

DELIVERING ON POTENTIAL

BIENNIAL REPORT 2015 AND 2016



Key information



prestigious institutional shareholders



from 2015 to 2016



1,015,230 page impressions on tri.edu.au in 2016

305 scientific publications in 2015



370 scientific publications in 2016

150 healthy volunteer clinical trial participants recruited in 2016





new technologies available to researchers and clinicians through the TRI Core Facilities in 2015 and 2016



events held at the Translational Research Institute in 2015 and 2016



900 scientists, clinicians, mathematicians and engineers at TRI



About this report

The Translational Research Institute (TRI) 2015 and 2016 Biennial Report highlights aspects of our performance between 1 January 2015 and 31 December 2016.

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To reflect our strategic direction, this report is structured around our four pillars – Global Recognition; Members and Stakeholders; Operational Excellence and People.

Our integrated corporate reporting approach means we are able to bring together material information about our operating environment, business strategy, governance, and financial and non-financial performance to demonstrate how we deliver value for our members and shareholders.

This report aims to communicate comprehensive information to satisfy the needs of individuals and groups who are affected by, or have an interest in, our activities, including:

- our members
- our shareholders
- government
- academic and healthcare collaborators
- business and industry partners
- funding bodies
- current and future employees
- health community
- contractors and suppliers.

About TRI

Our Vision

TRI will be recognised as a global leader in translational health research and commercialisation, resulting in improved health and workforce readiness.

Our Pillars

Global Recognition

TRI is globally recognised as a leading translational research institute partnering for better health.

Members and Stakeholders

TRI partners with its members and stakeholders to deliver innovative and life changing translational research.

Operational Excellence

TRI achieves operational excellence by optimising the use of its resources.

People

TRI employees and associated researchers and clinicians contribute to better health through their service, engagement and collaboration.



Founded and funded

TRI was funded on the back of the international adoption of the Gardasil cervical cancer vaccine, one of Australia's most successful examples of translational research. Gardasil faced a funds' shortage that saw the management of the business move overseas as further funds were needed. The vision for TRI was to try to stem the need for innovation to move overseas to go to product. To achieve this goal, a raft of infrastructure needed to be put in place. The TRI facility was the first step.

TRI was built on the Princess Alexander Hospital campus through a grant from the Australian Government of \$140 million; and funding from the Queensland Government of \$107 million, Atlantic Philanthropies of \$50 million, the Queensland University of Technology (QUT) of \$25 million and The University of Queensland (UQ) of \$10 million.

TRI Pty Ltd has a different business model and structure to most medical research institutes. It was formed through a collaboration of Queensland Health, The University of Queensland, the Queensland University of Technology and Mater Research who are equal shareholders with a representative on the TRI Board.

These shareholders are doorways to unique expertise, resources and knowledge:

- Australia's first large scale digital hospital
- a university in the world's top 50
- a university for the real world
- a private hospital providing clinical excellence
- a proven record of translating innovation for improved health.

Staff from medical research institutes, hospitals and departments within the shareholder organisations work together at TRI, with most of them located in the iconic, award-winning building which was constructed with interactions in mind. The unique design of the building inspires creativity. There are vistas to the city and mountains, a landscaped atrium, and rooms and breakouts areas where people meet and exchange ideas.



Catalyst for change

TRI Pty Ltd is a disruption to business as usual. It was established, by its four shareholders, as an independent company to create new interfaces between academics, clinicians and the commercial sector to form multidisciplinary teams that can bridge the chasm between biomedical research and the patients who need the discoveries.

TRI houses over 900 leading scientists, clinicians, engineers and mathematicians from around the world supported by TRI's own 74 dedicated staff who provide scientific services, IT, facilities management, finance and procurement, education, business development, marketing/events, and management.

TRI has two clinical trial research facilities, one based at the Princess Alexandra Hospital and the other at the Centre for Children's Health Research next to the Lady Cilento Children's Hospital; and high end core facilities in Microscopy, Preclinical Imaging, Proteomics, Histology, Cytometry, Biological Resources and Clinical Imaging.

TRI is also home to start-up companies and leases a facility to the biopharmaceutical manufacturer, Patheon Biologics. Patheon's presence supports the TRI vision to be one of a few places in the world where new biopharmaceuticals, vaccines and treatments can be discovered, produced, clinically tested and manufactured in one location. 'TRI's CEO believes that the most effective medical research directors are 'connectors'. Obviously you need a mix of directors and a focus on governance and strategy. But having directors who are able and willing to connect a research institute to local or international organisations, and open doors, is invaluable in innovation and commercialisation.'

Company Director Magazine (Volume 31, Issue 10, November 2015)

Our leadership

Message from the Founding Chair

In February 2015, our inaugural CEO Professor Ian Frazer stepped down from the position to focus more on his research. We wish Professor Frazer all the best with his ongoing translational research at TRI and TRI will continue to work closely with him as the Chair of the TRI Foundation.

