MTPConnect

MedTech and Pharma Growth Centre

Annual Report FY2020

Australian Government
Department of Industry, Science, Energy and Resources

Industry Growth Centres


2020

Contents

Foreword from the Chair and the Managing Director and CEO

FY2020 was shaping up as another year of high achievement for MTPConnect and the medical technology, biotechnology and pharmaceutical (MTP) sector.

In the first half of the year, the MTPConnect team led a 30-strong Australian delegation to the MedTech Conference in Boston and promoted Australia's clinical trials expertise at BioJapan.

The Biomedical Translation Bridge (BTB) program opened its first funding round; the BioMedTech Horizons (BMTH) program closed its second. By December, we had awarded $14.8 million to 17 projects across the country. Our BMTH projects joined Growth Centre projects for a value-add event to share their translation experiences.

We placed antimicrobial resistance front and centre of the policy debate with a cross-sector workshop in Canberra, promoted our sector at the 20th Science meets Parliament and released a new report on frugal innovation export opportunities in India.

Our organisation expanded, with new staff appointed in Melbourne, Perth, Brisbane, Sydney and Newcastle; a new director joining the Board; and a 'Guest of the Chair' initiative launched to nurture future leaders.

We also released our 2020 Sector Competitiveness Plan, which captured the significant advances made by the sector through to 31 December 2019.

Then, on 25 January 2020, Australia confirmed its first case of the novel coronavirus and it wasn't long before COVID-19 emerged as a public health and economic crisis.

The pandemic has impacted every aspect of all our lives and the sector has stepped up.

We have seen unprecedented collaboration between industry and government to ensure Australia secured its fair share of essential medical equipment, including ventilators, test kits and personal protective equipment. And even through lockdown restrictions, our researchers and start-ups have been working overtime to develop vaccine candidates, diagnostics and therapeutics to respond to this unprecedented health challenge.

Like the rest of the community, the MTPConnect team quickly adapted to life in lockdown, embracing new technology to help stay connected and continue delivering programs and initiatives to support the sector.

We partnered with L.E.K. Consulting to better understand the burden of the pandemic and lockdown restrictions – and how MTP companies and researchers responded to the crisis. We also worked with the Medical Technology Association of Australia (MTAA) to examine the critical role played by the medical device sector in the fight against COVID-19 and delivered a granting program tailored specifically to COVID-19 projects.

We expanded our commercialisation and workforce skills footprint by securing two new strategic initiatives from the Medical Research Future Fund (MRFF): the Researcher Exchange and Development within Industry (REDI) initiative program and a Targeted Translation Research Accelerator (TTRA) program focusing on cardiovascular disease and diabetes.

Indeed, MTPConnect now has $161.9 million in sector support funds under management, across five strategic initiative funding programs. Across those programs, a total of $78.2 million has been committed to support 103 projects so far, leveraging a further $229.1 million in industry contributions and external investment.

Translating and commercialising innovative health solutions leads to jobs and economic growth and it has been MTPConnect's focus throughout the pandemic. Maintaining that focus, continuing to build sovereign capability and strengthen supply chain resilience will position our sector to play a central and ongoing role in driving Australia's economic recovery and future pandemic preparedness.

Sue MacLeman
Chair

Dr Dan Grant
Managing Director and CEO

Scope of Report

The following report is the Annual Report from MTPConnect to the Department of Industry, Science, Energy and Resources (DISER); a contracted deliverable as detailed in the Funding Agreement signed by MTPConnect and DISER on 18 December 2015 and in the two Variations to the Funding Agreement signed on 3 May 2016 and 15 January 2019.

This report relates to the 2020 financial year: 1 July 2019 to 30 June 2020.

During this period, MTPConnect has met or exceeded all milestones and reporting obligations within the Funding Agreement and Variations to the Funding Agreement.

Overview

MTPConnect, the Medical Technologies and Pharmaceuticals (MTP) Industry Growth Centre (IGC), was established in 2015 as an independent, not-for-profit organisation that champions a sector-led approach to accelerating the growth of Australia's MTP sector. MTPConnect is distinguished from industry associations as it does not operate a paid membership model and is therefore not viewed as a lobby group. As an independent body, it is attuned to the needs of all participants in the sector, including government. This allows MTPConnect to act independently as a trusted voice to inform and shape government regulation, public policy and funding. MTPConnect is guided by an experienced Board of Directors and managed by a professional executive team.

The Board of Directors

Sue MacLeman – Chair

Sue MacLeman has more than 30 years' experience as a pharmaceutical, biotechnology and medical technology executive, having held senior roles in corporate, medical, commercial and business development. Sue has served as CEO and Board member of several ASX and Nasdaq-listed companies in the pharmaceutical sector and is currently Chair of MTPConnect (MTPII-GC Ltd), Chair of Anatara Lifesciences Ltd (ASX:ANR), Chair of TALi Digital Ltd (ASX:TD1), Non-Executive Director of Palla Pharma Ltd (ASX:PAL), Non-Executive Director of Oventus Medical Ltd (ASX:OVN) and Non-Executive Director of Veski. Sue is also appointed to several academic and government advisory committees, including the CSIRO Health and Biosecurity Advisory Committee, the Prime Minister's Digital Experts Advisory Committee, DMTC's Medical Countermeasures and various COVID-19 taskforces. Her broad commercial experience is underpinned by graduate qualifications in pharmacy and postgraduate qualifications in corporate governance, commercial law, business administration and marketing. This year, Sue was awarded the prestigious AusBiotech and Johnson & Johnson Innovation Industry Leadership Award in recognition of her outstanding contribution to the MTP sector.

Dr Nicholas Cerneaz – Director

Dr Nicholas (Nick) Cerneaz has been building companies to commercialise academic research for more than two decades. After gaining a DPhil from Oxford University in the early '90s in mammography technologies assisting the management of breast cancer, he has worked extensively guiding and advising the development of a number of medical technology start-up companies, covering a variety of fields including radiology, oncology, ophthalmology, pathology and immunology. Other industrial experience includes automation and process optimisation in heavy manufacturing and process industries, astronomy instrumentation design and implementation, and advanced computer vision safety systems for the automotive industry. With MyHealthTest Pty Ltd, a Canberra-based medtech start-up, he worked to bring convenient pathology services to consumers with do-it-yourself (at home) sample collection and test results delivered online to both patient and doctor.

Julie Phillips – Director

Julie Phillips has a strong background in the biotechnology and pharmaceutical industry, having worked as CEO and Director of start-up Australian biotechnology companies operating in the life sciences sector. Her technical background is in clinical trials, regulatory affairs and pharmacoeconomic assessment/pricing of therapeutics. From 2014 to 2020, Julie was Chair of AusBiotech Ltd, the peak biotechnology industry association in Australia. She is CEO and Director of BioDiem Ltd and its subsidiary, Opal Biosciences Ltd. She is also a member of the Council of the University of Newcastle and chairs Innovation Australia's R&D Incentives Committee.

Dr Douglas Robertson – Director

Dr Douglas Robertson is the Director of Research Services at the Australian National University and has over 30 years of experience in research, economic development, technology transfer, spin-out companies and commercialisation in the UK and Australia. During that time, he has negotiated over $3 billion of research funding, served on the boards of more than 20 technology companies and assisted the establishment of over 20 other early-stage technology businesses. Douglas was a founding Director of PraxisAuril (formerly Praxis and PraxisUnico), a major UK and international technology transfer and training association, from 2003 to 2013 and Chair in 2012 and 2013. He serves on the boards of four NCRIS facilities.

Alex Fowkes – Director

Alex Fowkes was the Chief Strategy Officer for WuXi NextCODE, based in Singapore. As a life science executive, he is an experienced leader and thought partner for life science strategy, commercial operations and business development. He has extensive experience in leading strategy development and operational improvement projects within the pharmaceutical, contract research and bioinformatics industries, with a core expertise in the strategy, execution and management of strategic partnerships. His specialities are life science strategy and operations, business development and strategic transactions.

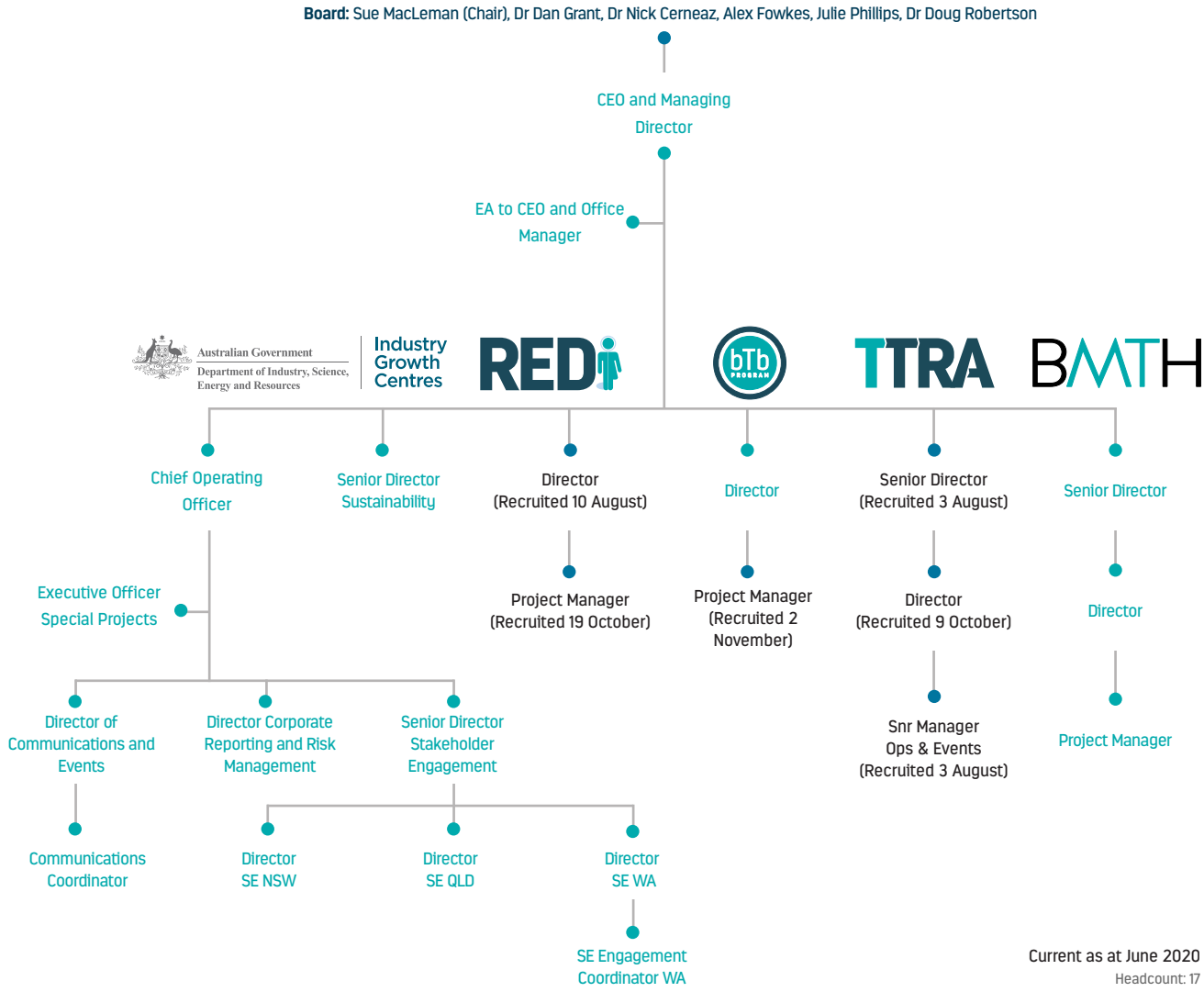
Dr Dan Grant – Managing Director and Chief Executive Officer

Dr Dan Grant has spent more than 25 years in senior roles in the pharmaceutical, higher education and medical research sectors. Prior to joining MTPConnect in 2018, Dan was the inaugural Pro Vice-Chancellor for Industry Engagement at La Trobe University, where he had oversight of the university's innovation, commercialisation and industry engagement activities. He was also the Senior Director and Head of Pfizer's External Research and Development Innovation group for ANZ/Singapore and their Head of Open Innovation. Dan also sits on the Expert Advisory Panel for the Stem Cell Therapies Mission. He has a PhD in Cardiovascular Physiology and an MBA.

Stuart Dignam – Chief Operating Officer

Stuart Dignam is an accomplished corporate affairs professional with experience across operations, communications, issues management and policy in the public and private sectors. Stuart has held several senior positions, including General Manager, Policy & Corporate Affairs at CPA Australia, Queensland Deputy Trade & Investment Commissioner for the Americas and Executive Director, Office of the Director-General of Premier and Cabinet in Queensland. He has worked as a broadcaster for ABC Radio and as a government media and policy advisor.

MTPConnect Organisational Structure



MTPConnect saw substantial growth during FY2020, in both staff and funding programs, and established a new head office in the Melbourne CBD at Level 20, 15 William Street, as well as a dedicated office in Queensland at the Translational Research Institute (TRI). The company's national footprint also includes office hubs at Monash University and the University of Sydney, as well as the MTPConnect WA Life Sciences Innovation Hub at the Harry Perkins Institute of Medical Research in Perth.

New business units were created to embed the new REDI initiative and TTRA program and align resources with the company's five program areas, ensuring MTPConnect is well placed to deliver current and future programs. Staff for the REDI and TTRA teams were recruited in FY2021.

Zooming in on the MTPConnect 'Teams'. Top L–R Dr Dan Grant, Sue MacLeman, Dr Nick Cerneaz, Alex Fowkes, Julie Phillips, Dr Douglas Robertson, Stuart Dignam, Dr Rebecca Tunstall, Andrew Bowskill. Middle L–R Dr Gerard Gibbs, Lauren Kelly, Dr David Fox, Elizabeth Stares, Caroline Duell, Danielle Shand, Dr Vishal Srivastava, Dr Duncan Macinnis, Dr Amelia Vom. Lower L–R Dr Michelle Low, Dr Tracey Wilkinson, Jarrod Belcher, Dr Erin McAllum, Libby Pearce, Jenny Devlin, Shannan Osrin, Rebekah Craggs, Dr Mana Liao.

The MTPConnect Team and COVID-19

Consistent with our commitment to staff health and safety and complying with workplace regulations, MTPConnect moved swiftly to implement policies and procedures to minimise COVID-19 infection risk for our team. This included proactive directives on 4 and 11 March 2020 banning travel and group meetings and implementing strict 'Working from Home' arrangements. Changes were incorporated into updated HR policies and procedures to provide COVIDSafe working arrangements for all MTPConnect staff. An Employee Assistance Program was launched to provide support to employees. Cybersecurity measures for the organisation's network were stepped up with the assistance of MTPConnect's IT service provider.

Executive Summary

Executive Summary

MTPConnect is an independent, not-for-profit Growth Centre (GC) that champions an industry-led approach to accelerating the growth of Australia's medical technology, biotechnology and pharmaceuticals (MTP) sector.

Focusing on the Four Objectives of the Industry Growth Centres Initiative

MTPConnect forges stronger connections between research and industry and maximises opportunities for Australians to make scientific and technological breakthroughs that are successfully translated and commercialised. It does this by focusing on the four objectives of the IGC Initiative:

- Improving collaboration and commercialisation
- Improving management and workforce skills
- Optimising the regulatory and policy environment
- Improving access to global supply chains and markets

MTPConnect has $161.9 million in sector support funds under management, across five strategic funding initiatives

Australian Government
Department of Industry, Science, Energy and Resources
Industry Growth Centres

Growth Centre Project Fund

$15.6M grant value

36 projects

$21M matched industry contributions

$1M state government contributions

$13.7M in-kind contributions

$103M incubator investment

24 projects completed

4 new projects confirmed

Australian Government
Department of Health
Medical Research Future Fund

BMTH BioMedTech Horizons PROGRAM — SUPPORTING TRANSLATION OF AUSTRALIAN MEDICAL TECHNOLOGY INNOVATION	**$45M** grant value **41** projects
bTb PROGRAM Biomedical TRANSLATION BRIDGE PROGRAM	**$22.3M** grant value **21** projects
RED DEVELOPING AUSTRALIA'S MTP SECTOR WORKFORCE	**$32M** grant value **5** projects
TTRA TARGETED TRANSLATION RESEARCH ACCELERATOR DIABETES | CARDIOVASCULAR DISEASE	**$47M** grant value **5** partners

Growth Centre Project Fund (Department of Industry, Science, Energy and Resources)
Through the GC Project Fund, MTPConnect has committed $15.6 million across 36 projects, which have achieved demonstrable results, including:

- 294 technologies being invented or progressed
- 203 patents/trademark applications and licenses
- 84 start-up companies
- 801 direct and indirect jobs being created
- $103.5 million of investment flowing into incubator companies

Medical Research Future Fund Projects (Department of Health)
MTPConnect has leveraged its successes in operating the GC Project Fund to secure four additional and complementary funding programs through the Medical Research Future Fund (MRFF), worth $146.3 million.

- BioMedTech Horizons: $45 million program/41 projects (includes 21 projects announced on 20 July 2020)
- Biomedical Translation Bridge: $22.3 million program/21 projects (includes 13 projects announced on 3 September 2020)
- Researcher Exchange and Development within Industry: $32 million program/five projects/further rollout underway
- Targeted Translation Research Accelerator: $47 million/rollout underway

Return on Investment – $15.6 million parlayed into $307.3 million

Across MTPConnect's five strategic funding programs, a total of $78.2 million has been committed to support 103 projects so far. With its focus on increasing collaboration and commercialisation, MTPConnect has been able to draw on multiple industry partners and industry co-investment into research projects to produce a critical mass of expertise and efficiencies in the execution of research and project translation.

- 36 GC projects – $15.6 million investment has leveraged $35.8 million of matching industry and other contributions and generated a further $103.5 million in third party, external investment
- 67 MRFF projects – $62.6 million investment has leveraged $89.8 million of matching industry contributions

Across all programs, MTPConnect's $78.2 million in strategic funding investments to date has yielded $229.1 million in additional industry contributions and external investment.

From the initial $15.6 million Growth Centre Project Fund in 2017, MTPConnect's work has seen $307.3 million flow into Australia's MTP sector.

Industry-Focused Grant Reviews

In addition, and separate to delivering strategic funding directly into the sector, MTPConnect assists research institutes and SMEs with pre-submission review of their translational and industry-focused product development competitive grant applications. Over the last five years, this has included:

- 240 Cooperative Research Centres Projects (CRC-P) applications reviewed
- Eight Cooperative Research Centres (CRC) reviewed
- 34 Australian Research Council (ARC) Industrial Transformation Training Centre (ITTC) and Research Hub (ITRH) consortia advised/mentored

This value-add activity has seen grants worth $190.4 million awarded to 48 MTPConnect-supported projects.

Combining the $307.3 million generated through MTPConnect's own granting programs and the $190.4 million from grant reviews, MTPConnect has contributed to $497.7 million flowing into Australia's MTP sector.

The overall economic impact of MTPConnect's activities, calculated by applying a benefit cost ratio of $3.90[1] to reflect the wider economic benefits of medical research, shows a total attributable return of ~$1.94 billion.

The GC and MRFF strategic funding programs enable MTPConnect to foster commercialisation and collaboration and address the skills gaps and key constraints identified across the sector. With significant funding still to be deployed by MTPConnect under these MRFF programs, we ensure that MTPConnect remains relevant as a major funding body over the next four years and can continue supporting translation of Australia's health and medical research into commercial and clinical outcomes.

1 KPMG 2018, *Economic Impact of Medical Research in Australia*

Highlights FY2020

Highlights FY2020

The 2020 financial year was dominated by the emergence of the COVID-19 global public health emergency. Australia's first case of novel coronavirus (SARS-CoV-2) infection was confirmed in Victoria on 25 January 2020. The outbreak was declared a Public Health Emergency of International Concern by the World Health Organization on 30 January and the disease caused by SARS-CoV-2 was formally named COVID-19 on 11 February. A month later, on 11 March 2020, COVID-19 was formally declared a pandemic.

With participants in the MTP sector on the frontline for research, diagnosis, management, prevention and treatment of infectious diseases, MTPConnect leveraged its expertise and extensive industry networks to play a critical role in supporting Australia's response to COVID-19. Many of these activities are further outlined in MTPConnect's series of COVID-19 Impact reports (see p. 37).

