton, Clayton
- → Monash Biomedical Imaging Preclinical Imaging Facility, Monash Alfred, Melbourne
- → Monash Institute of Pharmaceutical Sciences, Parkville
- → The Alfred Hospital

Swinburne University of Technology
- → Swinburne Neuroimaging Facility, Hawthorn

The University of Melbourne
- → Melbourne Brain Centre Imaging Unit, Parkville
- → Austin Hospital, Heidelberg
- → Peter MacCallum Cancer Centre, Parkville

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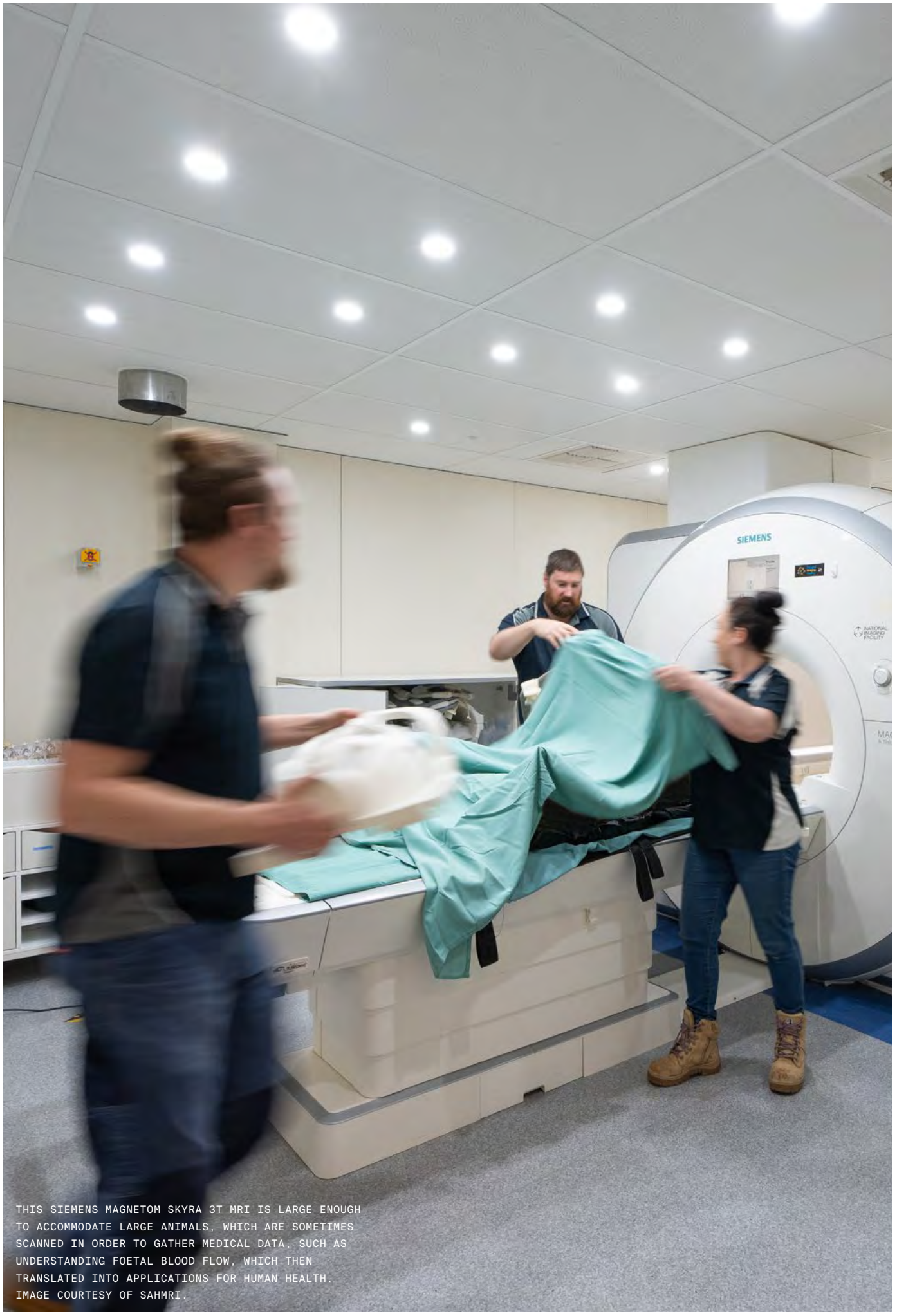

THIS SIEMENS MAGNETOM SKYRA 3T MRI IS LARGE ENOUGH TO ACCOMMODATE LARGE ANIMALS, WHICH ARE SOMETIMES SCANNED IN ORDER TO GATHER MEDICAL DATA, SUCH AS UNDERSTANDING FOETAL BLOOD FLOW, WHICH THEN TRANSLATED INTO APPLICATIONS FOR HUMAN HEALTH. IMAGE COURTESY OF SAHMRI.

NATIONAL IMAGING FACILITY

For more information email:
admin@anif.org.au
or visit our website:
www.anif.org.au

THIS IS AN AXIAL 7 TESLA SUSCEPTIBILITY-WEIGHTED MR IMAGE OF THE HUMAN BRAIN AT A RESOLUTION OF 0.3 X 0.3 MM TAKEN BY THE T7 AT THE UNIVERSITY OF MELBOURNE. THIS IS USED TO FIND TINY BRAIN ABNORMALITIES IN DISEASES SUCH AS EPILEPSY, MS, STROKE, AND TRAUMATIC BRAIN INJURY. IMAGE COURTESY OF UNIVERSITY OF MELBOURNE