We were very fortunate to attract an internationally acclaimed researcher to join TRI as its new CEO and Director of Research. Professor Carolyn Mountford and her team are currently working to improve MR spectroscopy technology and broaden its medical application. This work has already resulted in techniques used by research centres and hospitals for patients with cancer, brain tumours, and neurologic and psychological disorders.

Dr David Watson TRI Chair (2009 - 2017)

Image: Professor Carolyn Mountford and Dr David Watson

Chief Executive Officer's overview

After joinng TRI in February 2015, one of my first tasks was to more effectively connect clinicians and scientists, thus creating an environment for innovation, translation and commercialisation. This was achieved by opening up TRI Membership to clinicians; sponsoring seminars and training sessions for the two groups and launching Spore Grants that require a clinician as part of the research team.

We are also locating new technology in the hospital so it can to be used for research and patient treatment.

In November 2015, the Princess Alexandra Hospital became Australia's first large-scale digital hospital. This initiative will eventually make it possible to combine and analyse knowledge and data generated in the clinic with knowledge and data generated by research. We are also working to interface with industry to help researchers to get the right commercial partner at the right stage.

This interface of science, medicine and industry will be strengthened through the new Flagship Translational Research Programs covering the translational pathway from T1 to T5. The first two Flagship Programs are Diagnostic Imaging and Immunotherapy, with work currently underway to establish a Program around the Microbiome.

During 2015 and 2016, TRI worked to encourage researchers to look beyond the traditional academic career paths and reliance on government grants for funding. Even government has recognised the need for change and introduced policies to encourage strong engagement and collaboration between researchers, business and other relevant partners. In an extremely tight fiscal environment, the State Government released its Advance Queensland initiative and the Federal Government its National Innovation and Science Agenda.

These two initiatives seek to address the fact that Australia has long been at or near the top of world listings for innovation, but when it comes to converting innovation to product and delivering, the "lucky country" has been far closer to the bottom of the listings.

We are all learning but that's what we continue to do because we are focussed on improving health. We are focused on the patients.

Professor Carolyn Mountford *TRI CEO and Director of Research*



Our performance

TRI is successful from the grassroots upward. It is achieving its vision of a global leader in translational health research and commercialisation, resulting in improved health and workforce readiness. This is due, in part, to those internationally recognised programs that came with the initial and subsequent intake of members. However, there are now many new multi-shareholder programs underway resulting from a focus on performance in all four pillars.

Global Recognition

TRI is globally recognised as a leading translational research institute partnering for better health.

Members and Stakeholders Operational Excellence TRI partners with its members TRI achieves operational and stakeholders to deliver excellence by optimising innovative and life the use of its resources. changing translational research. Our **Pillars Global Recognition** People TRI is globally recognised TRI employees and as a leading translational associated researchers and research institute clinicians contribute to better partnering for better health. health through their service, engagement and collaboration.

'TRI demonstrates Australia's commitment to being an important player on a global scale; building a knowledge economy and retaining more of the financial benefits from commercialising innovations.'

International Innovation (Issue 175, April 2015)

TRI AUSTRALIA - TRANSLATIONAL RESEARCH PATHWAY



Developed the TRI Translational Pathway

While collaborations and interactions are an essential element of 'bench to bedside', which is the process of translating scientific knowledge into practical benefits for the community, there also needs to be an agreed roadmap. That is why the TRI Translational Pathway was developed.

The TRI translational research model sees a distinctive role played by each member of a multi-disciplinary team that collectively agree on the clinical question, the goal and the required outcomes based on known discoveries. The model addresses emerging research needs through the internationally accepted translational pathway from T1 to T5 modified by TRI for Australia's unique needs.

Since first publishing the TRI Translational Pathway in 2015, there has been a greater identification with, and recognition for, the T1 – T5 Pathway among our stakeholders and in the global health industry. Each milestone, from T1 to T5,

involves achieving significant progress towards answering a clinical question and a positive outcome for a patient.

In the beginning, researchers and clinicians could not identify where their projects fitted onto the pathway. Since 2015, we have been working with them to identify where research projects are at. This enables us to also identify individual and common roadblocks to further progress. We are helping them traverse the 'Valley of Death', where incredible discoveries are lost due to a lack of infrastructure and commercial models.

The future will see translational research metrics built into the performance of academic and clinical researchers everywhere, and a defining part of career development in the industry. TRI is working to see Australia leading the way.

Established TRI Flagship Programs

In 2015 the incoming TRI CEO, Professor Mountford agreed to lead by example and established a Diagnostic Imaging Program as the next of the 'Flagship' translational programs. This, with the Flagship Immunotherapy Program, led by the founding TRI CEO Professor Ian Frazer, provides real-life examples of how to make a new technology or treatment available worldwide.