MTPConnect's COVID-19 Response

- The MTPConnect Board and executive team provided direct advice and sector updates to federal, state and territory governments, ministers and departments to support research, medical, manufacturing and supply chain efforts.
- MTPConnect participated in DISER taskforces supporting COVID-19 industry response, including:
  - COVID-19 Ventilator Supply
  - COVID-19 Ventilator Production
  - COVID-19 ICU Equipment
  - COVID-19 PPE
  - COVID-19 Testing/Test Kits.
- MTPConnect was involved, as Chair or member, in a number of taskforce subgroups and provided general communications support for these subgroups.
- MTPConnect was a member of the Western Australia COVID-19 Tech Action (CTA) inter-agency group.
- MTPConnect was a member of the Queensland Department of State Development, Manufacturing, Infrastructure and Planning COVID-19 Steering Committee.
- MTPConnect was a member of the Victorian Government's Health and Medical Research Strategic Advisory Committee (HMRSAC) COVID-19 Working Group.
- MTPConnect was a member of the CSIRO Health and Biosecurity Advisory Committee.
- MTPConnect was a member of the DMTC Medical Countermeasures Stakeholder Committee, along with Department of Defence, CSIRO, Department of Health, Department of Home Affairs and Department of Foreign Affairs and Trade (DFAT).
- MTPConnect was a member of the Health Services Delivered Taskforce, providing advice to government, DFAT and Austrade on export opportunities, sovereign capability and supply chain resilience.
- MTPConnect podcast series featured episodes aimed at promoting the sector's COVID-19 work, including interviews with manufacturers, researchers and vaccine developers.
- MTPConnect and L.E.K. Consulting undertook approximately 80 direct interviews with senior leaders from across the sector value chain to understand the burden of the pandemic and lockdown restrictions, with results published in several COVID-19 Impact reports launched in June and September 2020.

Special COVID-19 Funding Round

MTPConnect engaged with the Department of Health/MRFF on the development and deployment of a tailored funding program to fast-track support for COVID-19-related research and translation, leveraging industry collaboration to maximise commercialisation and export potential.

Round 3 of the BTB program was fast-tracked to specifically target COVID-19 projects (medical devices, diagnostics, prophylactic or therapeutic approaches) that could achieve an impact in less than 12 months. The call for expressions of interest applications opened on 18 May 2020, just weeks after receiving Department of Health approval to conduct the funding round, and closed on 1 June 2020, attracting significant interest.

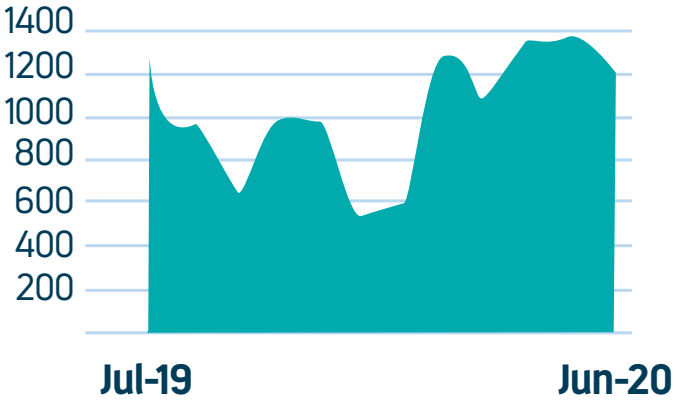
On 3 September 2020, MTPConnect and the Minister for Health, Hon. Greg Hunt MP, announced the outcome of the COVID-19 funding round, with five projects securing a total of $4.1 million and leveraging a further $14.5 million in matching contributions from industry. The projects included a vaccine candidate being developed in South Australia; a new treatment for respiratory complications of COVID-19 selected for a global WHO-endorsed clinical study; a preventive nasal spray developed from an approved antiviral; a rapid response test to predict severity of disease progression; and an isolation hood to better care for patients with COVID-19 and protect healthcare staff.

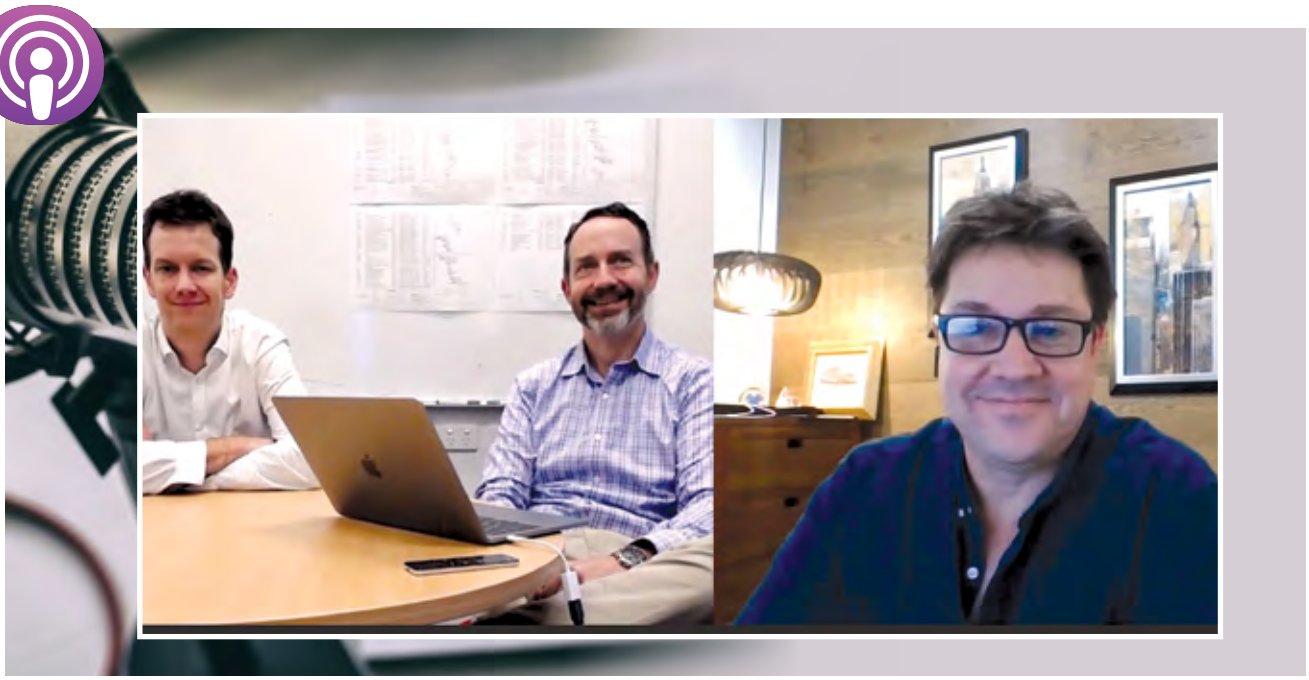
University of Melbourne mechanical engineering team in April 2020 pictured with a prototype personal ventilation hood. L-R: Kevin Kevin, Geoff Duke, Jason Monty, Will Lee, Max Rounds
Photo credit: Cesar Nicolas, University of Melbourne

Additional Highlights Included:

- BMTH and BTB programs continued to assess applications and have so far committed $54 million to 62 projects, with $87.8 million in matching contributions from industry.
- Two new MRFF strategic funding programs worth $79 million were secured: the Researcher Exchange and Development within Industry (REDI) initiative to develop Australia's MTP sector workforce and a Targeted Translation Research Accelerator (TTRA) program focusing on cardiovascular disease and diabetes.
- MTPConnect led 30 delegates from 27 Australian companies, research institutes, universities and start-ups to the MedTech Conference in Boston, Massachusetts, US, to promote Australian medical technology.
- In February, our Chair Sue MacLeman was appointed to the Prime Minister's Digital Technology Taskforce in the Department of the Prime Minister and Cabinet to guide Australia on the path to be a leading digital economy by 2030. Sue is part of the Digital Experts Advisory Committee and was also appointed to the Steering Committee for the Western Australian Health and Medical Life Sciences Industry Growth Plan.
- In March, MTPConnect hosted Medical Alley's Vice President of Intelligence Frank Jaskulke from Minnesota, US, for the first instalment of MTPConnect's 2020 seminar series – 'How to Crack the US Market' – with seminars held in Brisbane, Sydney and Perth and one-on-one meetings for projects in Melbourne.
- The Minister for Industry, Science and Technology, Hon. Karen Andrews MP, officially opened MTPConnect's Queensland office, located at the TRI in Brisbane, and participated in a panel discussion: 'Boosting Industry Engagement and Commercial Collaboration Through Mentoring.'
- 45 episodes of the MTPConnect podcast series were released, reaching an all-time total of 10,146 downloads with listeners in 63 countries.

Podcast episode downloads





MTPConnect COO Stuart Dignam takes the podcast to Queensland to talk with the University of Queensland's Dr Keith Chappell and Professor Trent Munro on developing an Australian COVID-19 vaccine candidate using a new molecular clamp technology.

Integrated Communications Strategy

MTPConnect has worked hard to connect with the MTP sector and promote the sector's successes and promise to the broader community. During FY2020 we continued to build on our well-established digital and social media presence, as well as continuing the popular podcast series and supporting a monthly seminar series. In March, with COVID-19 restrictions in place, the seminar series was moved to a virtual event platform using the Zoom meeting and webinar platform. The podcast pivoted quickly to a virtual Teams-based studio, so the weekly publishing schedule wasn't disrupted.

The website pushes content out to the MTP sector, publishing 61 news stories and receiving 130,000 page views this year. The monthly electronic newsletter is distributed to more than 2,900 individuals and organisations. More than 3,980 accounts follow our Twitter feeds and 3,400 profiles follow on LinkedIn. The podcast series hit 10,146 downloads after publishing 45 episodes and interviewing 54 guests during FY2020. The levels of engagement with MTPConnect's social media platforms continue to build month-on-month.

Sector Reports – Analysis and Insights

During the year, several comprehensive reports were published and promoted to the sector, including:

- *MTPConnect COVID-19 Impact Report (Edition 1)*
- *Collaborating in the Public Interest: How Australia's Medical Technology Sector joined with Government to fight COVID-19 (Supplementary report to the MTPConnect COVID-19 Impact Report)*
- *MTPConnect COVID-19 Impact Report (Edition 2)*
- *Frugal Innovation in Medical Devices and Technologies: The India Opportunity*
- *Digital Health in Indonesia: Opportunities for Australia*
- *MTPConnect 2020 Sector Competitiveness Plan*
- *MTPConnect 2021 Business Plan*

Other reports in development but not published as at 30 June 2020 included: Fighting Superbugs, Workforce Skills Survey, Adaptive Regulation in Digital Health, Drug Repurposing, Medicinal Cannabis, and an update on the *Clinical Trials in Australia* report.

The MTPConnect podcast team – Caroline Duell, Dr Dan Grant and Dr Rebecca Tunstall – with Nucleus Network's Dr Paul Griffin and Carrie Bloomfield, Co-Chair of the industry-supported R&D Taskforce and Head of Clinical Operations at GlaxoSmithKline (GSK) Australia, celebrate International Clinical Trials Day.

Clinical Trials Growth

With Australia fast becoming a 'go to' destination for international companies wanting to conduct clinical trials, promotion of Australia's clinical trials capabilities is a particular focus for MTPConnect.

The numbers tell a powerful story. In 2006, the average number of monthly registered trials was 41. Last year in Australia, clinical research was responsible for 1,820 ongoing clinical trials as the search for better health continues. The growth in clinical trials provides patients with early access to potentially lifesaving, innovative new therapies, while at the same time advancing medical knowledge.

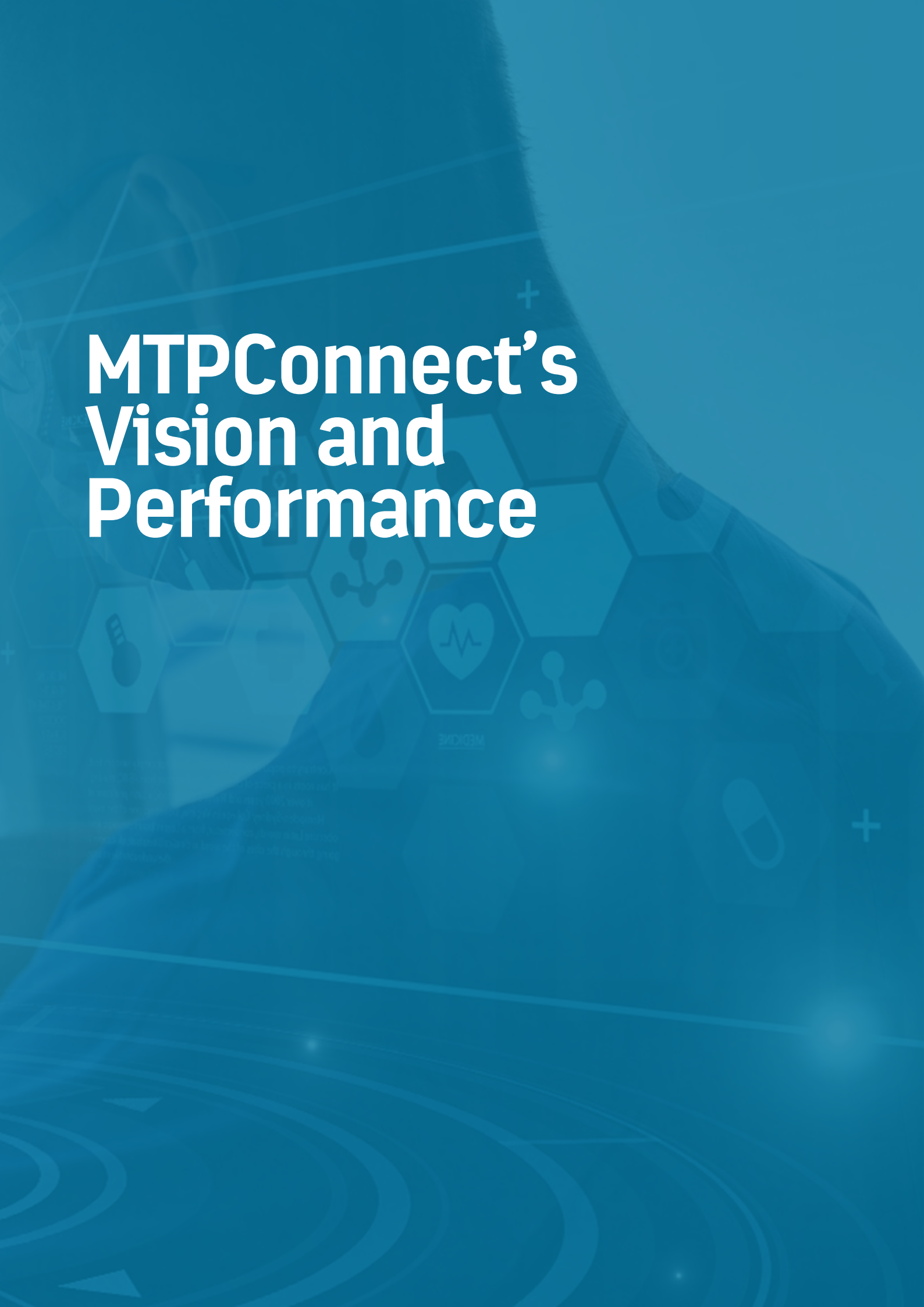
Australia's growing reputation for clinical trials also attracts offshore investment and drives economic growth, with clinical trials adding more than $1 billion a year to the Australian economy. Over 7,000 people are employed to work on clinical trial programs around Australia – an area of significant job growth potential.

MTPConnect presented at events at BioJapan 2019, highlighting to potential customers the factors that make Australia a country of choice for those looking to conduct clinical trials: our sophisticated medical research environment, rapid approvals process, cost effectiveness and highly regarded regulatory framework.

As the COVID-19 situation developed rapidly in Australia in early 2020, the sector worked together to ensure continuity of current clinical trial research for the thousands of patients currently enrolled in trials around Australia. While the clinical trials sector is being challenged by COVID-19, it is also playing a key role in Australia's COVID-19 response and recovery.

Australia is in a unique environment at the moment. Compared to many parts of the world that are experiencing high case numbers of COVID-19, Australia's response to the pandemic has seen clinical trial sites reopen for business. Australia is an attractive proposition for international companies looking to maintain momentum of their clinical trial program.

MTPConnect's report *Clinical Trials in Australia: the economic profile and competitive position of the sector,* released in 2017, was the first comprehensive overview of the entire clinical trials landscape in Australia. MTPConnect is developing an updated version to provide a snapshot of the impact of the clinical trial sector in Australia, planned for release in FY2021.



MTPConnect's Vision and Performance

MTPConnect's Vision and Performance

MTPConnect's vision is for Australia's MTP sector to create more products that reach proof-of-concept stage and achieve greater commercialisation success, increase the number of companies with late-stage product successes and to maximise the value of Intellectual Property (IP) monetisation events along the way. This vision was developed through a series of wide-reaching sector consultations in 2016 and 2019 with over 600 participants and stakeholders.

To deliver on this vision, MTPConnect brings a value proposition based around a unique ability to take a national, independent and informed approach to:

1) delivering strategic funding that enables key initiatives and programs;

2) undertaking direct action to support the MTP ecosystem; and

3) acting as a trusted and independent voice to inform government on the key issues, challenges and opportunities for the sector.

Growth Centre Project Fund Outcomes

Our GC projects achieved substantial results. From 2017 until the end of FY2020, these projects have resulted in 294 new technologies being invented or progressed, 203 patents/trademark applications and licenses, 84 start-up companies formed, 801 new jobs created and more than $103 million of investment flowing into incubator companies. Over 87,000 patients have been impacted (from 2017 to 30 June 2020).

Commercialisation

	New technologies invented or progressed	**New patent, trademark applications** and **licenses**	**New products** launched	**New start-up** companies formed	**New jobs** created in **project companies** (years – direct and indirect)	Total sector **investment** into new companies (cash and in-kind)
GC projects	294	203	166	84	801	$103.5M
Other MRFF projects	53	13	1	1	50	

Information sharing or workforce skills development

5,214
Individuals received workforce skills / commercialisation training

31,227
people attended **1,720** training events and information seminars

23,390
people attended **528** collaboration events

In addition to delivering strategic funding directly into the sector, MTPConnect assists research institutes and SMEs with pre-submission review of their translational and industry-focused product development competitive grant applications.

Grant reviews

240
CRC-Ps reviewed

8
CRCs reviewed

34
ARC consortia advised/mentored

Sector successes

Successful outcomes

48 grants
awarded

$190.4M
funding flowed to MTP sector

Delivering Projects for the Medical Research Future Fund

MTPConnect's Growth Centre work is complemented by four MRFF programs worth $146.3 million:

- The $45 million BioMedTech Horizons (BMTH) program
- The $22.3 million Biomedical Translation Bridge (BTB) program
- The $32 million Researcher Exchange and Development within Industry (REDI) initiative
- The $47 million Targeted Translation Research Accelerator (TTRA) program

BioMedTech Horizons (BMTH)

The BMTH program launched in April 2018 and is intended to address gaps in early biomedical and medical technology product development and increase the number of viable new medical technologies and devices reaching proof-of-concept stages or beyond and that become attractive for private capital investment and commercialisation. It provides up to $1 million of funding over a maximum two-year period to help eligible organisations progress their innovations.

The program is continuing to deliver. On 20 July 2020, MTPConnect and the Minister for Health, Hon. Greg Hunt MP, announced the outcomes of Round 3 of the program, with $18.8 million awarded to 21 projects. The funding attracted an additional $21.3 million in industry contributions. Over the three rounds of BMTH, a total of $37.7 million has been allocated to 41 projects, with matching contributions from industry of $45.2 million.

The BMTH program has also developed a series of value-add activities to benefit funding recipients. In October 2019, MTPConnect brought together the 11 projects that received funding in BMTH Round 1 for a two-day translation immersion program, which included presentations from the Therapeutic Goods Administration (TGA) on regulatory pathways, Intellectual Property protection, accessing funding including through the MRFF, finding PhD talent to support project translation and cybersecurity and resilience. Representatives from GC-funded projects including the TRI, Microscopy Australia, BridgeTech and TRICEP also presented on their projects and the assistance that they could provide to early-stage companies, such as subsidised microscopy services and cleanroom facilities.