Gardasil was the first translation that provided learnings for TRI members. Using this model, Professor Frazer created the publicly-listed Admedus, based in commercial space at TRI, with four other start-ups.

Using a different model to take an innovation to product, the current TRI CEO, Professor Mountford, takes imaging innovation to market with long-term commercial partner, Siemens Healthineers.



Image right: Professor Carolyn Mountford

On the world stage

In America

In June 2016, the In America commercial and documentary on TRI and its model for translating medical research, was shown on 190 regional US television stations and aired on Fox Business Channel nine times on Thursday 16 and Friday 17 June. Four of these were during peak viewing time. It generated interest here and overseas. TRI has the ongoing rights to the documentary which is featured on our website.

Germany

In 2016, TRI hosted a visit by Minister Ingrid Fischbach, Parliamentary State Secretary to the German Federal Minister of Health and her staff, who were extremely interested in how a research organisation works with a digital hospital to improve health outcomes.

IMAGINE bringing the world to Brisbane

To translate innovation you need to collaborate so TRI brought all the players together over the three-day IMAGINE Summit – the policy makers, funders, clinicians, collaborators and translators. In March 2016, TRI welcomed the Queensland Premier, Annastacia Palaszczuk; Minister for Innovation, Science and the Digital Economy; Leeanne Enoch; Dr Ashby, CEO Metro South; Dr Amanda Dines, RBWH Executive Director; Prof Coaldrake, QUT Vice Chancellor; Prof Sharma, QUT Deputy Vice

Singapore

In October 2016, a TRI-led delegation visited a number of Singapore's Agency for Science, Technology and Research (A*STAR) divisions and programs; SingHealth Duke-NUS and the Australian High Commission. This visit, coupled with subsequent meetings at TRI with delegations from Singapore has resulted in:

- an application for the A*Star and NRMRC joint funding initiative, to be released in early 2017, in molecular mechanisms of metabolic diseases
- a Memorandum of Understanding (MOU) with A*Star's Biomedical Research Council
- Singapore's interest in TRI's Asia-Pacific Microbiome Project
- negotiations to develop a collaborative project with A*Star in skin research
- negotiations to develop a collaborative project with SingHealth Duke-NUS in breast cancer
- Singapore's interest in utilising TRI's expertise in clinical trials and imaging
- TRI's interest in utilising Singapore's expertise in commercialisation.

World Science Festival

In March 2016, TRI also managed its partner's involvement in the first World Science Festival held in Brisbane. Two scientists Dr Mike Doran, QUT and Prof Brian Gabrielli, Mater Research, were part of the very successful Apprentice Program, which allowed kids to work on real research projects.

Chancellor; Jamie Merrick, DG DSITI; seven representatives from Siemens Healthcare including Elisabeth Staudinger, President Asia Pacific and Dr Renate Jerecic, Global Head of MR Collaboration; over 200 leading researchers and clinicians from Boston Germany, Singapore, New Zealand, Perth, Melbourne, Sydney, Newcastle and both sides of the Brisbane River; executives from two capital investment organisations and three other companies involved in commercialising research.

Guest speakers included Dr Peter Beattie; Professor Graeme Jackson, Senior Deputy Director, Florey Institute of Neuroscience and Mental Health; Dr Herb Kressel, Editor of the Radiology Journal; Dr Kirby Vosburgh and Professor Tayyaba Hasan from Harvard; Dr Hsiao-Ying Wey, Martinos Biomedical Imaging Centre; Dr Christoph Zindell, Head of MR for Siemens Healthcare worldwide; Professor Ian Frazer and leading researchers from CSIRO, CAI, QUT, UQ, PAH and the University of Western Australia. The workshops resulted in very lively and informative discussions on commercialising innovation in relation to the cost of maintaining patents; overcoming conflicts in areas like publishing and commercialin-confidence; and when and how to establish partnerships with industry. Immediate benefits included initial talks on a number of international and national collaborations.

Members and stakeholders

TRI partners with its members and stakeholders to deliver innovative and life changing translational research.

TRI Membership: the strength behind the vision

The TRI membership in 2013 was made up of scientists, from each of the shareholder organisations, who were undertaking research of international caliber that is translatable. They were recommended to the TRI Board for approval for a five year period following a process agreed to by the management committee.

In 2015, in order to support the bench to bedside vision, the clinicians from both the Mater and PAH were invited to become members providing an increased opportunity to communicate and solve problems. The same evaluation process was employed. There are currently 96 members with 52 involved in clinical activities.

TRI Caucus: the new driver of innovation

TRI members constitute "The Caucus" which meets every two months under the Chair of an elected leader and recently a deputy. During 2016, the TRI Caucus, under the leadership of Prof Jo Forbes (Mater), became proactive in the development of new TRI programs and gaining a voice for all TRI researchers and clinicians in TRI R&D decision making.

Importantly Caucus is now working towards coordinating and optimising collaborative translational research potential within TRI. Caucus is also promoting healthcare R&D at an international level by harnessing the skill sets and infrastructure of the entire TRI and their wider network.



Images clockwise from top: Professor Ian Frazer, Professor Carolyn Mountford and Dr Andy Moore riding to fundraise for the Lady Cliento Children's Hospital; Prisma MRI in TRI's Core Facilities; TRI's Inaugural Poster Symposium. 'TRI is helping to solve problems that have plagued our medical research industry for too long: insufficient commercialisation skills, inadequate industry collaboration, and too many great ideas being sold to overseas companies.'

Forge magazine (Vol 1 No 2 2015)







Building relationships

TRI helps its members to build relationships with key stakeholders such are donors, investors, funding bodies and government; and to showcase Australia's medical research and translational capabilities to international delegations and scientists.

In 2015 and 2016 combined, there were 935 events held at TRI for members and their stakeholders.

In April 2015, It's a Bloke Thing and The Prostate Cancer Foundation of Australia visited TRI to announce a combined donation of \$200,000 to the Australian Prostate Cancer Bio-Resources led by Distinguished Professor Judith Clements.

In 2016, TRI supported Shave for Leukaemia; World Immunology Day; World Arthritis Day; It's a Bloke's Thing; In the Pink; Run for Smiddy; PA Research Foundation Duck Race and morning teas, tours, seminars and networking functions.

Climb for Cancer was a fantastic collaboration with 64 researchers and support staff. TRI won the corporate trophy for raising over \$10,000. The Mater Research Foundation was really excited to have researchers involved.

TRI also organised a building-wide three week bike riding fundraiser to support UQDI's Dr Andy Moore and the Lady Cilento Children's Hospital. He rode 1,200kms while 30 of us rode 360kms (combined). The final 45 minutes were added by Professors Frazer and Mountford.

TRI Innovation and Translation Centre in collaboration with Siemens Healthineers

As part of the Diagnostic Imaging Program, TRI received funding from the Queensland Government's Advance Queensland initiative to establish an Innovation and Translation Centre in collaboration with Siemens Healthineers (IAT Centre). The Centre was officially opened in March 2016 by the Queensland Premier, Annastacia Palaszczuk.

This Centre builds on a long-term and strong relationship between Siemens, a global leader in MR research and technology development, and Professor Carolyn Mountford who, along with her team, has been a worldwide development site for Siemens since 1999.

The IAT Centre is a partnership between TRI, the Queensland University of Technology (QUT) and Queensland Health's PAH, which has the Southern Hemisphere's first clinical PET- MRI machine and recently acquired a Prisma Magneton 3T MRI.

The IAT Centre provides Queensland with world-leading, state of the art diagnostic imaging capabilities and a unique teaching, research and translational platform in multiple disciplines. It is positioning TRI, and Queensland, on the world stage for the development and testing of diagnostic tools based on MR technology.

Reaching out to Students and Early Career Researchers

The TRI Student Society was formed to allow post graduate students from shareholder organisations to meet in a common forum. This has proven to be a very successful initiative ably assisted by the TRI Communications and Marketing team who guide the students through understanding the process of the T1-T5 Translational Pathway.

The first Poster Symposium, organised by the TRI Student Society itself took place in 2014. At the 2016 Student Poster Symposium, TRI suggested to the Student Society they consider introducing additional categories to the traditional 'Science to Science' posters. The aim was to get students and Post Docs thinking about how to communicate their work to a potential commercial partner (Science to Business) and to a general audience (Science to Public), which includes government, clinicians, potential donors and other key stakeholders. Each entrant was also required to present their research in the larger context of their team's research and its ultimate health benefit.

The Student Society was so successful that TRI was contacted in 2016 by Early Career Researchers (ECR) wanting to form a building-wide network as well. This Committee had its first professional development workshop late in 2016 and will run two professional development events in 2017.

Partners in time

Her scientific story is one of tragedy and struggle, yet fortunate coincidence has now brought her work to the brink of major success.

In so many ways, timing has been everything for The University of Queensland Diamantina Institute (UQDI) researcher and Princess Alexandra Hospital (PA Hospital) Head and Neck Cancer Centre Fellow, Dr Fiona Simpson.

The Scottish-raised Cambridge doctoral alumnus was on a fellowship at USA's Scripps Institute when she experienced the frustration born of not being able to help her terminally ill mother, despite working at one of the world's top biomedical research facilities. Later coming to Australia on a JDRF Fellowship and then awarded an RD Wright Fellowship at The University of Queensland's Institute of Molecular Bioscience (IMB), Fiona moved to UQDI where a chance conversation in the tea room with Professor lan Frazer. The University of Queensland's (UQ) renowned developer of Gardasil, led to an invitation to head up her own research program at UQDI, provided that she "did something translational."