In addition, the BMTH companies have been given access to the Health Horizon platform, with specific 'lenses' created for each company to allow competitive analysis, and the Guidance and Impact Tracking System (GAITS) platform to help assess the commercialisation process for their products. The BMTH program has also been able to offer additional funds to projects in the BMTH1 cohort to allow access to commercialisation services, such as IP advice and contract development.

Details of all the projects funded in the BMTH program are included in the appendices **(see p. 131).**

ZiP received BMTH Round 3 funding to develop POC diagnostics for infectious diseases - ZiP C2 test instrument and assay testing for COVID-19.

BMTH Case Study – EarGenie™: The Journey to Personalising Hearing Technology

A new device under development at the Bionics Institute in Melbourne is set to improve the quality of life for deaf infants and children. This groundbreaking work is being supported by the BioMedTech Horizons (BMTH) program, delivered by MTPConnect.

The device, known as EarGenie™, aims to give infants and children born with hearing loss the opportunity to start their language development earlier and help audiology clinicians get faster and enhanced information about their patients' hearing needs.

EarGenie™ is being developed in partnership with medical device design company Design + Industry; prototyping company Hydrix; and Taralye, an organisation for support of language development of deaf children.

Bionics Institute Lead Researcher, Professor Colette McKay, said this device is a personalised clinical management system that will be used for optimising language development in children born with hearing loss.

"EarGenie™ will help us to understand language development of deaf children and to learn how to optimise the cochlear implant or hearing aid or even the therapies that children get to help them reach their full potential for language development," Professor McKay said.

"What we're aiming for is improved language development, which will lead to increased education, social and employment opportunity throughout life for infants born with a hearing loss."

EarGenie™ has the potential to go global, specifically for paediatric hearing clinics. It will be the first commercial system specifically for hearing clinics that uses functional Near-Infrared Spectroscopy (fNIRS) to image brain activity.

At diagnosis, EarGenie™ can enable a more accurate and complete hearing assessment so that an appropriate hearing instrument can be confidently selected, evaluated and fine-tuned to optimise each child's hearing. It will also enable clinicians to evaluate a child's language development, guiding device choice and adjustments and personalising language therapies.

EarGenie™ will also allow clinicians to see if the infant's brain is distinguishing between speech sounds, a function very difficult to achieve with other clinical testing methods.

The Bionics Institute aims to do clinical trials in the future to demonstrate the enhanced benefits for language development of earlier and more accurate hearing assessments and optimised hearing instrument programming.

For more information, visit www.bionicsinstitute.org

An infant using the EarGenie™ prototype.

BMTH Case Study – AxceldaPen: Developing 3D Bioprinting for Stem Cell Repair in Surgery

According to research from Arthritis Australia, the number of people with osteoarthritis and damaged cartilage in Australia is expected to increase nationally from almost 2.2 million in 2015 to almost 3.1 million in 2030.[2] St Vincent's Hospital Melbourne, in partnership with the University of Melbourne, University of Wollongong and Swinburne University, is developing a device to combat this growing health problem with the handheld AxceldaPen (formerly the BioPen).

This groundbreaking work is being supported by the BioMedTech Horizons (BMTH) program, as part of the Australian Government's Medical Research Future Fund (MRFF).

In a single surgery, the device aims to rapidly isolate harvested stem cells from a patient that are mixed with a scaffold formulation to 3D print a repair for cartilage defects in joints with osteoarthritis. Looking to 2030, Arthritis Australia has found if demand for knee replacements can be reduced, it could save the Australian health system more than $233 million.[3]

This project brings together surgeons, mechatronic engineers, material scientists, bioengineers, biologists and other experts in design, manufacture, quality control, regulatory, patent and intellectual property protection and product commercialisation.

Orthopaedic Surgeon and Project Leader at St Vincent's Hospital Melbourne, Professor Peter Choong, said the AxceldaPen device will improve the quality of life for patients living with knee problems.

"The AxceldaPen brings innovation, technology and science to the point of delivery where cells are harvested, isolated and then 3D printed back into the patient in a single surgical setting," Professor Choong explained. "This is very different to the typical medical device procurement and joint implantation process. The device will bring the laboratory into the operating room and deliver science to the point of care for patients."

The AxceldaPen combines the advantages of 3D printing with the versatility of using a handheld device, with the technique using stem cells that can be prepared prior to surgery, allowing for on-demand and patient-specific solutions.

For more information, visit www.svhm.org.au

Minister for Health Hon. Greg Hunt MP and St Vincent's Hospital Melbourne Project Leader Professor Peter Choong at the BMTH program launch in Melbourne in 2018.

2 Report prepared for Arthritis Australia May 2016 https://arthritisaustralia.com.au/wordpress/wp-content/uploads/2017/09/Final-Counting_SUMMARY_MAY2016_160527.pdf
3 *Counting The Cost: Part 1 Healthcare costs. The current and future burdens of arthritis.* Report prepared for Arthritis Australia, May 2016 P31 https://arthritisaustralia.com.au/wordpress/wp-content/uploads/2017/09/Final-Counting-the-Costs_Part1_MAY2016.pdf

Minister for Health, Hon. Greg Hunt MP, talking with BTB venture partners at the launch.

Biomedical Translation Bridge (BTB)

The BTB program provides up to $1 million in matching funding to nurture the translation of new therapies, technologies and medical devices through to the proof-of-concept stage with industry support.

MTPConnect operates the program in partnership with BioCurate (the University of Melbourne and Monash University), UniQuest (through QEDDI, the Queensland Emory Drug Discovery Initiative, a business unit of UniQuest, the commercialisation company of the University of Queensland), the Medical Device Partnering Program (MDPP, led by Flinders University) and the Bridge and BridgeTech programs (Queensland University of Technology), who are involved in mentoring and advising recipients. The BTB program is uniquely positioned to provide applicants with expert mentoring that provides scientific expertise and commercial acumen to support projects in their translation to proof-of-concept stage.

The BTB program launched in May 2019 and has held a series of information seminars in different locations around Australia, reaching 1,100 individuals in metropolitan and major regional centres to promote the program and engage with the sector ahead of calls for funding. An information session was also released as a podcast episode to broaden reach and impact.

Round 1, announced in December 2019, saw eight projects selected to share in funding of $5.9 million following a highly competitive application process. Additional industry contributions of $14.6 million were secured.

Round 2 opened in February 2020, receiving an overwhelming response to calls for expressions of interest (EOIs). In mid-May 2020, Round 3 was opened, specifically targeted at COVID-19-related research with the need for rapid deployment. The call for EOIs over a two-week period was designed to support medical devices and diagnostics research, prophylactic development – such as vaccines – and therapeutic approaches that will make an impact in 12 months or less.

On 3 September 2020, $10.4 million in funding was announced for 13 early-stage biomedical projects, including COVID-19 research, for rounds 2 and 3 of the BTB program. The funding attracted a further $28 million in industry contributions.

The BTB projects announced have been included in the appendices for completeness **(see p. 133).**

Dr Dan Grant and Dr Kate Brooks (MTPConnect) with Noisy Guts co-founders Dr Josephine Muir and Professor Barry Marshall.

BTB Case Study – Let's Hear it for Noisy Guts

Noisy Guts, an emerging early-stage Western Australian medtech start-up, was awarded $1 million matched funding in Round 1 of MTPConnect's Biomedical Translation Bridge program to develop a medical device to diagnose gut disorders.

Up to one in five Australians will suffer from Irritable Bowel Syndrome (IBS) at some point in their life, and half the population complain of some digestive problem in any 12-month period, so gut health is an issue.

These problems can be exacerbated because many patients struggle to explain their experience of gut discomfort. Gastrointestinal disorders are estimated to cost the Australian Government over $6.8 billion each year,[4] making them one of the most expensive disease groups for admitted patients in public hospitals.

So how do we treat gut problems without resorting to invasive measures that place more strain on the healthcare system? For Nobel Laureate Professor Barry Marshall, the answer lay in termite-sensing technology.

"I was visiting someone at another university, and he showed me these little microphones to put on your house to listen for termites, so it was a little tiny Internet of Things-type gadget, and then using artificial intelligence to listen to the termite scratching noises," Professor Marshall said.

"About half of the patients that gastroenterologists see are people who you can't find anything wrong with them, they get tummy pains from time to time, and it's also quite common in children. I thought, well why not put microphones on peoples' abdomens and analyse it with a supercomputer?"

The Noisy Guts team found there was a correlation between the gut noise patterns recorded by microphones and particular gastrointestinal disorders. These microphones were integrated into the Noisy Guts 'acoustic belt', a wearable sensing device that is user friendly for both patients and clinicians. The belt will enable clinicians to more accurately screen and diagnose gut disorders using AI-driven analysis.

The Noisy Guts program, which spun out of the University of Western Australia, brings together clinicians, data scientists and engineers to create an efficient experience for recording and diagnosis, and is a prime example of how digitised solutions can be translated to the medtech industry from other – sometimes surprising – areas of research.

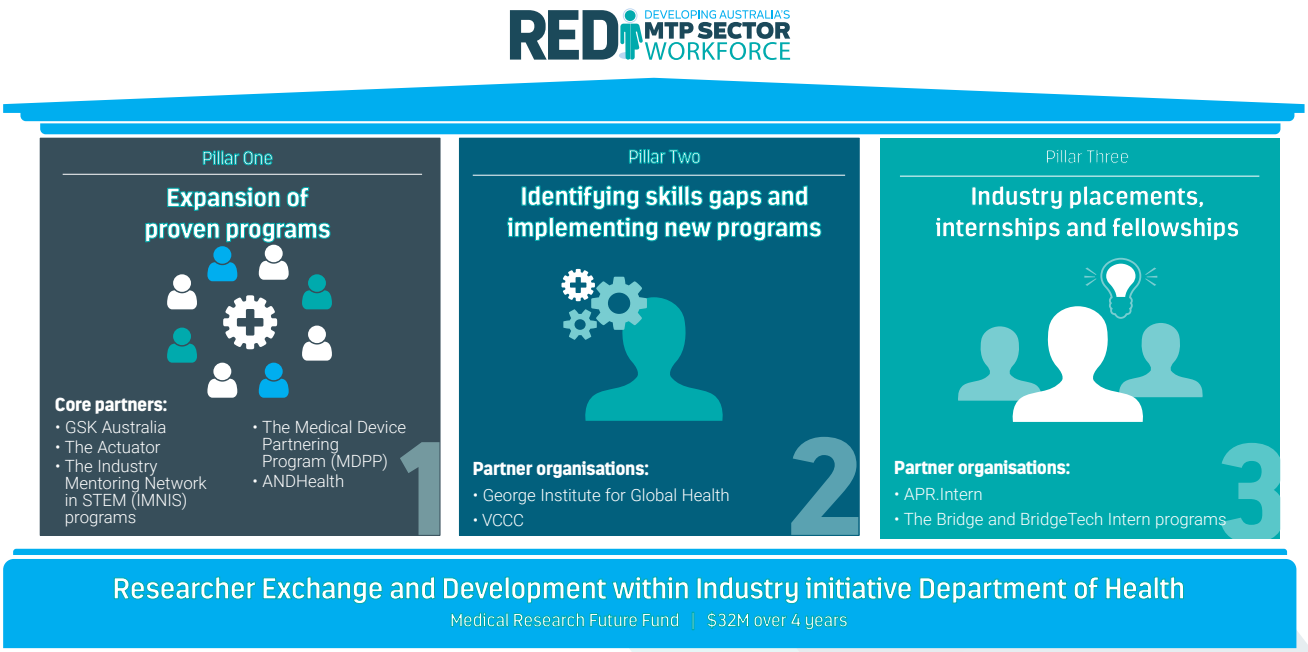
"Despite COVID-19, we closed our $1.5 million seed round in April 2020," Dr Muir said. "Together with the $1 million matching funding from the BTB grant, we're looking forward to having a regulatory compliant device registered with the TGA by 2021."

Whilst initially focussed on IBS, Noisy Guts is excited about expanding the capabilities of its acoustic belt. The company is currently undertaking a clinical study involving 350-plus patients with Crohn's, colitis and coeliac disease.

For more information, visit www.noisyguts.net

4 'Disease expenditure in Australia' published June 2019. Report prepared by the Australian Institute of Health and Welfare https://www.aihw.gov.au/reports/health-welfare-expenditure/disease-expenditure-australia/contents/australian-burden-of-disease-groups

Researcher Exchange and Development within Industry (REDI)



Improving workforce skills and driving jobs growth is the focus of the $32 million REDI initiative awarded to MTPConnect in February 2020, through the MRFF.

Australia's MTP sector supports around 70,000 Australian jobs and contributed more than $5 billion in Gross Value Added (GVA) to the Australian economy in 2019. Its future is dependent on the skills of its workforce.

Working with our partners, REDI has been established to drive skills development and workforce training that brings together researchers, clinicians, industry and the entrepreneurial ecosystem to enhance Australia's MTP sector.

The MTPConnect REDI initiative leverages the expertise of our research, training and industry partners to drive skills development and workforce training, through deployment of an integrated, three-pillar plan.

The four-year REDI initiative rolled out this year to:

- deliver systemic improvement to Australia's MTP workforce by providing industry experiences and skills development for researchers, clinicians and innovators
- develop an industry-ready workforce with the skills necessary to keep pace with a rapidly changing sector
- provide a skills development blueprint across the MTP value chain through a 'root and branch' skills gap analysis
- create new training, mentoring and industry placements over the life of the program.

Pillar One: Expansion of Proven Programs
MTPConnect partners with training, mentoring, internship, entrepreneurship and incubator organisations to support expansion of their proven training programs to deliver deeper impact by addressing known skills gaps. Expansion of the training programs will create more industry placements, mentoring and researcher exchange programs, and will reach greater numbers of early and mid-career researcher and clinical researchers.

Partner organisations:

- ANDHealth
- GSK Australia (joined November 2020)
- MedTech Actuator
- The Industry Mentoring Network in STEM (IMNIS) program
- The Medical Device Partnering Program (MDPP)

Pillar Two: Identifying Unknown Skills Gaps and Implementing New Programs
REDI will deliver a forward-looking 'root and branch' analysis of the MTP workforce to provide a deep understanding of current and future skills gaps. The analysis is an essential step in preparing Australia's MTP workforce to meet future demands. Informed by MTPConnect's Sector Competitiveness Plan and linking with national MTP industry and research bodies, the analysis will form the foundation for a contestable program of new initiatives to fill skills gaps not currently addressed. New initiatives delivered as part of Pillar Two will support a further 2,000 participants under REDI.

The Steering Committee has appointed L.E.K. Consulting to undertake the comprehensive sector skills gap analysis, which will be launched in FY2021.

Partner organisations:

- The George Institute for Global Health
- Victorian Comprehensive Cancer Centre (VCCC)

Pillar Three: Industry Placements, Internships and Fellowships
To ensure workforce skills align with industry needs and drive industry-research-clinical-entrepreneurship connections, REDI will provide targeted short, medium and long-term industry placements, internships and fellowships for clinicians, early-stage, mid-career and distinguished researchers and MTP professionals, enabling high-performing individuals from these cohorts to gain industry experience. Industry placements will focus on discovery, translation and commercialisation of relevant research.

Partner organisations:

- APR.Intern
- The Bridge and BridgeTech programs

The REDI Steering Committee Members include:

- **Dr Dan Grant:** Managing Director and CEO (Co-Chair)
- **Dr Rebecca Tunstall:** Senior Director Stakeholder Engagement (Co-Chair)
- **Ian Burgess:** CEO, Medical Technology Association of Australia (MTAA)
- **Dr Amanda Caples**: Victoria's Lead Scientist, Department of Jobs, Precincts and Regions
- **Dr Jason Coonan:** COO, IMCRC
- **Lee Grow:** Professional Development Manager, MTAA
- **Leanne Kemp:** Queensland Chief Entrepreneur
- **Dr Paul MacLeman:** Chair, Pharmaceutical Manufacturing Industry Reference Committee
- **Professor Caroline McMillen:** Chief Scientist for South Australia
- **Greg Mullins:** Head of Policy, Research Australia
- **Dr Andrew Nash:** Senior Vice President for Research, CSL
- **Dr Antonio Penna:** Executive Director, Office for Health and Medical Research, NSW Health
- **Professor Kevin Pfleger:** Chair of Accelerating Australia Executive Committee
- **Professor Sir John Savill:** Executive Director, Melbourne Academic Centre for Health
- **Anna Schulze:** Director, Public Policy & Government Relations, CSL
- **Dr Zoe Terpening:** Strategic Lead, UNSW Precincts
- **Dr Peter Thomas:** Executive Director of Policy and Operations, AAMRI

MTPConnect Director Communications and Events Caroline Duell, Victorian Comprehensive Cancer Centre (VCCC) Executive Director Professor Grant McArthur and Head of Education and Training Development Michelle Barrett, and MTPConnect Managing Director and CEO Dr Dan Grant in the virtual podcast studio discussing REDI support for the VCCC SKILLED Internship program that is building clinical trial talent pipeline.

Targeted Translation Research Accelerator

In June 2020, the Australian Government announced that MTPConnect will operate the new $47 million MRFF-funded TTRA initiative for diabetes and cardiovascular disease (D&CVD). The announcement was made jointly by Hon. Karen Andrews MP, the Minister for Industry, Science and Technology, and Hon. Greg Hunt MP, the Minister for Health.

MTPConnect is delivering the TTRA to provide a new integrated research program to improve the management and treatment of D&CVD in Australia.

The program will stimulate collaboration across industry, research and clinical organisations to produce novel preventive interventions, diagnostics, medical devices, therapeutics and digital health solutions for D&CVD that reduce the burden on patients, families and communities. The TTRA is taking an inclusive, national approach to working with clinicians, researchers, health administrators, Aboriginal and Torres Strait Islander health groups and consumers.

The TTRA will:

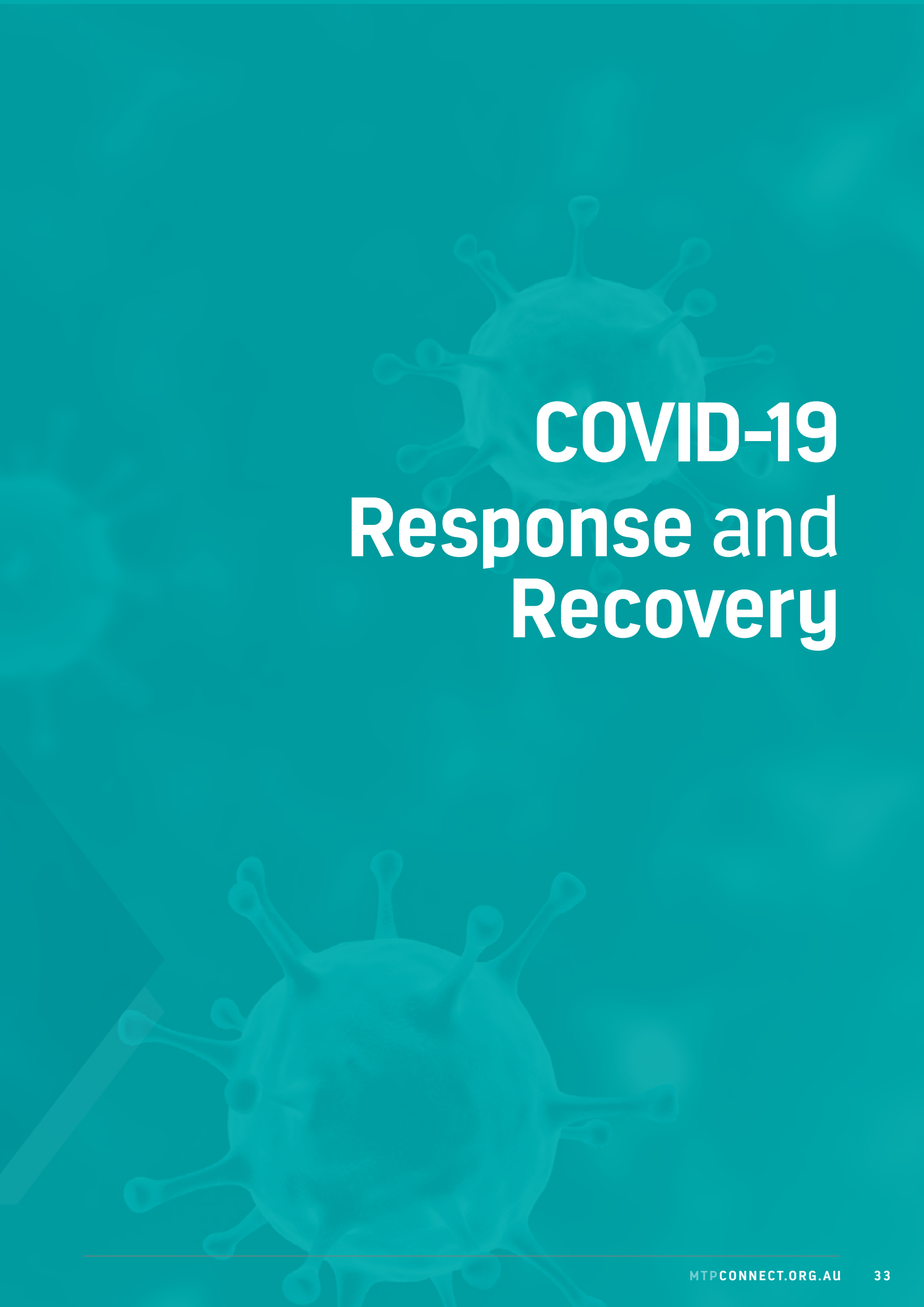
- establish research centres for diabetes and cardiovascular disease
- establish a contestable funding program to support D&CVD research projects
- promote the clinical and commercial translation of novel therapeutics, diagnostics, devices and digital solutions for D&CVD.