'lan Frazer and others had a vision for translational research', she said. 'And l've been here with him from

the beginning of TRI, when UQDI was in R Wing of the PA Hospital. Since then I've witnessed the birth and growth of this fantastic new Institute.'

After a long course turning some accepted cell biology ideas on their head, and pursuing lines of enquiry for which at times she had no funds, Dr Simpson's research has ultimately shown the relatively inexpensive anti-nausea drug Stemetil can dramatically improve the capacity of the immune system to kill tumour cells following cetuximab and similar monoclonal antibody cancer drug therapies.

'We had our setbacks, but every time things seemed dire, something just happened — we'd receive new funding or

one of our collaborators would contact me late at night with a breakthrough', she says. 'Then when we started pursuing the Stemetil idea, our collaborator, PAH's Director of Cancer Services Professor Euan Walpole turned out to be the same Euan Walpole who published the original Australian dosage studies on Stemetil way back in 1972, the year I

was born. Can you believe it?'

While Dr Simpson's story began before TRI was built, founding CEO and Director of Research at TRI Professor Ian Frazer has been the common element of support on the journey.

'His whole concept of TRI got me really excited. I've found translation is actually a very creative process. For the people who go with it, it actually works. You come in and you have an idea of how research can be applied, but it has to fit with clinical care, and it has to be something that's chosen and tolerated by patients. Plus I've also learned a lot about industry and commercial issues.'

Dr Simpson acknowledges the early stages of an original concept like TRI aren't easy. 'Like anything new the

details of the original vision are still unfolding, but there's fresh initiatives happening here all the time to bring TRI forth and make it the best it can be', said Dr Simpson. 'For example TRI's new Clinical Research Facility means we now have a proper environment to collect blood samples. Obviously as it evolves this diverse facility will be of even greater benefit to many other incoming scientists, clinicians and their patients.

When asked of the benefits of TRI, she shoots straight back in praise of Café Catalyst in TRI's beautiful Atrium. 'The coffee keeps us going', she laughed. 'On a more serious note, it's the networking and collaboration with clinicians, and their patients of course. I wouldn't have even known

Image above: Ovarian Cancer cells Image right: Dr Fiona Simpson in the Lab

'People here don't seem to think so institutionally, which exponentially increases the possible connections we can make.'

Dr Fiona Simpson



Image: Project Pink is the PA Research Foundation's campaign to raise funds for innovative breast cancer research projects. To find out more, or make a donation, please visit www.projectpink.org.au.

what question the clinicians needed answered without the TRI setup."Clinicians are highly cautious with their patients. Remember they've made an oath to do no harm. Even so, the proximity has helped build trust between us. Because they are so close they are more likely to come to one of our talks, and vice versa, rather than having a mindset of "just doing my job". Being here together means they don't just see our research on paper or on a PowerPoint. We could actually show them the mice, and the improvements that were happening. Then when we came to testing tumour tissue from patients, they could actually be in our lab when we stained up the first slides.'

'We had to find the pattern of the cetuximab side effects. We investigated live patient tumours. We ran back to the lab and did the tests on the live tumour biopsies. None of that would have happened if we hadn't been within 10 minutes dash from the wards, because within half an hour the tissue starts to lose viability.'

Dr Simpson sees TRI as creating win-win situations. 'People here don't seem to think so institutionally, which exponentially increases the possible connections we can make', Dr Simpson said. 'For example, if I give a talk then someone present might not be able to help me with a particular problem, but they'll know someone else who can That has helped me as a researcher, but it's also helped UQDI, of which I'm a part, and my collaborators at PAH and elsewhere.'

Proximity is also obvious in the design and operation of TRI. 'The labs and systems here work differently to elsewhere. All my staff are outside my door, and my labs are right here also, in visible range. It's a great set up. The administration and services are excellent. At times I've brought large numbers of samples for testing and as I said, there isn't much time to do it. Yet Crystal in TRI's Histology Core Facility always comes through. The people here are patient focused, no matter what their job. They go the extra mile because they can see the possibility of making a difference', Dr Simpson said. Whenever in need of inspiration, Dr Simpson has only to think of the patients.

'All our patients are in metastatic phase. They are all in palliative care. Yet they really want to make a difference too. The patients and their partners love to make a café visit to TRI. It makes them feel good, even if just for a short while. None of what we do counts for anything unless we can help patients. They are real heroes. We need plenty of tissues and chocolate here sometimes.'

'Then there's my team. I'm so proud of them. They've stuck with me through thick and thin. They're all so dedicated. Once I took away someone's entry pass so they would have to take some time off. I have to look after them, you see. They call me "Lab Mum".'

The trials have been showing good safety results so far and the project is moving to a new phase, including combinations with successor drugs to cetuximab. 'We have three usage patents and are now seeking ongoing funding for further trials and confirmation of efficacy, as well as potential future commercial arrangements', Dr Simpson said.

To say it's been far from an easy ride is an understatement but perhaps Fiona Simpson personifies the adage that the harder you work the luckier you get. Though she may feel that in some ways she has been an experiment for the disruptive idea that is TRI, the bottom line is that Dr Simpson's project has gone from concept to three clinical trials in only six years, and is now at T3 on TRI's Translational Pathway.

'Pioneering in translation has had its challenges for sure. But I'm a Highlander. I never stop. I never give up', she said.





Image top: Dr Fiona Simpson with her lab team in 2015. Image middle: Dr Fiona Simpson with her lab team in 2016. Image right: Cancer tumor under the microscope.

Operational excellence

TRI achieves operational excellence by optimising the use of its resources.

Clinical Interface

When TRI CEO and Director of Research, Professor Carolyn Mountford was appointed in February 2015, one of her first tasks was to more effectively connect clinicians and scientists to create an environment for innovation, translation and commercialisation.

'Brisbane is becoming an epicenter for high-quality science with research infrastructure, such as TRI, being a big drawcard for international scientists.'

'Research investments pay off for Australian City' (Nature Index 25 Oct 2016)

The TRI Clinical Research Facility (CRF)

The CRF started undertaking trials in January 2015 and was officially opened by Queensland Minister for Health, Cameron Dick, in August 2015. It is the culmination of a significant collaborative effort from the Princess Alexandra Hospital, Metro South Health, TRI and its partners including The University of Queensland, the Queensland University of Technology and Mater Research.

Among the first human studies undertaken during a threemonth pilot phase, were trials on the treatment of obesity and of asthma. The TRI CRF has now expanded its scope of operations and many new trials are underway. It provides a controlled and safe environment to conduct patient research with ready access to hospital facilities and emergency response teams.

Dr David Theile, a senior surgeon and past CEO of Metro South Head was appointed to get the TRI Clinical Trial Facilities operational and to build expertise in the design and management of clinical trials.

The TRI Clinical Trial Facility at the Centre for Children's Health Research (TRIC)

In October 2016, TRI officially opened and promoted its Clinical Trial Facility, located on the Lady Cilento Children's Hospital campus within the Centre for Children's Health Research. It is a purpose-built clinical trial facility designed to support low risk outpatient based studies in babies, children and adolescents.

The facility aims to assist in translating research findings into better care and outcome for patients at the Lady Cilento Children's Hospital and across Queensland, and ultimately for children and adolescents through the world.

Images clockwise from top: TryaTrial Campaign advertisements, Flow Cytometry Core Facility, commercial space available at TRI



Campaign to recruit healthy cohorts for clinical trials: TryaTrial Campaign

Researchers and clinicians wanting to undertake clinical studies and trials report that it is really difficult to get healthy controls to volunteer.

To assist, TRI ran a TryaTrial Campaign in October 2016, to build awareness of the importance of volunteers for clinical trials and improved health; and to counter the current view that only sick people took part in trials. There was a two-week campaign on two radio stations and with posters at 65 bus stop shelters. It recruited around 100 volunteers.

This campaign was continued through TRI Social Media channels. To date, over 150 people have expressed interest in participating in a trial, with some already linked with specific trials. These volunteers receive a regular newsletter and have been invited to an afternoon tea and tour of TRI where they could see first-hand the research that they are helping translate into improved healthcare.

Core Facilities

TRI combines the people with the technologies for improved utilisation and value-for-money. It enables high quality platform capabilities through shared technologies and expertise.

When TRI was established, equipment used in specific technical fields was brought together from the four TRI shareholders and made available to all. It was then decided that TRI should manage this equipment through centralised Core Facilities.

Collaboration between the prominent partners at TRI has enabled the core facilities assets to grow and are rapidly becoming a drawcard for researchers looking to use state of the art equipment and expertise, not available elsewhere.

A survey of the Core Facilities in 2015 found that most people, around 75% of respondents, were satisfied with the quality of services and instrumentation.

The Core Facilities of flow cytometry and preclinical imaging were transferred to TRI in 2016 with microscopy, histology and proteomics to be transferred in 2017.

Commercial space

TRI licenses customisable incubator laboratory, cleanrooms and office space to start-up companies. In 2016, the annual revenue per year of \$410,000 generated by commercial occupants, decreased shareholder contributions. These occupants add to the skills TRI scientists required when commercialising medical innovations by offer training and specialist services to shareholder staff.



People

TRI employees contribute to better health through their service, engagement and collaboration.

'TRI fosters open discussions on career pathways that extend beyond the traditional academic researcher or clinician researcher. We encourage researchers to look beyond traditional research funding avenues to commercial partnerships and internships.'