Expert Advisory Board
MTPConnect is delivering the initiative in collaboration with the TTRA Expert Advisory Board, which brings deep expertise around commercialisation, diabetes and cardiovascular disease advocacy, lived experience, clinical and research perspectives and the investment viewpoint to the governance of the TTRA program. Members include:

- Professor Ian Frazer AC (Chair), clinical immunologist, co-inventor of the HPV vaccine – the University of Queensland
- Professor John Shine AC (Co-Chair at program establishment), biochemist and molecular biologist, President, Australian Academy of Science – University of New South Wales
- Professor James Best AO, Dean, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore; Director, Juvenile Diabetes Research Foundation (JDRF) Australia
- Rebecca Davies AO, lived experience of diabetes and heart disease as parent and wife; member of the Consumer and Community Health Innovations Advisory Committee; Director, Chris O'Brien Lifehouse
- Yasser El-Ansary, Chief Executive, Australian Investment Council
- Professor Rachel Huxley, academic, researcher and epidemiologist focusing on chronic disease – Deakin University
- Adjunct Professor John Kelly AM, CEO, Heart Foundation of Australia
- Judi Moylan AO, former Australian Government Minister; former Chair, Diabetes Australia; Chair of NHMRC Community and Consumer Committee
- Mike Wilson OAM, CEO, JDRF Australia

Program Partners
The TTRA program is designed to support and incentivise translation as a natural course of activity for those applying and receiving funding. This will be delivered through mentoring and commercialisation advice provided by TTRA partners ANDHealth, Medical Device Partnering Program (MDPP) and UniQuest to those applying for and receiving research project funding.

COVID-19 Response and Recovery



COVID-19 – Response and Recovery

The MTP sector in Australia has not been immune to the impacts of the COVID-19 pandemic since its onset in February/March 2020. To better understand the burden of the pandemic and lockdown restrictions – and how MTP companies and researchers have responded to the crisis – MTPConnect undertook extensive research, in partnership with L.E.K. Consulting.

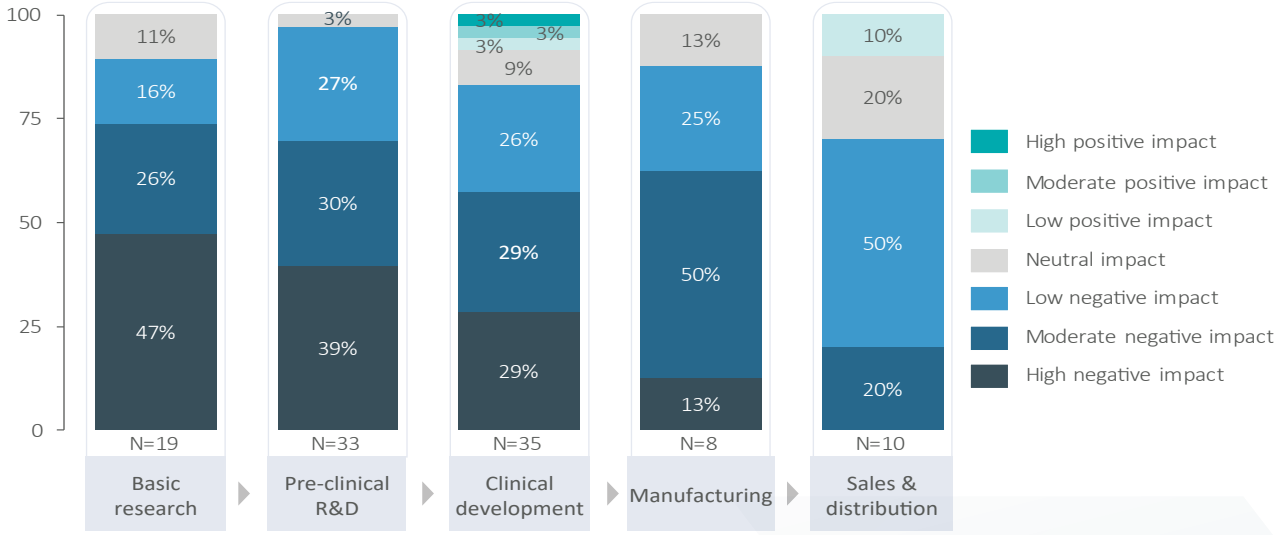
In June, we reported our findings on the initial impacts in our first MTPConnect COVID-19 Impact Report. With insights from 80 senior leaders from the sector, the report detailed significant hits to company values, the shutdown of critical clinical trials and the drying-up of much-needed capital to sustain research and development projects. It highlighted that the sector was dealing with these impacts while simultaneously fast-tracking vaccine, diagnostic, device and therapeutic research to fight COVID-19 and securing vital medical supplies. The report also identified five key factors across the MTP value chain that will affect the growth of the sector over the next six to 12 months.

We also released a supplementary report, prepared in collaboration with the Medical Technology Association of Australia (MTAA), *Collaborating in the Public Interest: How Australia's Medical Technology Sector joined with Government to fight COVID-19.* It detailed the behind-the-scenes story of a unique industry and government collaboration that ensured Australia secured its fair share of essential medical equipment, including ventilators, test kits, personal protective equipment (PPE) and other ICU supplies.

Our June report on impacts through until 31 May 2020 found the COVID-19 crisis had a strongly negative impact on the MTP sector. Executives and senior sector leaders rated the overall impact on their businesses as 2.5 on a scale of 1 to 7, where a rating of 1 is a highly negative impact and 7 is highly positive.

Commercial activity across the sector, as measured by the market capitalisation of ASX-listed MTP companies, fell $11 billion (or 5 percent) from $211 billion in February 2020 to $200 billion in May 2020. While this decline was lower than the corresponding 24 percent decline of the S&P/ASX All Ordinaries index over the same period, it was primarily driven by the steady market capitalisations of CSL and ResMed, two companies that played significant roles in responding to COVID-19 by trying to develop vaccines/therapeutics and medical devices respectively. Excluding these two companies from the analysis reveals the rest of the Australian sector experienced nearly a 16 percent decline in market capitalisation, akin to the S&P/ASX index over the same period.

Impact of COVID-19, by position in the value chain
Percent of sub-sector respondents
(N=47)



Question: Q5. In which parts of the value chain does your organisation operate? (Select all that apply); Q7. How would you describe the overall impact of the COVID-19 pandemic on the level of activity for your organisation when compared to normal operating activity?
Source: L.E.K. Pulse Survey 2020

In October 2020, a second edition of the *MTPConnect COVID-19 Impact Report* was published, including additional data and new insights. This new report also explored strategies to spur recovery and discussed trends and opportunities for growth. The report makes it clear that the MTP sector has a critical and ongoing role to play in Australia's pandemic response, future preparedness and economic recovery.

For more findings from the first and second editions of the COVID-19 Impact reports, please visit the MTPConnect website.

COVID-19 Pivot Case Studies

Case Study – QUT Adaptive Clinical Trial Platform Modified for COVID-19

The QUT team modified its MTPConnect-funded N-of-1 Trial Ready Registry to allow specific data capture and support of COVID-19 adaptive clinical support and clinical trial support.

The Clinical Data Analytics Platform (CDAP) will allow the capture of a patient's records, their clinical data and test results, and their clinical care regime. It will allow information to be drawn from patients, GPs, hospitals and My Health Record as needed. As clinical trials start, the platform will allow the clinical trial to be added into the system and the results between patients compared. Importantly, the data analytics of the system will allow identification of clinical regimes or therapies that are not effective, allowing better care for those patients.

The QUT team has worked with the Digital Health CRC and raised $4 million from universities, NSW Health and Queensland Health to create the CDAP framework for COVID-19.

More information is available through this link.

Case Study – ClinTrial Refer

Australia's geographically dispersed and comparatively small patient base creates difficulty in recruiting sufficient patients for clinical trials. A new smartphone app and web-based platform, called ClinTrial Refer, is helping to change that by allowing doctors to locate an active clinical trial within minutes while the patient is in the clinic. Since its release in 2013, it has received wide industry support and resulted in a 60 percent increase in recruitment for those trials using the app.

MTPConnect has supported the pilot study, which is now complete. The project allowed the team to combine 19 individual apps into a single database, link to the wide network of the Australian New Zealand Clinical Trials Registry (ANZCTR) and build a national and potentially global solution to improve trials recruitment. The new combined app has now launched and is progressing well, with more clinical trials being uploaded and subscriptions increasing.

ClinTrial Refer has added a COVID-19 medical condition to the app to allow clinical centres and researchers to profile their clinical trials and better recruit healthy and ill patients. Loading of trials into this section of the platform is free.

For more information, visit www.clintrial.org.au

Case Study – Medical Device Partnering Program (MDPP)

The MDPP is an ideas incubator, fostering collaborations between researchers, industry, end users and government to develop new medical devices and technologies with global market potential. MDPP has operated successfully for 12 years in South Australia and was funded by MTPConnect to develop a national footprint and a sector database of clinical centres and medical technology, biotech and pharmaceutical companies. MDPP now operates a node in Victoria and continues working to establish a presence in other jurisdictions. The sector database has been developed into a Capability Directory, to help innovators connect with organisations so they can develop their idea ready for market. It can be used by businesses to identify research organisations that can help to develop new products, or by start-up enterprises looking for advanced manufacturers that can build new products.

During the COVID-19 pandemic, MDPP used the sector database and knowledge of companies in South Australia to work with the Advanced Manufacturing Growth Centre and industry to redeploy manufacturing activities to develop medical products and personal protective equipment (PPE) for healthcare workers.

Additionally, MDPP has used its research and laboratory knowledge to work with the TGA to develop new Australian-based testing facilities for protective face masks. Previously, masks had to be sent to China – with a four-week lead time – for testing. Development of two new local testing facilities allows for faster approval and release of equipment to the healthcare workforce.

For more information, visit www.mdpp.org.au

Find support on our capability directory

449	307	162	53	51
Medical device companies	Manufacturers	Product development services	Medical research institutes	Accelerators and incubators

MEDICAL DEVICE PARTNERING PROGRAM

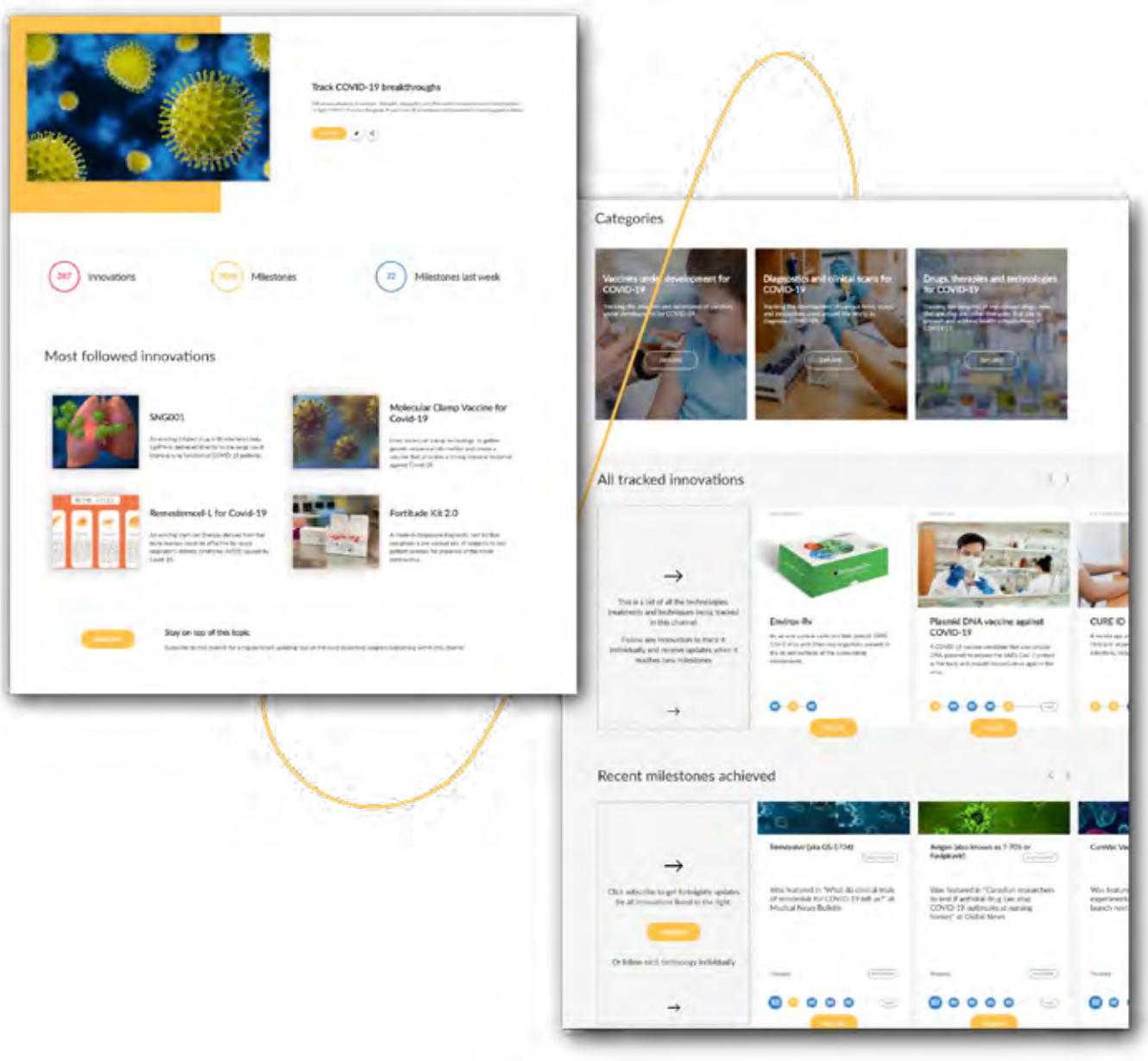
Supported by MTPConnect
MedTech and Pharma Growth Centre

Case Study – Health Horizon

Health Horizon is an online product development platform that tracks all MTP products in development and automatically updates their progress as new information is released into the public domain. Clinicians and members of the public can follow a sector or the progress of a specific health innovation product to determine when it will become available for use. MTPConnect funded Health Horizon to investigate new products and develop the systems to allow automatic update of their progress. Over 1,500 additional products were identified.

Health Horizon has released a COVID-19-focused dashboard to highlight COVID-19 testing and vaccine products and their progress to TGA approval.

For more information, visit www.thehealthhorizon.com



How MTPConnect is Addressing the Growth Centre Program Objectives

How MTPConnect is Addressing the Growth Centre Program Objectives

The objective of the Growth Centres Initiative (GCI) is to improve the productivity and competitiveness of six sectors of competitive strength and strategic priority in the Australian economy. To drive connectivity, innovation, productivity and competitiveness in Australia's MTP sector, MTPConnect systematically addresses the four GC objectives: improving collaboration and commercialisation, improving management and workforce skills, optimising the regulatory and policy environment and improving access to global supply chains and markets.

MTPConnect Growth Centre Objectives

1. **Improving collaboration and commercialisation between research and industry, and within industry, to achieve stronger commercialisation outcomes**
2. **Improving management and workforce skills necessary for sector growth**
3. **Identifying and acting on opportunities to address regulations and policies that are unnecessary or overly burdensome and impede growth**
4. **Improving the capability of the sector to engage with international markets and access global supply chains**

Objective 1 Improving Collaboration and Commercialisation

Team Activities

MTPConnect presented at the CRC Association's Collaboration for Industry Impact Workshop at University of Technology Sydney. There were discussions on the principles of collaboration with a specific focus on CRC and CRC-P grants and MTPConnect's work giving feedback on applications prior to submission.

In rounds 8 and 9 of the CRC-P grants program, the MTP sector won a total of four grants worth over $43 million. The results of the Australian Research Council (ARC) Industrial Transformation Training Centres (ITTC) and Industrial Transformation Research Hubs (ITRH) grants have been announced, with the MTP sector being awarded one training centre in this round, worth $4.8 million. MTPConnect engaged with all five of these applications prior to submission, giving advice and contact information for collaborations to improve the submissions. To date, MTPConnect has worked with the MTP sector to win 48 ARC grants worth over $190 million of funding.

In October, MTPConnect brought together the 11 projects that received funding in BMTH Round 1 for a two-day translation immersion program. The program included presentations on regulatory pathways (TGA); Intellectual Property protection; accessing funding, including through the MRFF; finding PhD talent to support project translation; and cybersecurity and resilience. GC-funded projects also attended and participated, from the TRI, Microscopy Australia, BridgeTech and TRICEP.

MTPConnect's Director of Stakeholder Engagement for NSW, Dr Duncan Macinnis, initiated and delivered the University of Sydney Drug Discovery Initiative in April, an interactive forum for early-stage researchers to discuss their emerging drug discovery projects in infectious, inflammation, neurological and CNS diseases with key industry leaders who offered pre-IP guidance on development plans.

MTPConnect is continuing to support collaboration throughout the sector with various sponsorships and virtual events. For the clinical trials community, we sponsored ARCS Australia's 10-part webinar series 'COVID-19: considerations and strategies for running trials during the pandemic' and PRAXIS Australia's 2020 webinar series 'Building Resilience in times of COVID-19'. We supported digital health events, including Cicada Innovations' Monthly Buzz event on 'Digital Health: What's Next?' and the Quantum TX event in Perth, with a live stream event 'Investing In Digital Health' Masterclass for the Angel Investing Series 2020 with the Perth Angels.

MTPConnect supported a range of industry events throughout the year, including:

- The RACMA Conference in Adelaide, which explored the role of robotics and artificial intelligence in healthcare, value-based healthcare and medical administration
- Australian Clinical Trials Alliance (ACTA) International Clinical Trials Conference
- The University of Western Australia's BioInnovation Symposium in Perth
- ANDHealth and the Australian delegation to the HLTH digital health conference in Nevada
- Connecting Doctors & HealthTech with MedTech Actuator and Artesian Ventures
- The AusBiotech conference
- Partnering with other Growth Centres (AustCyber, METSIgnited, FIAL, AMGC and NERA) for CSIRO's Data61+ Live event
- Austrade's Australian Export Awards and the International Health category
- Australian Technologies Competition finals in Melbourne (presented the Medtech & Pharma Award)
- 'Science meets Parliament' conference in Canberra
- Participated in panel discussions on healthcare innovation at West Tech Fest in Western Australia
- Attended Industry Forum on Advanced Manufacturing in Sydney
- Supported the MedTech Actuator Demo Day in Melbourne
- Presented at the Cerebral Palsy Alliance's Stem Cells Forum in Sydney
- Sponsored the DMTC Conference in Canberra, delivering keynote on 'Antimicrobial Resistance: Tackling a Global Health Challenge'
- Chaired a panel at the BioMelbourne Network Devices & Diagnostics Lab titled 'Making Sense of Manufacturing Minefields', focusing on advanced manufacturing
- Attended Medicinal Cannabis Industry Australia's (MCIA) The Future of Medicinal Cannabis Conference in Melbourne
- Opened BridgeTech's first 2020 Collaboration Seminar in Brisbane
- Participated in a panel with representatives from DISER and Growth Centres (AMGC, AustCyber, FIAL and NERA) at RMIT University's 'Engaging for Impact' series
- Provided a sector update to the CRC Advisory Committee meeting

Leveraged Funding

MTPConnect manages the BMTH and BTB programs for the MRFF. Both programs opened funding rounds this year, resulting in funding for 34 new projects and leveraging of significant matching contributions from industry.