Professor Carolyn Mountford, International Innovation (Issue 175, April 2015)



Sandrine Roy Microscopy Senior Scientist

I think my background as a scientist with a PhD and postdoctoral experience (I'm a cell biologist) really helps in this position because I can see what people need. I share their perspective. I know what it's like.

Since the establishment of TRI, the microscopy equipment available to researchers has grown from five instruments located in R Wing at the PA Hospital to 22 located on level four at TRI. There are over 300 Microscopy users in the facility out of the 900 scientists and clinicians working here.

I work hands on/hands off with clients depending on what is needed for most efficient practice. Part of the service is that we train people but we are also available when people need help. Each Core Facility is so different and so the staffing ratios required are different. TRI recognises this in its planning so we don't get overloaded and can provide optimum service.

Because of our scientific backgrounds, we often question the investigators on their projects. This is especially important for example with new students, who are less experienced. We're a backstop to ensure there is scientific robustness going on in the facility as far as possible.

When you're imaging for somebody, you're sitting in the dark next to them, so you start talking with each other. When I spend so much time with some researchers I get an intimate insight into their work, what's making them tick and therefore what further ways I can help them, or connect them with someone who can.

I like to help people and in these facilities we're really well placed to put people in contact with each other. We're always circulating in the facility. I try to connect people so they can share resources and maybe down the line do collaborative work. People from different partner institutions may have been a bit reticent in the early days, but I think the collaborative mindset is really growing at TRI. They attend each other's seminars and share ideas.



Brian Tse Preclinical Imaging Scientist

Even before becoming officially appointed as manager of the TRI's Preclinical Imaging Core Facility, Brian Tse was known as the resident expert on the equipment and volunteered to do the work as and when required. Before stepping into the role, Brian was a researcher on level three at TRI with QUT IHBI.

In 2016 there were 70 different users of the Preclinical Imaging core facility (PCI).

PCI's main role is to help researchers generate more experimental data using animal models of disease so that projects can progress along the TRI Translational Pathway from T1 phase (preclinical) to T2 phase (clinical studies).

We help researchers address a clinical question or medical need. For example, is this drug reducing the size of tumours? Is a new imaging tool required? Is the data of sufficient quality to consider progressing to patient studies at T2?

We train individual users of facilities so they can do the work themselves, depending on its complexity, and the radiation licensing requirements etc. We also help them analyse data. Once trained they can just book time with the machine and go ahead, but we're always here to help.

PCI also helps clients design the experiments, whether just the imaging component or the whole study – whatever is required.

Our corporate plan

The TRI Corporate Plan, developed in 2016, represents a summary of the overarching strategic direction and provides principles for forward planning. The current Corporate Plan includes:

- Five year strategic goals expressed through the Four Strategic Pillars
- Financial forecasts to support our Strategic Goals
- Key risks and controls

Five Year Strategic Goals expressed through Strategic Pillars

Five Year Strategic Statements

Global Recognition

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Members & Stakeholders

"TRI partners with its members and stakeholders to deliver innovative and life changing translational research"

Operational Excellence

"TRI achieves operational excellence by optimising the use of its resources"

People

"TRI employees and associated researchers and clinicians contribute to better health through their service, engagement and collaboration"

Financial Plan

The Financial section of the Corporate Plan provides highlevel financial forecasts, inclusive of TRI strategic priorities.

Key aspects which aided improvement in the financial budgeting process were:

- top down budget parameters were set and communicated to staff upfront
- budgets were formulated along with departmental strategic goals, operational management goals and aligned to strategic pillars
- departmental budget ownership, which will improve performance management.

Key risks and controls

The Corporate Plan includes a summary of the risks that could prevent TRI from achieving strategic goals. The key risks for TRI are integrated with the four strategic pillars and include mitigations. 'Translational research must be driven from clinical needs. And having TRI in close proximity to the PA Hospital is a must to get something back into the clinic.'

Dr Michael Schuetz, Director of Trauma, Princess Alexandra Hospital, In America documentary 2016





Our Board

Dr David Watson Independent Chair

Dr David Watson has a PhD in accounting from Ohio State University. He was Professor of Accounting and Business Finance at The University of Queensland 1978-89, Head of the Department of Commerce 1978-82, and twice Dean of the Faculty of Commerce and Economics. He also served in the House of Representatives becoming Deputy-Leader of the Liberal Party until 1992. David is a member of the Board of the Queensland Competition Authority and the Board of Directors of Tatts Group Limited. Dr Watson is a Fellow of CPA Australia and a Fellow of the Institute of Chartered Accountants.

Professor Robyn Ward AM FAHMS

Provost and Senior Vice-President, The University of Queensland

Prof Robyn Ward joined The University of Queensland as Deputy Vice Chancellor (Research) after many years within hospital and academic settings in New South Wales, including roles as Director of the Prince of Wales Cancer Centre and Clinical Associate Dean at UNSW.