This brings the total number of funded projects in the BMTH and BTB programs to 62, receiving a combined funding amount of $54 million, with the projects committed to contributing additional cash and in-kind industry contributions of $87.8 million to help Australian SMEs and universities advance their technologies towards clinical and commercial reality.

Case Study – ANDHealth: National Digital Health Initiative

ANDHealth is a unique not-for-profit industry-led organisation focused on strengthening the Australian digital health ecosystem and de-risking innovations in digital health, with a focus on clinical evidence, commercialisation and investment readiness.

ANDHealth was founded to create Australia's first National Digital Health Initiative, to provide commercialisation support programs to Australian evidence-based digital health companies facing unique challenges in navigating the path from concept to market. ANDHealth has created a highly specialised team and remains the only program specialising in technology identification, screening and commercialisation programs proven to accelerate the scale up and commercial growth of digital health companies.

ANDHealth works collaboratively across Australia to bring proven expertise to innovators and demonstrable commercial outcomes. Highlights from the period 1 July 2019 to 30 June 2020 include:

- 219 hours of one-to-one support, program delivery and event content delivered across Australia
- 196 companies attended BRIGHT for Digital Health programs
- 46 companies accessed ANDHealth's Office Hours facility
- 40 companies attended the inaugural Masterclass program
- 617 attendees from seven different countries across eight events, showcasing seven international digital health industry leaders

The ANDHealth programs team launched their first digital health commercialisation masterclass in November 2019, the development of which was directly supported by MTPConnect. This program was embraced by national and international industry experts, who have engaged strongly in the industry consultation throughout the curriculum development process. ANDHealth confirmed over 50 speakers, who committed their time to what was a unique offering in Australia.

ANDHealth continues to deliver programs, such as BRIGHT Innovate and Ideate and Masterclass, and is supported by MTPConnect through the REDI initiative and the TTRA program.

For more information, visit www.andhealth.com.au

ANDHEALTH+ Cohort Company Reported Outcomes

Cohort Company Outcomes Reported to ANDHealth (as at JUNE 30 2020).
FY18 Cohort Onboarded October 2017 | FY19 Cohort onboarded September 2018.

$30.5M Raised (dilutive & non-dilutive)	$14.8M New Revenue	188 New jobs (FTEs)	12 New CxO Roles
1 Exit of DoseMe (to Tabula Rasa NASDAQ: TRHC)	820 Commercial pilots commenced	33 Clinical trials and studies commenced	17 New international market launches
160 New commercial customers	91,280 New patients served	303 New operational sites	42 New partnerships formed
106 New product releases			

Case Study – Accelerating Australia SPARKS New Ideas

Accelerating Australia Is a national consortium of biomedical research institutions, universities, healthcare providers and companies. It facilitates translation of biomedical research through experiential entrepreneurial courses, brokerage and early-stage commercialisation support services, collaborating across sectors, organisations and disciplines to identify and reduce hurdles in our biomedical translation ecosystem.

Project partners include CERI, the University of Western Australia, Monash University, the University of Adelaide, the University of Melbourne, University of Technology Sydney, the University of Sydney, Orthocell Ltd, AVITA Medical Ltd, Proteomics International, Murdoch University, Curtin University, Edith Cowan University, Macquarie University, Harry Perkins Institute of Medical Research, Telethon Kids Institute, Lions Eye Institute, Ear Science Institute Australia, Perron Institute for Neurological and Translational Science Australia and St John of God Health Care.

During the project, separate state nodes delivered local training events with a number of national conferences attended by all nodes.

As a result of the project and the national collaboration within Australia, SPARK Oceania organised the 2019 SPARK Global Annual Meeting in Sydney, with attendees from more than 16 countries, including the SPARK Global Regional Directors from the Americas, Europe, Africa, Oceania and Asia. The meeting was opened at the NSW Parliament House and supported by MTPConnect. In association with the SPARK Global meeting, Accelerating Australia held a Bioinnovation Expo, with a presentation selected from each of the four Accelerating Australia nodes, followed by 17 technologies presented alongside promotional banners in the networking function. Accelerating Australia innovators made great connections with the SPARK Global community and other attendees, resulting in new potential R&D collaborations, CRC-P grant opportunities, clinical expert connections, investor connections and commercial partnerships.

During the project, commercialisation training and support was provided for 949 individuals (students and clinicians from 20 partner universities and companies) – resulting in 120 new technologies, 25 new jobs and $6.5 million investment into the companies. In addition, the project witnessed improved collaboration between universities and companies within each state node.

For more information, visit www.acceleratingaustralia.com

Two members of Adelaide Biodesign Team 'LegIt' after winning the $10,000 Medical Stream prize in the 2019 Australian eChallenge. L–R Jane Morphett and Vivien Heng from Team LegIt with Dr Jonathan Hall and Dr Michelle Perugini from Life Whisperer.

Victorian Minister for Racing, Tourism, Sport and Major Events, Industry Support and Recovery, Trade and Business Precincts, Hon. Martin Pakula MP, opening the MedTech Actuator's 2019 Showcase in Melbourne.

Case Study – Medtech Start-Ups Accelerated

Start-up accelerator the MedTech Actuator has formed a collaboration with venture capital firm Artesian Ventures to create new growth opportunities for medtech start-ups. Funded as part of MTPConnect's GC Project Fund, the MedTech Actuator has achieved excellent outcomes – creating 55 new jobs and training over 1,000 innovators in less than 18 months.

The initiative, overseen by CEO Dr Buzz Palmer, has grown nationally. MedTech Actuator programs and activities foster rapid commercialisation of early-stage ventures and support medical technology innovators. Additionally, the MedTech Actuator encourages industry, government, research and entrepreneurship interaction, taking a collaborative – not competitive – approach to innovation and has defined and strengthened capital pathways for innovative ideas.

The MedTech Actuator accelerator brings together the very best of Australia's medtech and innovation system to catapult ventures onto the global stage. With a dedicated early-stage investment fund by Artesian Ventures, portfolio companies have access to a structured pathway to $3 million-plus seed to series A investment.

CEO and Co-Founder of SOMATRACK Pty Ltd, Roanne Innes, believes that she has gained a lot from being involved in the accelerator.

"The MedTech Actuator certainly provides a life-changing and incredibly rewarding experience and provides each founder with an amazing community of professionals that want success as much as you do," Ms Innes said. "As a member of the third cohort I will be forever grateful for being part of this program and community."

The MedTech Actuator is also supported through MTPConnect's REDI initiative until 2023.

For more information, visit www.medtechactuator.com

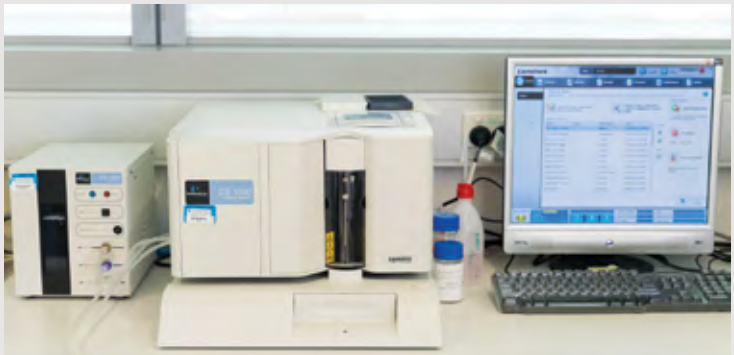
Case Study – Microscopy Australia Technical Voucher Fund

Microscopy Australia, through the MTPConnect GC Project Fund, set out to provide easy and discounted access to its microscopy services for medtech R&D companies, by funding technical vouchers to reduce existing barriers to use. The consortium of university-based microscopy facilities, led by the University of Sydney, includes the University of Queensland, the University of Western Australia, University of New South Wales, the University of Adelaide, University of South Australia, Australian National University and Flinders University.

The voucher system has enabled Western Australia-based Linear Clinical Research to provide an essential technical testing service for a new investigational drug being developed for a first in-human clinical trial by an international sponsor. Linear Clinical Research has a purpose-built state-of-the-art clinical and medical research facility, conceived to bring world-first clinical trials to Western Australia and make innovative therapies available to the local community.

By using Microscopy Australia's specialised flow-based Luminex analyser and key technical expertise, Linear has been able to provide high quality, reliable data within tight study timelines. The device (pictured below) has enabled Linear to critically analyse a specific biomarker in the drug development pathway, which demonstrated it was possible to get an early signal that the investigational drug was working in healthy volunteers.

Clinical trial in progress. Image courtesy of Linear Clinical Research.



Luminex device used for Linear's clinical trials in Microscopy Australia's facility at the University of Western Australia.

The data collected will be used to inform decisions on the further development of the product and whether it will progress to Phase II studies in people with the target disease. The results have helped Linear nurture a strong working relationship with its international sponsor.

Microscopy Australia's Marketing and Business Development Manager Dr Jenny Whiting said the Voucher Fund has been extremely valuable in providing affordable technical services to medtech companies.

"It is great to have this support from MTPConnect to help our facility in WA provide such significant benefits to Linear, a local clinical trials company attracting international sponsors," Dr Whiting added. "Accessing our instruments at subsidised rates is critical to their competitive edge," she said.

Linear Clinical Research CEO Jayden Rogers said the partnership with Microscopy Australia through the Technical Voucher Fund provided a high-quality service for this international sponsor.

"Being able to access the Technical Voucher Fund was pivotal to putting together a competitive proposal to the sponsor that helped Linear to secure the study," Mr Rogers explained.

"The Voucher allowed us to offer a lower cost to the sponsor for the biomarker analysis work, which had a direct impact on us being selected to run the study over other sites, not just in Australia, but worldwide.

"Running large healthy volunteer studies such as this one helps to bring in much-needed revenue to the business, which then means we are able to support a wider range of trials, including investigator-initiated studies," he said.

For more information, visit Microscopy Australia at www.micro.org.au and Linear Clinical Research at www.linear.org.au

Objective 2 Improving Management and Workforce Skills

Team Activities

MTPConnect launched a new initiative this year – the MTPConnect Guest of the Chair program – to give emerging leaders in the MTP sector the opportunity to experience a range of board-level activities. In a competitive process, Dr Parisa Glass, Deputy Director of the George Institute for Global Health, was selected as the Board's first Guest of the Chair. Dr Glass attended MTPConnect Board meetings over 12 months, engaging with our Chair, directors and senior management and gaining new perspectives on how boards operate. Dr Glass completed her appointment and applications for the FY2021 Guest of the Chair were opened in June 2020.

L–R Guest of the Chair Dr Parisa Glass with the MTPConnect Board members Alex Fowkes, Sue MacLeman, Dr Nick Cerneaz, Dr Dan Grant, Julie Phillips and Dr Douglas Robertson.

In November 2019, the MTPConnect WA Life Sciences Innovation Hub partnered with CSIRO's Data61 and Ribit program to host a forum, 'How to Kickstart Your Career', for PhD students, early-to-mid-career researchers and postgraduates to connect with industry leaders and consider career options. WA Industry panellists gave advice and shared their personal experiences of transitioning out of academia and into industry or vice versa. Keynote speaker, Professor Paul X McCarthy, an Adjunct Professor at University of New South Wales, introduced his new report, *Advancing Australia's Knowledge Economy*, in partnership with Ribit and APR.Intern.

In February 2020, MTPConnect partnered with CSIRO's Data61, Ribit and the City of Perth for the 'Speed Networking for Jobs' initiative, which saw 75 graduates meet up with 16 medtech, biotech and pharma companies to get tips about applying for positions and making industry connections.

In May 2020, MTPConnect launched a new webinar platform, taking the seminar series online for the first virtual event, 'MTP guide to cyber safety'. AustCyber CEO Michelle Price, Perx Health CEO and Co-Founder Hugo Rourke and Forticode CEO Tony Smales joined the discussion, providing their insights about the intersection of health and cyber. The webinar was made available as a bonus podcast episode.

The second webinar in the seminar series was held in June 2020. 'Charting your Course – Commercialising Health Innovations' discussed useful commercialisation tools and featured guests including CIMIT's Chief Operating Officer Dr John Collins from Boston, US; Health Horizon Founder Marcus Dawe; and OncoRes Medical Managing Director and CEO Dr Katharine Giles. The webinar was reproduced as an episode in our MTPConnect podcast series.

Guests joining the 'Charting your Course' webinar (top L–R) MTPConnect's Dr Rebecca Tunstall, Dr Dan Grant and Dr Gerard Gibbs with (lower L–R) Health Horizon's Marcus Dawe, CIMIT's Dr John Collins and OncoRes Medical's Dr Katharine Giles.

With the emergence of the COVID-19 pandemic, the sector began to respond to the impact of a changing research and healthcare environment. MTPConnect supported ARCS Australia's COVID-19 webinar series, 'COVID-19: considerations and strategies for running trials during the pandemic'. This sponsorship allowed ARCS to open what would normally have been a paid, member-only event to the entire clinical trials sector for free. The popular series, which hosted 35 speakers from the sector, attracted 3,595 registrations and over 1,880 YouTube views, and sessions were rated on average 85 percent 'good to excellent'. MTPConnect also sponsored PRAXIS Australia's webinar series 'Building Resilience in times of COVID-19', targeting professional development for the clinical trials sector.

MTPConnect led the development of a Future Workforce Skills Survey with a cross-industry project team including ANDHealth, AusBiotech, Medicines Australia and MTAA. The survey was launched in June 2020 and the results were published in a report, *A Survey of Workforce Skills and Capacity in the Medical Technology, Biotechnology, Pharmaceutical and Digital Health (MTP) Sector* on 15 October 2020.

Translational Research Institute (TRI)'s Director of Building Operations Michelle Richards with Minister for Industry, Science and Technology Hon. Karen Andrews MP and others on a tour of the cleanroom facility in Brisbane in 2019. Photo by Glenn Hunt Photography.

Case Study – TRI's Clinical Manufacturing Training Hub Accelerates Research Translation

A clinical manufacturing training hub set up by the TRI, in collaboration with Vaxxas, PharmOut and Eurofins AMS, is enabling the translation of innovative, investigational products into clinical studies. This work was funded through the MTPConnect Growth Centre Project Fund program.

The project establishes a 'turn-key' early-stage clinical product manufacturing facility to Good Manufacturing Practice (GMP) standard for a wide range of clean to sterile, biological, pharmaceutical, device and medtech products at the dedicated site at the TRI in Brisbane.

The collaborators designed the project to solve two main barriers in translating innovations to industry and the clinic:

1. Providing access to high quality GMP standard cleanrooms with small-scale manufacturing capabilities
The consortium observed that Australian researchers and start-up medtech and pharma companies had very limited access to high-value infrastructure such as GMP cleanrooms. Many start-ups require time to develop their processes within these facilities and then to manufacture small-scale product for use in clinical trials. This project provides the infrastructure and the quality management systems needed to operate and accelerate their translational pathway.

2. Access to facilities where staff can be trained in cleanroom technologies
Australia's medtech, biotech and pharma industries have a shortage of workers skilled in cleanroom processes and advanced manufacturing.

While the TRI facility is not being used for small-scale manufacture yet, it is training researchers and students in cleanroom operations, giving them transferable skills and further career options.

TRI CEO Professor Scott Bell said the establishment of the cleanroom in 2017 has been important to provide training to researchers that builds their skills.

"MTPConnect's support ensures that more Queensland innovations make it to the clinic and that the new generation of scientists learn valuable skills in product development and advanced manufacturing," Professor Bell explained.

"The TRI cleanroom and small-scale manufacturing facility fills the gap from the lab to the clinic, enabling discovery, production, and clinical trials and treatment to be available in one place."

The TRI facility was completed in April 2020 and there has been a high interest for both training and clinical manufacturing. A training synopsis has been developed between Vaxxas and the TRI to provide a general introduction to the medtech development life cycle, as well as more specific hands-on-based competency around the new cleanroom equipment. Since opening, the facility has trained 60 Master of Pharmacy students from the University of Queensland.

Vaxxas is an Australian biotechnology company, based at the TRI, that is developing and commercialising vaccine delivery technologies such as their innovative Nanopatch™.

Vaxxas CEO David Hoey said the partnership with TRI and the other consortium members is enabling Australian researchers and start-ups to access facilities that have never before been available in early-stage research.

"The MTPConnect-supported Cleanroom Upgrade Project has increased the level of compliance and flexibility of the cleanrooms at the Translational Research Institute," Mr Hoey said.

"This has enabled Vaxxas to manufacture, in-house, sterile clinical trial material for a number of Phase I clinical studies. The upgraded cleanrooms and state-of-the-art manufacturing equipment, coupled with trained TRI staff and the Quality Management System (QMS) templates, provide an easily accessed and flexible early-stage clinical trial manufacturing and training facility," Mr Hoey added.

For more information, visit www.tri.edu.au

Researchers utilising the cleanroom facilities at the TRI in Brisbane.

Leveraged Funding

REDI
Workforce skills is the focus of the $32 million REDI initiative that was awarded to MTPConnect this year. Working with our partners, REDI is driving skills development and workforce training that brings together researchers, clinicians, industry and the entrepreneurial ecosystem to enhance Australia's MTP sector. The program is systematically addressing current gaps in workforce skills and putting in place programs to meet the challenge of developing and retaining world-class talent that has industry experience in research translation, clinical development and commercialisation.

MTPConnect will deliver these outcomes with project partners:

- ANDHealth
- APR.Intern
- Industry Mentoring Network in STEM (Australian Academy of Technology and Engineering)
- MedTech Actuator
- The Bridge and BridgeTech programs (Queensland University of Technology)
- The George Institute for Global Health
- The Medical Device Partnering Program (MDPP)
- The Victorian Comprehensive Cancer Centre (VCCC)

As a result, MTPConnect has so far committed around $10 million of REDI funding to support workforce training and skills over the next four years.

The first meeting of the REDI Steering Committee was held in June with Managing Director and CEO Dr Dan Grant and Senior Director of Stakeholder Engagement Dr Rebecca Tunstall serving as Co-Chairs. The Steering Committee appointed L.E.K. Consulting to undertake the comprehensive sector skills gap analysis (Pillar Two of the three-pillar REDI initiative).

BTB
The BTB program nurtures the translation of new therapies, technologies and medical devices through to the proof-of-concept stage. The Bridge and BridgeTech programs, delivered by Queensland University of Technology, are the program's education partners, providing an education and training program for funding recipients to enable successful commercialisation of Australian pharmaceutical and medtech research.

The 2020 Bridge commercialisation program, originally funded through MTPConnect's GC Project Fund and recently re-funded through the BTB program, inducted 101 participants this year. Even in this COVID-19 environment, Bridge continues to support emerging PhD and postgraduate students to explore career opportunities in the pharmaceutical sector.

GC-Funded Projects
In early October, MTPConnect hosted Hon. Karen Andrews MP, the Minister for Industry, Science and Technology, at the TRI in Brisbane. The Minister officially opened the Queensland office of MTPConnect, launched the new MTPConnect-supported IMNIS regional Queensland mentoring program and engaged directly with innovative Queensland-based MTP projects and sector leaders. The Minister also participated in a panel discussion: Boosting Industry Engagement and Commercial Collaboration Through Mentoring. The panel was chaired by MTPConnect Chair Sue MacLeman and the Minister was joined on the panel by Dr Marguerite Evans-Galea, Bronwyn Le Grice, Professor Lyn Griffiths and Dr Dean Moss.

Our Director of Stakeholder Engagement for Queensland, Andrew Bowskill, attended the close of the BridgeTech program's second cohort in Brisbane. The event shared the first cohort's achievements, which included five participants who had initiated or completed new R&D contracts, eight who had pitched to investors or industry representatives and four who were involved in developing new start-ups.

Case Study – CRITERIA: Improving Job Readiness for MTP Graduates

Australia has a strong and flourishing clinical trials environment, which makes it an attractive destination to conduct trials. In 2018, to further enhance Australia's capabilities in this field, ARCS Australia developed the Clinical Research Industry's Talent Expansion, Retention, Investment and Advancement (CRITERIA) training program. The program was established with support from MTPConnect's GC Project Fund and collaborators in research and industry, including Clinical Network Services, PPD Australia, SeerPharma, IQVIA, Sydney Partnership for Health, Education, Research and Enterprise (SPHERE), Monash University, St Vincent's Hospital Melbourne, Novotech, University of New South Wales, On Q Recruitment, the University of Sydney, Pharma to Market and the University of Queensland.

Fifty-two candidates were selected from across Australia to undertake an ARCS-administered three-month training program in all aspects of pharmaceutical medicine and clinical research, as well as mentorship to develop their interpersonal skills and job readiness for clinical research roles. ARCS Australia CEO Dr Shanny Dyer explained the impact of the CRITERIA program in giving opportunities to PhD graduates entering the workforce.

"We're really pleased to work with MTPConnect on this really important project that looks at building the Australian workforce in clinical research," Dr Dyer said. "The program was designed to take PhD and postgraduates, who have done our training and mentoring, to secure roles for them in clinical research and we think what the program has achieved is a terrific outcome."

For more information and to get involved, visit www.arcs.com.au and watch the CRITERIA video.

CRITERIA graduates attending the ARCS Australia Conference.

Case Study – IMNIS: Industry Mentoring Boosts Industry Connections in STEM

The Industry Mentoring Network in STEM (IMNIS) has delivered positive outcomes from its medtech/pharma program. IMNIS saw significant growth in the initial uptake of its program, with students participating across 14 universities in five states, including Victoria, New South Wales, Queensland, South Australia and Western Australia. IMNIS develops STEM PhD graduates who can engage and collaborate with industry, understand the innovation process and pipeline, network and career transition with confidence, and lead and excel within any part of Australia's vibrant STEM ecosystem.

The project aims to break down barriers between industry and academia, advance skills and knowledge of the broader industry sector, and extend professional networks. IMNIS's consortium collaborators – the Australian Academy of Technology and Engineering and AusBiotech – provide links to universities for PhD students to gain access to industry mentors and enhance their skills.

This year, with MTPConnect's support, the program was successfully piloted with remote mentoring in Queensland and moved to online mentoring and networking as a result of COVID-19. IMNIS is a partner in MTPConnect's MRFF-funded REDI initiative.

IMNIS Executive Director Dr Marguerite Evans-Galea AM believes the program is achieving its goal and that the 'ripple effects' of the program and the unexpected benefits have been most exciting.

"The ripple effects for mentees include valuing their time more, and the time of others. They also say they are more organised in their day-to-day research and have a fresh perspective on their PhD – seeing it as a stepping stone to their future, rather than the 'be-all and end-all'," Dr Evans-Galea explained.

"But it is when students say they have more confidence and hope for their future that you know we're doing something right."

IMNIS has significant capacity to expand and influence Australia's collaborative culture between industry and academia. Participant survey results from June 2020 show 94 percent of mentees and 94 percent of mentors rate the overall mentoring experience as positive and successful. Most mentees (94 percent) said they had a better understanding of industry, the skills needed to succeed, the careers available, and that they extended their professional network beyond academia. Importantly, 98 percent of mentors agreed.

Most mentors (97 percent) and mentees (95 percent) said they'd recommend the program to their peers. Seventy-eight percent of mentees said they attained knowledge and skills to assist them in engaging and collaborating with industry. Almost half of mentors (45 percent) said they did/will engage in their mentee's research, their group and/or their organisation. Most mentors (89 percent) are regularly discussing the careers available in industry, the broader industry sector, and innovation processes with their mentees.

Although most mentees are in the second year of their PhD, there are some final year students included, and 36 IMNIS alumni/mentees have attained jobs in industry within the last year, with 13 from the most recent year of the program. These mentees attribute this success to the advice of their mentor and their increased confidence, knowledge and skills through mentoring. Fifty-two percent of past mentees surveyed are either working in industry or actively seeking a role in industry and 68 percent of past mentees are collaborating with industry or are keen to collaborate with industry.

IMNIS Executive Director Dr Marguerite Evans-Galea AM introducing Professor Lyn Beazley AO FTSE, Science Ambassador and former Chief Scientist of Western Australia, for the STEM Careers in Industry event held at CORE Hub in Perth this year.

IMNIS fosters enduring connections and collaborations between researchers and industry, with 70 percent of IMNIS alumni maintaining contact with their mentor up to five years after their program has ended; 90 percent of mentees have committed to staying connected with their mentor in the most recent program. Mentors and mentees highlight additional benefits of the program, including enhancing their strategic planning skills, networking broadly across industry, and the opportunity to connect more closely with their peers – other IMNIS mentors and mentees, as well as those in their own organisation.

Introducing PhD graduates early in their careers to this wider range of STEM professionals has the potential to shift the dial on how they view, interact and collaborate with industry into the future. Industry is clear when it says skills are lacking in university graduates – and it is these skills that IMNIS mentors are helping students to identify and develop early in their careers. This can only have a positive impact on a student's career trajectory and their future potential for success. This will have flow-on benefits to Australia's future workforce capacity and capabilities, and the broader medical technology and pharmaceutical sector overall.

For more information, visit www.imnis.org.au or hear more about the IMNIS project on the MTPConnect podcast series.

Objective 3 Optimising Regulatory and Policy Environment

Team Activities

MTPConnect continues to work with sector stakeholders ANDHealth and the University of Queensland to finalise a white paper on adaptive regulation. Titled *Adaptive Regulation for Digital Health: Enhancing Australia's Regulation System for the Next Generation of Healthcare,* the report examines how Australian digital health industry stakeholders are engaging with the Australian therapeutic goods regulatory framework, particularly as novel products incorporating digital health technologies are emerging onto the market.

MTPConnect is also playing a leading role in Antimicrobial Resistance (AMR) policy and collaboration. Working with Biointelect, we attended the AMR Industry Workshop in Sydney, which brought together representatives from AusBiotech, Medicines Australia, Pfizer, MSD and CSIRO, as well as SMEs. Participants explored four main topics: translation/commercialisation, international partnerships and collaborations, regulations and regulatory incentives, and pricing and reimbursement. The discussions provided the basis for a broader consultation organised by MTPConnect to inform the new Australian national strategy on AMR.

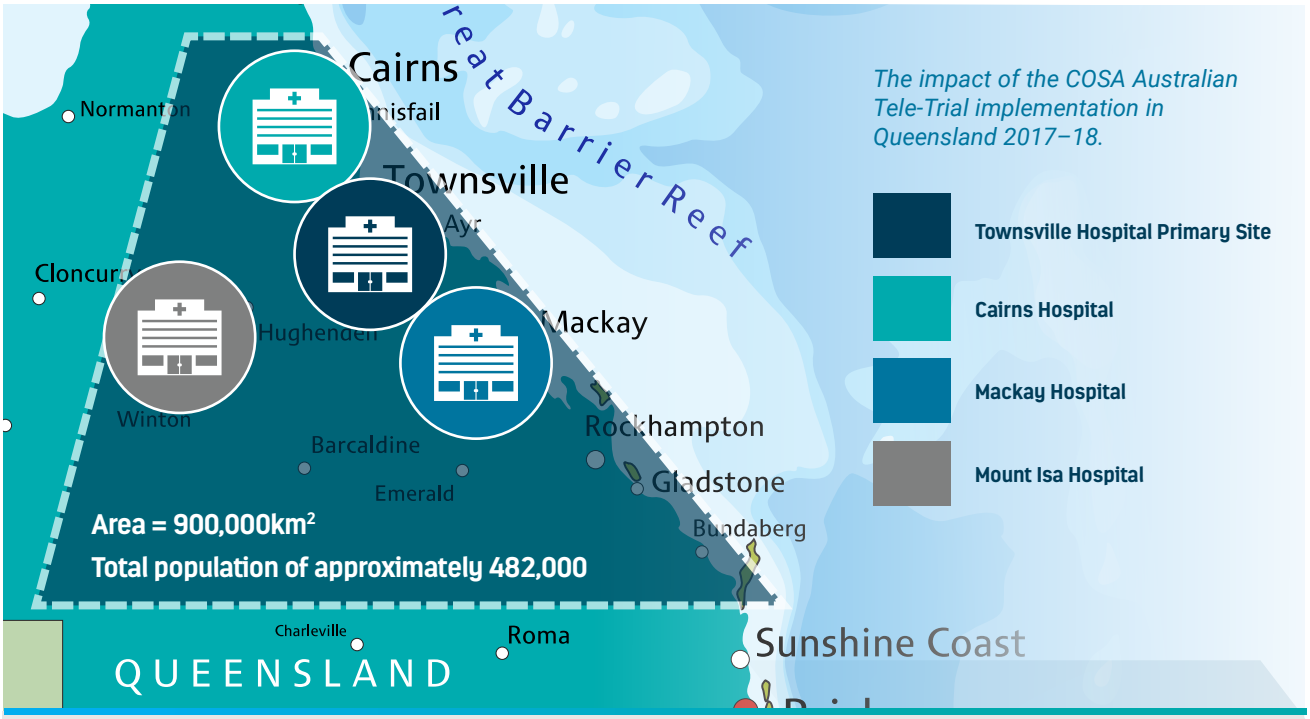
In November 2019, MTPConnect expanded on the work done by Biointelect to tackle AMR and convened a multidisciplinary workshop during World Antibiotic Awareness Week to bring together key stakeholders from the health and medical research sector, the biotech and pharmaceutical industry, government and regulators to assess the challenges and see what could be achieved. Australia's then Chief Medical Officer, Professor Brendan Murphy, opened the meeting. To follow, MTPConnect led the development of a white paper in partnership with Biointelect, detailing those discussions and making a series of recommendations for new and improved approaches to addressing drug resistance. In September 2020, the report *Fighting Superbugs: A Report on the Inaugural Meeting of Australia's Antimicrobial Resistance Stakeholders* was launched and MTPConnect announced the formation of an Australian-first network bringing together key stakeholders to address the impact of AMR on human health. The Australian Antimicrobial Resistance Network – AAMRNet – has been established following recommendations made in this report.

MTPConnect facilitated broad sector engagement on the opportunities and challenges presented by drug repurposing. This MTPConnect-initiated project, consistent with MRFF research priorities, follows recommendations from a recent Senate Inquiry into rare cancers, which identified drug repurposing as an opportunity for delivering improved outcomes for patients. Consultations to date have included leading clinicians and researchers, the venture capital community including Brandon Capital, consumer organisations and the TGA and Department of Health. MTPConnect is preparing a white paper that will inform the next steps to promote drug repurposing in Australia.

GC-Funded Projects

MTPConnect has committed to three new GC-funded projects to start in Q1 FY2021 to establish catalytic bodies, with experts from industry, research and government to review opportunities and determine the education and regulation changes needed to allow Australia to embrace emerging opportunities. These include:

- Australian Antimicrobial Resistance Network (AAMRNet) – coordinated by MTPConnect
- The Regenerative Medicine Catalyst Body – coordinated by AusBiotech
- Genomic Catalyst Body (InGeNA) – coordinated by the Australasian Institute of Digital Health



Case Study – COSA Pilot Tele-Trial Model Boosts Rural Patient Access

The Clinical Oncology Society of Australia (COSA) is boosting access to clinical trials for patients living in rural areas, with support from MTPConnect's GC Project Fund and a consortium of industry, Medicines Australia, research institutes and consumer groups. As part of the project, COSA identified key rural areas across Australia to improve clinical trial capabilities and enrolment, commencing the groundbreaking project in 2017.

Building on COSA's Tele-Trial Pilot Project, tele-trials have now expanded from four patients at two rural New South Wales sites, Orange Hospital and Dubbo Hospital, to 119 patients participating in tele-trials nationally in 18 trial sites across Queensland, New South Wales, Australian Capital Territory, Victoria and South Australia.

With the assistance of Queensland Health, COSA implemented the first industry-sponsored tele-trial in Queensland with a cluster of four sites for an oral treatment breast cancer study called MonarchE. This included Townsville as the primary supervising site and Cairns, Mackay and Mount Isa as the satellite sites. The cluster serviced an enormous area of 900,000 km^2, with a total population of approximately 482,000. The trial was opened in September 2017 in Townsville, August 2018 in Cairns (distance from Townsville of 400 km), September 2018 in Mackay (distance from Townsville of 400 km) and November 2018 in Mount Isa (distance from Townsville of 1,000 km).

Professor Sabe Sabesan, Director of Medical Oncology at the Townsville Cancer Centre and Co-Chair of the COSA Tele-Trial Project, said the collaboration with Queensland Health has been vital in rolling the Tele-Trial Model out across Queensland.

"There has been significant progress in treating cancers and it is important all our communities across the country are able to access the latest developments. Queensland Health have led the necessary regulatory and governance reforms to establish the Tele-Trial Model in Queensland and it is vital that other states follow their lead and adopt uniform processes nationally," Professor Sabesan explained.

The biggest challenge facing implementation of the MonarchE tele-trial was the development of streamlined processes for the review, authorisation and conduct of the Tele-Trial Model. Queensland Health, in collaboration with COSA, drafted new standard operating procedures to incorporate tele-trials into routine practice and Queensland Health facilitated state-wide implementation of the model.

Significant progress in regulatory reform to enable adoption of the Tele-Trial Model has been made. The Australian ICH GCP (including Tele-Trials) SOPs and Supervision Plan developed by Queensland Health in collaboration with COSA, along with a Tele-Trials Consultation Guide, have been approved for National Mutual Acceptance (NMA) and are now available as generic national documents. New South Wales and Victoria have also released new SOPs including tele-trials and Victoria now joins Queensland in providing an approved tele-trials subcontract. This regulatory framework, which was previously only available in Queensland, provides states and territories participating in NMA with essential guidance and support to facilitate increased uptake of the Tele-Trial Model.

While the COVID-19 pandemic has meant clinical trial resources at sites are channelled into COVID-19-related research and planned tele-trials were put on hold, it has also highlighted the significant advantages and utility of the Tele-Trial Model. An interstate tele-trial was established in just six weeks to allow a young Tasmanian patient to continue to receive treatment on a commercially sponsored Phase I trial during COVID-19 border closures.

It is expected the Tele-Trial initiative will result in improved quality of care for cancer patients and help reduce the disparity in outcomes for cancer patients living in regional and remote areas of Australia by enhancing rural service capabilities and reducing variation in practice.

For more information, visit www.cosa.org.au or listen to Professor Sabe Sabesan and COSA CEO Marie Malica speak about the project's impact on the MTPConnect podcast.

Representatives from the CT:IQ consortium at CT:IQ's Clinical Trial Site Recruitment Guide project launch.

Case Study – Clinical Trials: Impact & Quality (CT:IQ)

CT:IQ acts as an important platform for stakeholder voices to come together to develop solutions to the roadblocks and inefficiencies that impede the value and conduct of clinical trials in Australia. CT:IQ also provides an opportunity for upskilling professionals by sharing best practice. This is the only consortium in the country with such a diverse group, including government, industry, researchers, drug and device organisations, sites, Phase I units, research ethics committees, interest groups and consumers, all focused on improving the clinical trial sector collectively. This equates to 100 individuals across 65 organisations with a shared commitment to driving excellence.

In December 2018, CT:IQ's members selected five improvement projects against the needs of the clinical trials sector and the following four projects have now been launched and have been well received by the sector:

- Website to facilitate Consumer Involvement & Engagement (CI&E) in clinical trials – launched at the ACTA International Conference
- Guidance for improving the quality of the consenting process in clinical trials via eConsent – public launch at AusBiotech Conference and ARCS eClinical Information Summit following members-only launch
- Development of Guidance for Early Phase CT trial conduct – launched on CT:IQ website
- Development of recommendations for CT participant recruitment optimisation – launched on CT:IQ website

Objective 4 Improving Access to Global Supply Chains and Markets

Team Activities

MTPConnect's Dr Dan Grant attended the Australian British Health Catalyst (ABHC) conference in the UK in July 2019, where the theme was 'integrated healthcare in a digital world'. Leaders from the Australian and UK MTP sectors came together in London and Cambridge to explore the challenges for future healthcare delivery, cybersecurity, big data and how to leverage returns on our innovations. MTPConnect was also a member of the organising committee.

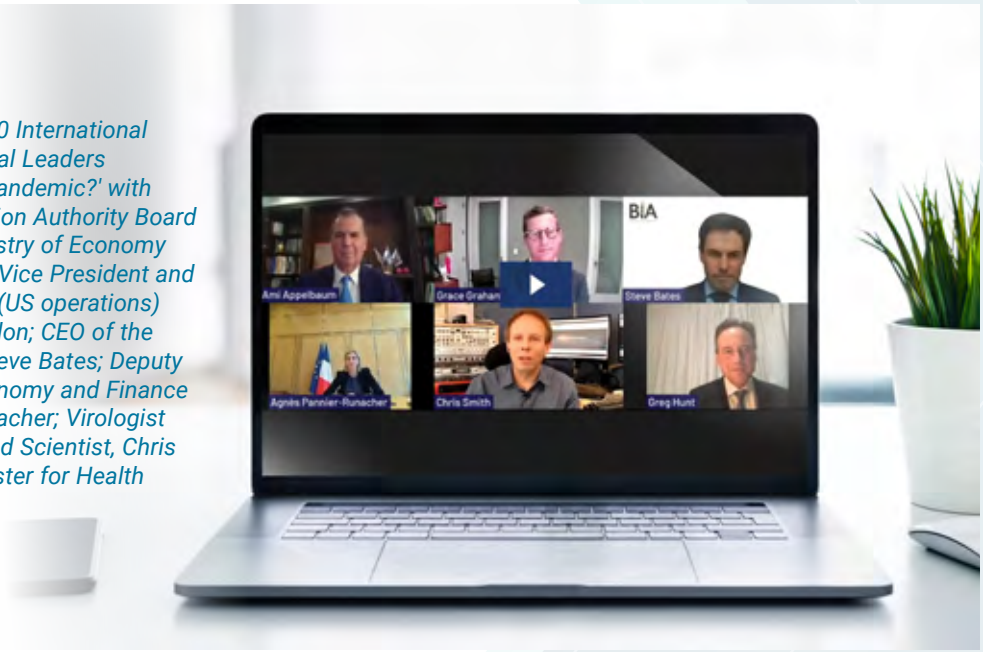
MTPConnect supported emerging leaders at the ANZLF Forum in Auckland. Board director Dr Nick Cerneaz joined forum members and emerging business leaders Chandra Selvadurai, William Smith-Stubbs, Mary-Ellen Redmayne, Jordan Go, Pete Williams and Gavin Fox-Smith to discuss strategies to further strengthen trans-Tasman bonds.

MTPConnect organised and led the Australian delegation to the MedTech Conference in Boston, US, from 23 to 25 September 2019. The mission included 30 delegates representing 27 companies, research institutes, universities and start-ups and was supported by Austrade, MTAA and AusBiotech, as well as the state governments of Victoria, Western Australia and Queensland and the Entrepreneurs' Programme's Accelerating Commercialisation initiative. Western Australian start-up OncoRes Medical made the top five of the finals of the MedTech Innovator competition and was awarded US$25,000 at the conference.

In November 2019, MTPConnect Chair Sue MacLeman represented the sector at the services sector export roundtable at Parliament House hosted by the Minister for Trade, Tourism and Investment, Senator the Hon. Simon Birmingham. The roundtable discussed ways to support Australian businesses to go global, removing barriers facing exporters abroad and simplifying regulation.

MTPConnect supported the Australian delegation to the BioJapan conference, working with Austrade, CSIRO and the Victorian Government to showcase the capabilities of Australian biotech and pharma companies, particularly in the areas of personalised and regenerative medicine. Dr Dan Grant presented on Australia's expertise in clinical trials and promoted opportunities for trials to be conducted in Australia.