Professor Arun Sharma

Deputy Vice-Chancellor (Research and Commercialisation), Queensland University of Technology

Prof Sharma has played a leadership role in development of Australian research capability in information and communication technology. He co-foundered the National ICT Australia Limited (NICTA) – Australia's national centre of excellence, and was the inaugural Director of its largest research laboratory. He has been on the Boards of QMI Solutions Ltd, qutbluebox Pty Ltd, Cooperative Research Centre for Integrated Engineering Asset Management and Cooperative Research Centre for Smart Services.





Dr Richard Ashby AM Chief Executive of Metro South Hospital and Health Services

Dr Ashby is one of the state's most experienced clinicians and health administrators. In 2010, Dr Ashby was awarded a Member of the General Division of the Order of Australia for service to emergency medicine, to medical administration, and to a range of professional associations.

Dr Ashby has extensive experience as a Director of numerous Boards and Member, Australian Medical Council; Vice President Royal Australasian College of Medical Administrators (2010-20120 and Chair of the e-Health Governance Board (Queensland Health).

Jim Walker AM

Vice President and Managing Director of Rockwell Collins Asia Pacific

Mr Walker has over 30 years' experience in engineering, manufacturing and technology development in the aerospace industry. He has been the CEO of a number of companies and was also General Manager of The Boeing Company's Network Enabled Systems Business Unit in Australia. Mr Walker has held a number of board appointments throughout his career and is currently the Chair of Mater Research and is a director on the China Eastern and Rockwell Collins Joint venture in Shanghai. Mr Walker is a Member of the Order of Australia, an award which recognises his contribution to the Australian aerospace industry.

Our Executive Leadership Team 2015-2016

Professor Carolyn Mountford, Chief Executive Officer and Director of Research Dr Kate Johnston, Chief Operating Officer Kirsten Kiel-Chisholm, General Counsel Louise Morland, Communications and Marketing Director Rick Durroch, Financial Controller Michelle Richards, Work Health and Safety Manager Alan Stockman, Building Services Manager Dr Stephen Love, Facilities Manager Mark Eaton, Supply Manager Christian Unger, IT Manager Anneli Bridgment, Human Resources Manager

Our Committees

The TRI Committees were formed to tackle challenges and to generate new ideas from different perspectives and expertise. Each Committee has a specific role to play and the Chairs are rotated each year.

2015 Innovation and Translation Committee

This Committee includes senior executives from each of the shareholder organisations and two independent members. It drives the Innovation and Translation Programs. Its responsibilities include to work collaboratively to drive TRI's research, translation and commercialisation goals.

2016 Strategy and Commercialisation Committee

In 2016, the Innovation and Translation Committee was changed to the Strategy and Commercialisation, which is charged with identifying and advising on ways to maximise both government and business opportunities that will help TRI achieve its goals to improve health through innovation, translation and commercialisation.

2015 and 2016 Facilitations Committee

This Committee's responsibilities include to oversee and manage the TRI Core Facilities, with input from the user groups; to provide cutting edge research with state-ofthe-art facilities; and to assess and oversee the application for any external funding required to achieve cutting edge research and development

2015 Education and Talent Management Committee 2016 Personal Development and Talent Management Committee

The functions of this committee are to manage talent, which requires identifying the human capital needed, and how to meet those needs, to ensure the future success of TRI; and to broaden the career development platform to include all aspects of translational research. The new platform should include IP, company structure, fiduciary responsibilities, business planning, grant writing, as well as a sound education in editorial policies and scientific legal responsibilities. It is essential to invite senior journal editors to teach at TRI as well as business, legal and accounting experts to present seminars on a pro bono basis

2015 and 2016 Clinical Research Facilities Committee

The functions of this Committee are to:

- oversee the operations of the both the TRI Clinical Research Facility at the Princess Alexandra Hospital and the facility at the Centre for Children's Health Research servicing the Lady Cilento Children's Hospital
- undertake a risk management assessment on both facilities on a six monthly basis
- build relationships with the clinical services entities to enable translational activates.



TRI Foundation

TRI Foundation works with the Translational Research Institute (TRI) to develop new treatments within shorter timeframes for common and serious diseases and conditions.

Chaired by Professor Ian Frazer, the TRI Foundation raises awareness and funds to facilitate and promote research at TRI.

Monetary donations allow the TRI Foundation to distribute funds to research projects, which aren't widely marketed or media driven, but will result in much needed improvements in healthcare.

All donations made to the TRI Foundation are tax deductible via the My Cause website. A receipt will be provided for tax purposes.



We thank you in advance for assisting us financially to accelerate the time it takes to bring cures and treatments to the community.

tri.edu.au/TRIfoundation



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Partners



Princess Alexandi Hospital