Preparation for extensive sector participation at the BIO International Convention (BIO2020) in San Diego, US, in June 2020 was a major focus during the period. MTPConnect secured support from the Department of Health for the Australian delegation to attend BIO2020. In addition, the Department of Health requested MTPConnect develop and coordinate a visit program for the Federal Minister for Health to lead the Australian BIO2020 delegation. A comprehensive itinerary was created, utilising international industry and research connections, for activities at BIO2020 and a broader health and medical mission across the US and Canada. However, all plans for this overseas mission were halted in March 2020 due to COVID-19 health concerns and travel restrictions, and the conference was moved to a virtual format. Consequently, MTPConnect secured participation for the Minister for Health, Hon. Greg Hunt MP, in a key event: 'International Plenary – How are Global Leaders Collaborating to Combat the Pandemic?' The Minister appeared with other global healthcare and business leaders to discuss efforts to come together to fight COVID-19.



A screenshot from the BIO2020 International Plenary session 'How are Global Leaders Collaborating to Combat the Pandemic?' with Chairman of the Israel Innovation Authority Board and Chief Scientist of the Ministry of Economy and Industry, Ami Appelbaum; Vice President and General Manager of Oncology (US operations) from Amgen, Christophe Bourdon; CEO of the UK Bioindustry Association, Steve Bates; Deputy Minister to the Minister of Economy and Finance for France, Agnès Pannier-Runacher; Virologist and Podcast Host of The Naked Scientist, Chris Smith; and the Australian Minister for Health Hon. Greg Hunt MP.

MTPConnect had been approached by Austrade to lead the Australian delegation to BIO KOREA in May 2020. While the in-person event could not proceed due to COVID-19 travel restrictions, MTPConnect supported the virtual conference and coordinated support for the WA Life Sciences Innovation Hub to sponsor the BIO KOREA Australian booth and arranged a series of industry speakers for the online event, including the Australia Live Talk session. MTPConnect interviewed Austrade Senior Trade Commissioner South Korea (designate) Julie Quinn and Orthocell's Managing Director and CEO Paul Anderson for a podcast episode to promote the event, titled 'Opening Up International Markets: BIO KOREA 2020 Goes Virtual'.

To launch MTPConnect's 2020 seminar series in March, MTPConnect brought US market expert Frank Jaskulke, a senior executive from Minnesota's Medical Alley, to Australia to share his expertise and insights about breaking into the US market. Australia and Medical Alley have a history dating back to the development of the pacemaker. MTPConnect established a cooperation agreement with Medical Alley in 2017 aimed at forging a strong relationship and opening further connections for the exciting medical innovations between countries. Our Stakeholder Engagement team, led by Senior Director Dr Rebecca Tunstall, introduced Frank to the medtech sector across Australia at seminars held in Brisbane, Sydney, Perth and one-on-one activities with start-ups and companies in Melbourne.

Also, in June, Dr Dan Grant joined a webinar event organised by Asialink Business and City of Perth to discuss how Western Australian medtech and pharma companies could explore opportunities in Asia. Dr Grant highlighted MTPConnect's industry guides published in partnership with Asialink Business and supported by Austrade, covering market opportunities in India and Indonesia for digital health and frugal innovations.

Leveraged Funding
To broaden the international expertise on the BMTH Steering Committee, MTPConnect extended an invitation to US-based stakeholders Frank Jaskulke, Vice President of Intelligence at Medical Alley in Minnesota, US, and Paul Grand, Founder and CEO of the US-based global MedTech Innovator, to join the BMTH Steering Committee. Both Frank and Paul have a wealth of experience, large networks and deep insights into the regulatory and market requirements for successful commercialisation of new medical device technologies. Their involvement will provide insights, expertise, networks and guidance for the recipients of BMTH funding to create connections into new markets as their products mature.

GC-Funded Projects
A major collaboration between MTPConnect and Asialink Business, funded through MTPConnect's GC Project Fund, is assisting the Australian MTP sector to understand and access export opportunities in Asian markets through the research and publication of industry guides.

The MTPConnect team joined Asialink Business in December 2019 to launch the first report, *Frugal Innovation in Medical Devices and Technologies: The India Opportunity*, at State Library Victoria. The report, also supported by Austrade, highlights the growing opportunities for future-focused Australian medical technologies businesses in India. The report can be downloaded from the MTPConnect website and the launch event, showcasing a panel discussion of industry experts, was featured in the podcast series. Then, in March 2020, MTPConnect released the second research report, *Digital Health in Indonesia: Opportunities for Australia*. It explores why it is time for Australian businesses to take advantage of Indonesia's booming digital health ecosystem.

Representatives from Asialink Business, Austrade and the National Hospital Surabaya in Indonesia.

GC Case Study – Opening up International Markets: Helping Businesses Expand to India and Indonesia

International markets can be difficult to access for Australian MTP sector companies, with a number of challenges to entry. As part of the MTPConnect GC Project Fund, an Asialink Business project commenced in 2019 to identify opportunities for Australian companies to access global markets.

With the support of Austrade, the project has developed practical and timely industry guides, including Frugal Innovation in India and Digital Health Opportunities in Indonesia, and undertook an assessment of the Asia capability of industry senior executives and board members.

In December 2019, MTPConnect and Asialink Business launched the first of these reports, Frugal Innovation in Medical Devices and Technologies: The India Opportunity. The report highlights the growing opportunities for future-focused Australian medical device and technologies businesses to tap into India's expanding healthcare sector. The project engaged global leaders in innovation and technology in Asia to understand the emerging opportunities for Australia's MTP businesses.

The new research identifies three major areas of opportunity for Australian medical device and technology companies in the Indian market. It finds that:

- Australian medtech businesses are well placed to export into India's expanding private hospital network
- Australian SMEs can adapt their medical device and technology offerings through Indian start-up incubators
- Australian universities and research institutions can partner with Indian organisations to develop and commercialise their technologies.

Asialink Business CEO Mukund Narayanamurti said this report will help Australian MTP companies to understand the key trends shaping the sector in Asia and enable them to more effectively pursue opportunities.

"By 2035[5], India will be the world's most populous country and its share of global GDP could be on par with the United States. No other single market offers more growth prospects for Australian industry," Mr Narayanamurti explained.

"The opportunities for innovative Australian medtech companies and organisations are a prime example of how Australia can leverage its strengths, be future-focused, and respond to India's growing need for world-class services," he said.

The second industry guide released in March 2020 is titled Digital Health in Indonesia: Opportunities for Australia and explores why it is time for Australian businesses to take advantage of Indonesia's booming digital health ecosystem. With the start of the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA), the report outlines the growing opportunities for Australian digital health businesses to partner with Indonesia on innovative solutions to the country's rising health needs.

The project is now completed, the reports can be downloaded from MTPConnect's website and the project is covered on the MTPConnect podcast.

L–R Partner at Deloitte Access Economics, Dr Pradeep Philip; Managing Director of Crescent Strategy Consulting, Sabeen Shaikh; Global Head of Medicine, George Health Technologies at the George Institute for Global Health, Associate Professor Ruth Webster; and CEO of Asialink Business, Mukund Narayanamurti, at the launch of the Frugal Innovation in Medical Devices and Technologies: The India Opportunity report at State Library Victoria in Melbourne. Photo by Shardey Olynyk.

5 'An India Economic Strategy to 2035' https://dfat.gov.au/geo/india/ies/index.html

MTP Sector Performance and Vision

MTP Sector Performance

The MTP sector is a major contributor to R&D, both globally and within Australia. The MTP value chain encompasses a vibrant sector with a diverse range of participants, including consumers and patients, universities, other research organisations, small and large local and multinational companies, investors, service providers, industry organisations, infrastructure providers, governments, regulators, policymakers, funders and those involved in healthcare delivery, such as state health departments and private medical practice. Each participant has a critical role to play in the sector's growth and success.

MTP Sector Performance Since 2015

MTPConnect's 2020 Sector Competitiveness Plan (SCP) updated the MTP sector's Knowledge Priorities, Sector Growth Priorities and regulation reform agenda. It also reviewed the growth achieved by the sector over the last four years up until 31 December 2019, the period prior to the emergence of the COVID-19 pandemic.

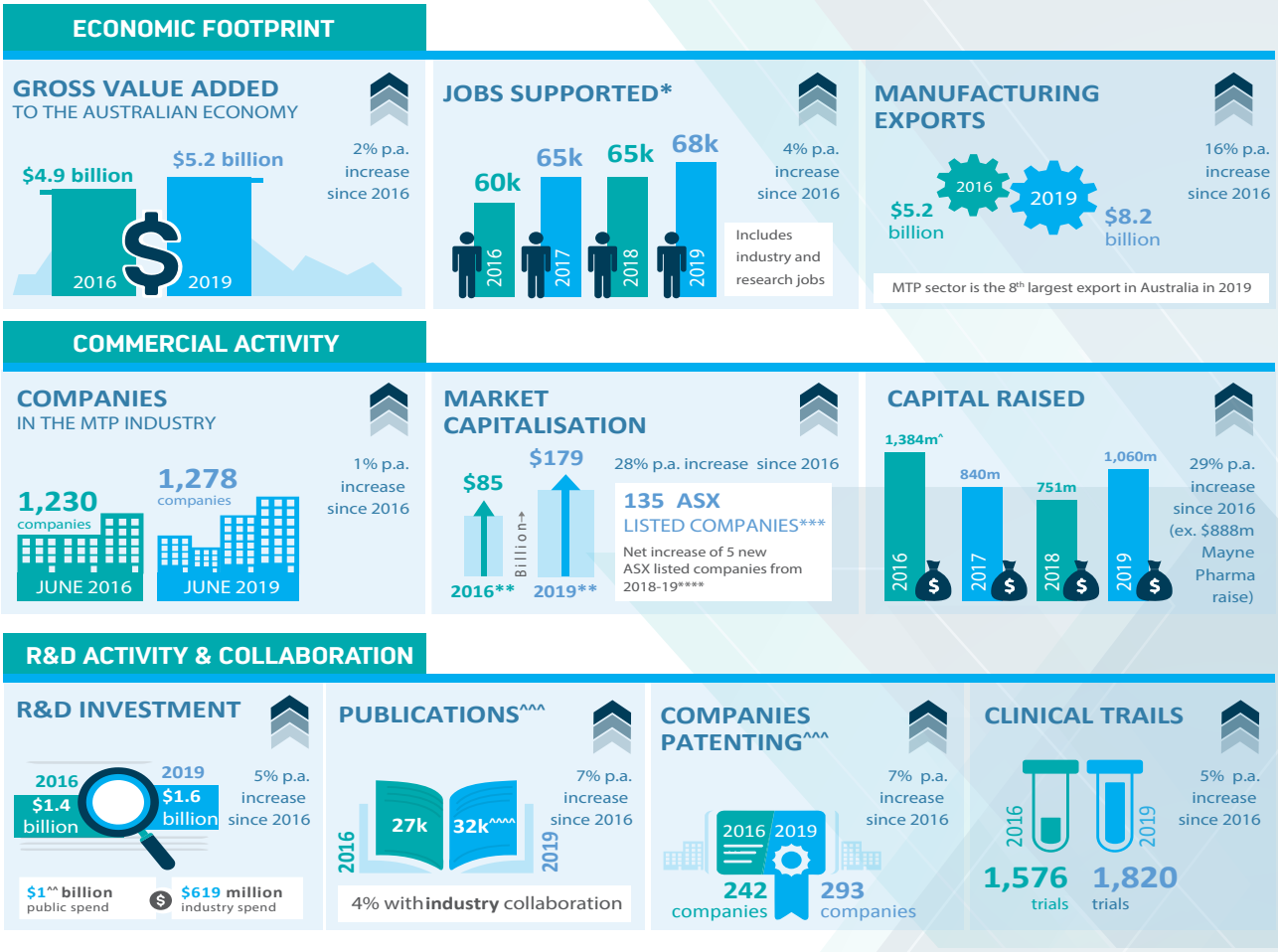
The SCP documented robust growth across many key metrics for the reporting period, including Gross Value Added, which had grown steadily at 2 percent p.a. since 2016, and manufacturing exports, which had grown 16 percent p.a. since 2016 to be worth $8.2 billion, making the MTP sector the eighth largest export segment in Australia.

The MTP sector supported approximately 68,000 jobs in 2019, an increase of 4 percent p.a. since 2016.

During 2019, Australia continued to cement its reputation as a 'go to' destination for companies wanting to conduct clinical trials, with 1,820 ongoing trials – a 22 percent increase on 2015. As well as contributing an estimated $1.1 billion a year to the economy, more clinical trials means more patients getting increasing access to new therapies.

More information about MTP sector performance can be found in the 2020 SCP.

MTP Sector Progress to 31 December 2019



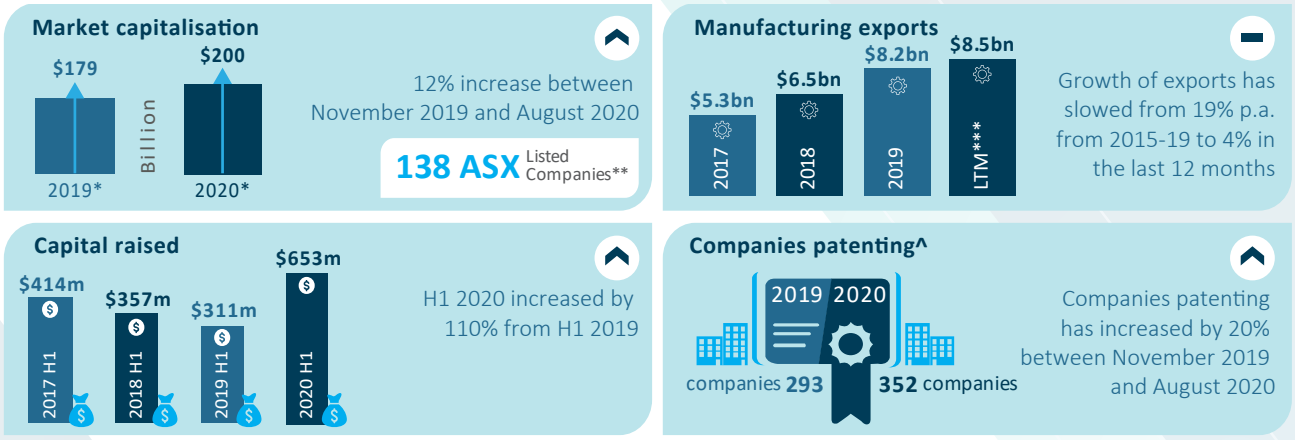
Notes: See following page.

Notes: * Due to the volatile nature of quarterly employment metrics, the industry job portion of the presented figures is calculated as a rolling two-year average of the quarterly data. In the 2019 SCP, industry jobs was calculated as an annual average.
** 2016 market cap as at 2016, 2019 market cap as at November 2019.
*** The definition of ASX-listed MTP companies was broadened in the 2018 analysis to include medical software / digital health companies whose products are not necessarily regulated by the TGA.
**** 2018 figure for ASX listed companies adjusted from 135 to 130 for the 5 companies that were de-listed during the year.
^ Capital raised in 2016 was artificially high due to a $888 million capital raise by Mayne Pharma.
^^ Public spend analysis comprises grants made by ARC, NHMRC, BTF and MRFF; NHMRC and ARC (announced before August 2018) grant funding per year assumes grant funding distributed equally in each year of the grant; ARC funding estimates for grants announced after August 2018 assume a) the duration of each of these grants is the average duration of a grant of equivalent type (e.g., Linkage Project, Discovery Project) over the period from January 2016 to August 2018, and b) grant funding is distributed equally across each year of the assumed grant duration; MRFF funding is FY2019 committed funding per 2018-20 Priorities Discussion Paper; BTF funding assumes increase between previous announcement and current grant funding occurred in 2019.
^^^ Data provided by Clarivate Analytics.
^^^^ There were an additional 79 reporting organisations whose publications output was included in the data from 2017 onwards.

The Impact of COVID-19 on MTP Sector Progress

From its onset in early 2020, the COVID-19 pandemic caused significant negative impacts to the MTP sector in the period March to May 2020, as detailed in our COVID-19 Impact report series. Since May, the sector has strongly recovered from the pandemic slump. In the first eight months of FY2020, performance against key metrics continued to follow an upward trajectory. However, the rate of growth for manufacturing exports and market capitalisation has slowed to 4 percent and 12 percent respectively. With $653 million of capital raised by listed MTP companies in the first half of FY2020, this was an increase of 110 percent from H1 FY2019. MTP companies were able to raise much-needed liquidity to strengthen their balance sheets, taking advantage of the positive investor sentiment towards the sector during the COVID-19 pandemic. The number of companies patenting also rose 20 percent between November 2019 and August 2020, likely due to efforts to find products and solutions in response to COVID-19.

Sector Competitiveness Metrics



Notes: * 2020 market cap as at 31 August 2020, 2019 market cap as at 30 November 2019.
** The list of ASX-listed MTP companies was updated to reflect five new listings, one new inclusion to the MTP sector list and three de-listed since November 2019.
*** LTM is the last 12 months to June 2020.
^ Data provided by Clarivate Analytics.
Source: Thomson Reuters, ABS, Bioshares, Clarivate, L.E.K. analysis

In equity markets, the MTP sector has continued its recovery from a COVID-19 slump in May, albeit at a slower pace than the broader market. The market capitalisation of ASX-listed MTP sector companies (in aggregate) on 31 August 2020 was 12 percent higher than at 30 November 2019. In comparison, the ASX All Ordinaries index remained 11 percent lower in August 2020 compared to November 2019. The market capitalisations of CSL and ResMed, two companies that played significant roles in responding to COVID-19, fell by $5.3 billion (3.1 percent) between May and August. The rest of the sector experienced an increase of 19 percent in the same period, as shown in the figure below. In comparison, the S&P/ASX All Ordinaries index rose by 21 percent over the same period.

Since the first report, CSL and ResMed have cumulatively lost a further **$5.3 billion**, while the remaining MTP sector has **gained $5.6 billion**. The ASX All Ordinaries index has recovered stronger than the sector, gaining **21%, or $337 billion** in value

		Change %		
		3 Jun 19 – 3 Feb 20	3 Feb 20 – 1 May 20	1 May 20 – 31 Aug 20
1	CSL and ResMed	51.6	(3.0)	(3.1)
2	All other MTP companies	34.1	(15.7)	19.0
1 + 2	All MTP companies	48.4	(5.0)	0.1
3	Index: All Ords ASX	9.6	(23.8)	20.9

While CSL and ResMed have declined since May, it should be noted that they experienced less of a decline from the initial crash in February, nearing November 2019 value

Note: ^ Each segment in the chart has been indexed to 100 for their relevant market capitalisation as at 3 June, 2019
Source: Thomson Reuters Datastream, L.E.K. analysis

See [p. 34] for more details about MTPConnect's COVID-19 Impact report series. The reports can be found here on MTPConnect's website.

Megatrends and Knowledge Priorities

The Australian MTP sector has the potential to be a significant contributor to improving patient outcomes and also a key driver of economic and jobs growth over the next 10 to 20 years. Technological developments and shifts in consumer behaviour are creating exciting opportunities within the MTP sector. These include genomics, gene-editing, big data and analytics, while the ability to develop products and services tailored to individuals/groups of consumers with digital connectivity and integration is becoming increasingly feasible, alongside a rise in consumer awareness of their overall health and wellbeing.

The MTP sector's ability to respond to megatrends is also important, as has been highlighted in Australia's responses to the global biosecurity challenges posed by the COVID-19 pandemic, and will play a key role in establishing sovereign capabilities, resilient supply chains and in defining our economic and job creation path out of COVID-19.

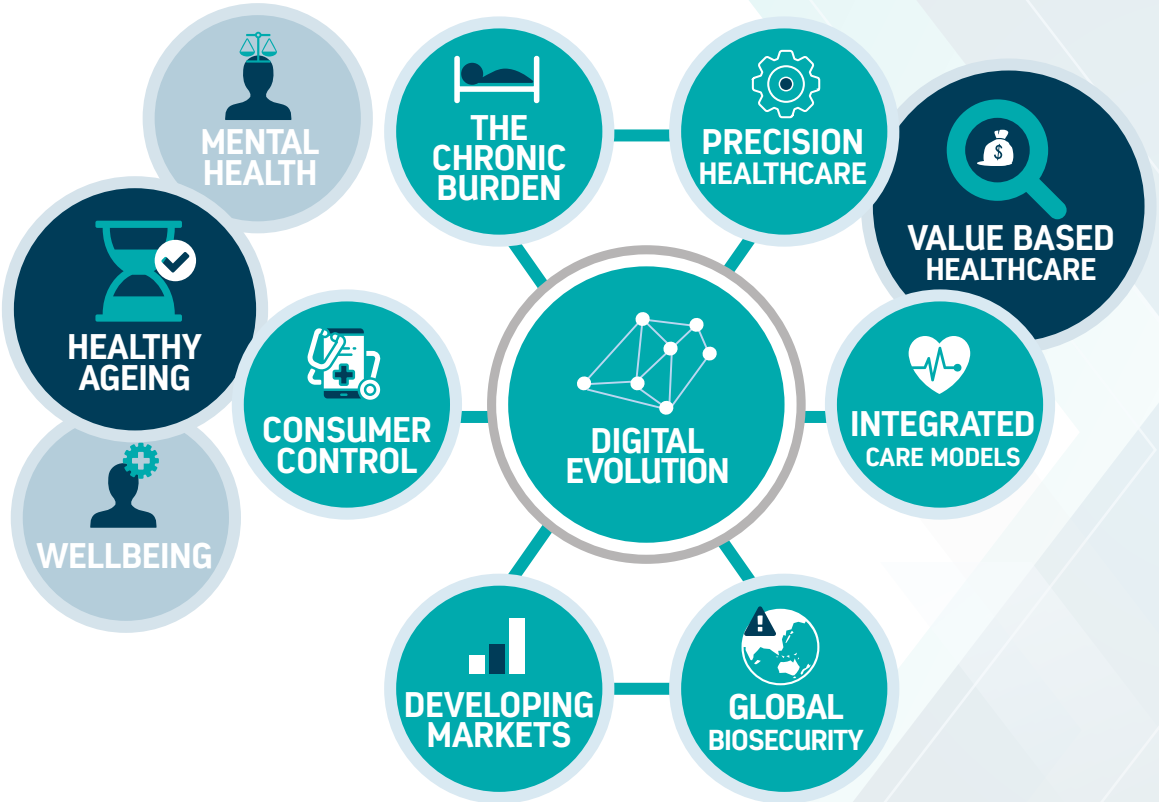
These megatrends, knowledge and sector priorities, as detailed in the 2020 SCP, are shaping how Australia can build long-term, world-class positions in targeted areas of research and development, where patient outcomes can be realised, and opportunities exist for strong commercial returns.

Emerging Megatrends

Megatrends are the overarching social, economic, environmental, technological and geopolitical forces that will shape the future of industries. They are often disruptive; they change existing business models and present opportunities and challenges for organisations. By nature, they are forward-looking and, as a result, the list of megatrends does not vary significantly from year to year; rather they evolve gradually.

Digital evolution is central as an enabler and disrupter for all other megatrends. Mental health and wellbeing, while not megatrends, are highlighted as underlying drivers in the chronic burden and consumer control megatrends respectively, contributing to pressure on the sustainability of healthcare delivery. It is acknowledged that, over time, the manifestations of climate variability (higher temperatures, altered rainfall patterns and more frequent or intense extreme events) will influence many of these megatrends, including global biosecurity, healthy ageing and wellbeing, developing markets and the chronic burden and will need to be considered as part of strategic planning and operational activities.

Megatrends identified in MTPConnect's 2020 SCP



The Global Biosecurity Megatrend and COVID-19

As we have seen, the MTP sector is critical for responses to pandemics and global biosecurity threats. Many Australian researchers, start-ups and SMEs are working in vaccine design and manufacture, diagnostics and imaging, bioprocessing technologies, ventilation technology, telemedicine, infection control and protection and immune system-directed therapies. Industry input into Federal Government taskforces has been integral to securing essential supplies of ventilators, testing kits and other personal protective equipment (PPE) supplies required by the healthcare system. Australia's medical device sector is uniquely placed to inform and deliver a sovereign manufacturing capability and robust supply chains as part of future pandemic planning.

MTPConnect's role in supporting Australia's response to COVID-19 included close involvement in the Federal Government taskforces and working groups and state interagency COVID-19 committees, as well as membership of the CSIRO Health and Biosecurity Advisory Committee and the DMTC Medical Countermeasures Stakeholder Committee and deployment of funding through the BTB COVID-19 round.

Knowledge Priorities

MTPConnect has identified a suite of Knowledge Priorities (KPs), or areas where there is a high level of unmet need globally and where Australia is, or has the potential to be, a leading contributor, to provide strategic focus to the sector's activities for FY2020 and beyond. As shown in the diagram below, six areas of science, nine therapeutic areas, five device/diagnostic areas and four other existing national priorities have been identified as Current KPs, while nine areas have also been identified as Emerging KPs. As a result of COVID-19, we will see new priorities emerging, with an emphasis on building sovereign capabilities and supply chain resilience, advanced manufacturing, vaccines and diagnostics.

SCIENCE AREAS	THERAPEUTIC AREAS	DEVICE /DIAGNOSTIC	SKILLS & CAPABILITIES	OTHER EXISTING NATIONAL PRIORITIES
Current				
• Biochemistry and cell biology (including synthetic biology) • Psychology and cognitive sciences • Genetics and precision medicine • Microbiology • Immunology • Paediatrics and reproductive medicine	• Oncology • Infectious disease (including antimicrobial resistance) • Neurosciences and neurology • Cardiac and cardiovascular systems • Diabetes, endocrinology and metabolism • Respiratory disorders (e.g. asthma) • Arthritis and musculoskeletal conditions • Aged and palliative care • Aboriginal and Torres Strait Islander Health	• Diagnostic device – POC /lab • Surgical devices and consumables • Implantables (including 3D-printed custom devices and bionics) • Wearable devices • Digital health and monitoring	• Certain skills/capabilities have been identified through prior work, including advanced manufacturing, clinical trials expertise and big data analytics. • MTPConnect will complete a 'root and branch' skills audit of the MTP sector as part of the MTP REDI initiative sector participants to identify skills gaps within these KPs	• Drug repurposing • Biosecurity • Data science • Rare diseases
Emerging				
• Human movement and sports science • Medical physiology • Medical biotechnology • Nanotechnology	• Regenerative medicine • Optometry and ophthalmology • Pain management • Dematologicals			

FY2020
Year in Review

FY2020 – Year in Review

July 2019

Australian British Health Catalyst (ABHC) Conference

MTPConnect's Dr Dan Grant attended the ABHC conference in the UK. Leaders from the Australian and UK MTP sectors came together in London and Cambridge to explore the challenges for future healthcare delivery, cybersecurity, big data and how to leverage returns on innovations. He joined Bronwyn Le Grice from ANDHealth, Professor Christine Bennett, Dean of the School of Medicine at Western Australia's University of Notre Dame, and Laurel Powers-Freeling from Cambridge University Health Partners in a panel discussion to flesh out opportunities for researchers and start-ups in the commercialisation of healthcare. MTPConnect was also a member of the conference's organising committee.

BioMedTech Horizons Program

Round 2 of the $45 million BMTH program closed for expressions of interest in mid-July. There was strong interest, with approximately 100 applications submitted from all around Australia across the four therapeutic areas: Cardiovascular, Orthopaedics, Ophthalmology, and Emergency Medicine and Trauma.

Biomedical Translation Bridge Program

The BTB program opened its first round for expressions of interest on 1 July, closing on 16 August 2020.

Building Effective Translational Facilities Workshop

University of Wollongong's Professor Gordon Wallace welcoming attendees to the TRICEP workshop.

MTPConnect presented and participated in the 'Building Effective Translational Facilities' workshop organised by Professor Gordon Wallace at University of Wollongong. This was an invitation-only event to members and partners to tour and discuss the Translational Research Initiative for Cellular Engineering and Printing (TRICEP). This facility was funded by an MTPConnect GC Project Fund grant in 2018. Presenters included Rui Amandi de Sousa, Stemmatters (an international SME partner); Andrew Batty, Lincoln Consulting Group; Dr Buzz Palmer, MedTech Actuator; Dr Pia Winberg, Venus Shell Systems; and Dr Cameron Ferris, Inventia Life Science.

New Staff Additions

MTPConnect welcomed three new members to the MTPConnect team: Libby Pearce as Executive Officer Special Projects, Dr Kate Brooks as Director of Stakeholder Engagement for Western Australia and Lauren Kelly as Director of the BTB program.

August 2019

Queensland Meetings

MTPConnect's Dr Dan Grant and Andrew Bowskill meet with the University of Queensland's Associate Professor Damian Hine and Dr Lisette Pregelj in Brisbane.

Dr Dan Grant and Director of Stakeholder Engagement for Queensland Andrew Bowskill met with the University of Queensland's Associate Professor Damian Hine and Dr Lisette Pregelj to discuss adaptive regulation for digital health.

WA Digital Health Accelerator Launch Event

MTPConnect Director of Stakeholder Engagement for Western Australia Dr Kate Brooks attended the launch of the WA Digital Health Accelerator at the Telethon Kids Institute in Perth. ANDHealth Managing Director, CEO and Co-Founder Bronwyn Le Grice presented about ANDHealth and the role that digital health plays in Australia.

MedTech Conference

In July, preparations continued for the MTPConnect-led Australian delegation to the MedTech Conference in Boston. Dr Dan Grant will lead the mission, joined by General Manager of Stakeholder Engagement Dr Alfredo Martinez-Coll and Director of Stakeholder Engagement for Western Australia Dr Kate Brooks.

Biomedical Translation Bridge Program

Applications closed on 16 August 2019 for the first round of the BTB program. MTPConnect received 156 expressions of interest across both medical devices and pharma and covering a range of therapeutic areas. MTPConnect worked with program partners BioCurate, UniQuest, the Medical Device Partnering Program and the Bridge and BridgeTech programs to assess the applications.

Antimicrobial Resistance (AMR) Industry Workshop

MTPConnect attended the AMR Industry Workshop in Sydney. Organised by Biointelect, the workshop brought together representatives from AusBiotech, Medicines Australia, Pfizer, MSD, CSIRO and SMEs in the MTP sector. Participants explored four topics: translation/commercialisation, international partnerships and collaborations, regulations and regulatory incentives, and pricing and reimbursement. The discussions provided the basis for a broader consultation to be organised by MTPConnect, to inform the new Australian national strategy on AMR due in November 2019.

CRC Association's Collaboration for Industry Workshop

MTPConnect presented at the CRC Association's Collaboration for Industry workshop at University of Technology Sydney. There were discussions on the principles of collaboration with a specific focus on CRC and CRC-P grants.

ARCS Australia Conference

MTPConnect was a major sponsor of the ARCS Australia Conference in Sydney. To promote the conference, its attendees and focus issues, MTPConnect recorded a podcast episode with guests including ARCS Australia CEO Dr Shanny Dyer, MTAA CEO Ian Burgess, and Anita van der Meer from NSW Office of Health & Medical Research.

August 2019 (continued)

Podcast – 3D Bioprinting in the Illawarra

The MTPConnect podcast team visited the New South Wales Illawarra region and University of Wollongong. Our Communications Coordinator Shannan Osrin caught up with TRICEP Director Professor Gordon Wallace and Director for Additive Fabrication Technologies Associate Professor Stephen Beirne for a tour of the bioprinting facility.

Guest of the Chair Appointment

Dr Parisa Glass, Deputy Director of the George Institute for Global Health, was selected as the first Guest of the Chair from a strong field of candidates. This unique MTPConnect initiative gives emerging leaders in the medtech, biotech or pharmaceutical sector the opportunity to experience a range of board-level activities. Dr Glass attended MTPConnect Board meetings over the next 12 months, engaging with the Chair, directors and senior management and gaining new perspectives on how boards operate.

Staffing Changes

Andrew Bowskill joined MTPConnect in the role of Director of Stakeholder Engagement for Queensland, based in Brisbane. It was announced that Dr Alfredo Martinez-Coll and Sue Fisher would be leaving MTPConnect to pursue new opportunities in October.

September 2019

The 2019 MedTech Conference

The 2019 MTPConnect-led Australian delegation to the MedTech Conference in Boston.

The MTPConnect team wrapped up a productive week at the 2019 MedTech Conference in Boston. Approximately 30 delegates from 27 companies, research institutes, universities and start-ups travelled with the delegation to Massachusetts to fly the flag for Australian medtech innovation on the world stage. Dr Katharine Giles and the OncoRes Medical team placed in the top five in the finals of the MedTech Innovator competition and were awarded US$25,000 at the conference. MTPConnect worked closely with Austrade, MTAA and AusBiotech to organise this mission and with the support of the Victorian, Western Australian and Queensland state governments, as well as the Entrepreneurs' Programme's Accelerating Commercialisation initiative.

September 2019 (continued)

Introducing Noisy Guts – an Australian Nobel Laureate's take on Medtech Commercialisation

Dr Dan Grant and Nobel Laureate Professor Barry Marshall meet in Perth to record a podcast episode.

The MTPConnect podcast introduced listeners to the Noisy Guts story: a Western Australia-based start-up developing new diagnostics for gut health that was co-founded by Professor Barry Marshall, Director of the University of Western Australia's Marshall Centre for Infectious Diseases Research and Training and winner of the 2005 Nobel Prize for his work on the causes of ulcers. Noisy Guts CEO and Co-Founder Dr Josephine Muir and Professor Marshall explored the challenges of translation and shared valuable lessons from building their own start-up for the episode.

2019 MTAA MedTech Conference

MTPConnect supported MTAA's MedTech19 Conference. A conference highlight was the MedTech Actuator's event 'MedTech's Got Talent Sydney Rapid Fire Round', where 15 entrepreneurs pitched to secure places in the finals that were held in December in Melbourne.

ARMS 2019 Conference

MTPConnect Chair Sue MacLeman spoke at the ARMS 2019 Conference in Adelaide, presenting a keynote on emerging megatrends in health and medical research in Australia and the threats and opportunities they present.

2019 BridgeTech Program Close Event

MTPConnect attended the close of the BridgeTech program's second cohort in Brisbane. The event shared the first cohort's achievements, which included five participants who had initiated or completed on R&D contracts, eight participants who had pitched to investors or industry representatives, four participants who were involved in developing new start-ups and more.

The Australia New Zealand Leadership Forum (ANZLF)

MTPConnect Board Director Dr Nick Cerneaz with the ANZLF emerging leaders in Auckland.

MTPConnect sponsored emerging leaders to attend the ANZLF in Auckland, New Zealand. MTPConnect Board Director Dr Nick Cerneaz joined forum members and emerging business leaders (Chandra Selvadurai, William Smith-Stubbs, Mary-Ellen Redmayne, Jordan Go, Pete Williams and Gavin Fox-Smith), to discuss ways to further strengthen the trans-Tasman bonds between Australia and New Zealand's research efforts.

October 2019

MTPConnect Queensland Office Launch and Minister's Day

L–R Queensland University of Technology Executive Director Professor Lyn Griffiths, ANDHealth CEO Bronwyn Le Grice, UniQuest CEO Dr Dean Moss, IMNIS Executive Director Dr Marguerite Evans-Galea, Minister for Industry, Science and Technology Hon. Karen Andrews MP at the Translational Research Institute in Brisbane. Photo by Glenn Hunt.

MTPConnect, in partnership with the Translational Research Institute (TRI), hosted Hon. Karen Andrews MP, the Minister for Industry, Science and Technology. The Minister officially opened MTPConnect's Queensland office, located at the TRI, and launched the new IMNIS mentoring program set to roll out in regional Queensland. The Minister engaged with a number of innovative Queensland-based MTP projects supported by MTPConnect and participated in a panel discussion: 'Boosting Industry Engagement and Commercial Collaboration Through Mentoring.' The panel was chaired by MTPConnect Chair Sue MacLeman and the Minister was joined on the panel by Dr Marguerite Evans-Galea, Bronwyn Le Grice, Professor Lyn Griffiths and Dr Dean Moss.

Australian Delegation Heads to BioJapan

Dr Dan Grant with Victorian Minister for Racing, Tourism, Sport and Major Events, Industry Support and Recovery, Trade and Business Precincts, Hon. Martin Pakula MP, and the Australian delegation to BioJapan in Yokohama.

Dr Dan Grant participated in the Australian delegation to BioJapan, Asia's premier event for the biotech sector, presenting a session on Australia's expertise in clinical trials. MTPConnect once again worked closely with Austrade, CSIRO and the Victorian Government to showcase the capabilities of Australian biotech and pharma companies, particularly in the areas of personalised and regenerative medicine.

October 2019 (continued)

HLTH Conference

ANDHealth CEO Bronwyn Le Grice with the Australian delegation to the HLTH conference in Las Vegas, US.

MTPConnect worked with ANDHealth to support the attendance of an Australian digital health delegation at the HLTH conference in Las Vegas, US. Digital health was on the agenda, and the event brought together established digital health payers, providers, employers, and pharma services, as well as a range of disruptive start-ups.

Bridge Program Symposium

MTPConnect's Andrew Bowskill with Queensland University of Technology Executive Director Professor Lyn Griffiths and the Bridge program consortia representing Australian pharmaceutical companies at the Symposium in Melbourne. Photo by Shardey Olynyk.

The MTPConnect team attended the Bridge Program Symposium in Melbourne, where the consortium members and participants gathered from across Australia. Over three days, the group heard international industry speakers and consortia members from the pharmaceutical sector discuss key issues and trends for researchers looking to establish careers in the Australian pharmaceutical industry. Interviews with consortia members and participants were captured for a podcast episode to promote the value of the Bridge program.

BTB Round 2 Information Session in Melbourne

Dr Dan Grant with BTB team Lauren Kelly and Danielle Shand, and UniQuest's Dr Mark Ashton, the Medical Device Partnering Program's Dr Andrew Milligan and BioCurate's Dr Tifelle Reisinger at the BTB information session in Melbourne.

To coincide with the 2019 AusBiotech Conference, MTPConnect hosted a BTB information session in Melbourne about applying for funding. BTB partners BioCurate, UniQuest, MDPP and the Bridge and BridgeTech programs were on hand to provide tips for making applications. The session was captured in a podcast episode to amplify funding opportunities through this program.

October 2019 (continued)

BioMedTech Horizons Value-Add Day

MTPConnect brought together 11 Round 1 BioMedTech Horizons projects for a one-day capability building program relevant to the translation of Australian medical technology innovation. Each of the companies presented their project and progress and had the opportunity to network with each other. A podcast episode captured comments from keynote presenters. The agenda included presentations by:

- Rob McInnes (Rob McInnes IP Advisory) – R&D and IP-deal making in biomedtech
- Alex Nikro (Department of Health) – Medical Research Future Fund (MRFF) update
- Dr Jiamin Aw (APR.Intern) – Accessing PhD talent to boost your project
- Luke Hurst, Danielle Rajendram and Patrick Deegan (Asialink Business) – Emerging markets and realising growth opportunities
- Avi Rebera (TGA) – TGA's SME Assist program
- Kristi Geddes and Susan Kantor (MinterEllison) – Protecting personal information, cybersecurity
- Oded Vanham (MDPP), Michelle Richards (TRI), Dr Jenny Whiting (Microscopy Australia), Joel Spotswood (BridgeTech program) and Dr Tillmann Boehme (TRICEP)

AusBiotech Conference – Panel on Regenerative Medicine

Dr Dan Grant spoke on the panel about the advances and opportunities in Australian regenerative medicine, with Professor Melissa Little (Murdoch Children's Research Institute), Paul Anderson (Orthocell), Associate Professor Dominic Wall (Cell Therapies Pty Ltd) and Dr Hiroya Muranishi (Takeda Pharmaceutical), which was chaired by Dr Dawn Driscoll (Cell Therapies). The discussion focused on the future and potential of Australian regenerative medicine. Dr Grant and Professor Little are members of the Australian Government's Expert Advisory Panel for the Stem Cell Therapies Mission.

AusBiotech Conference – Panel on US and Australia Life Science Partnerships

Dr Dan Grant joined a panel with Dr Chris Nave (Brandon Capital Partners), Dr Tom Luby (Texas Medical Center), Erica Kneipp (Australian National University) and chaired by Dr Lisa Haile (DLA Piper) discussing the strengths and weaknesses of trade and investment collaborations between the US and Australia.

Sue MacLeman Wins the AusBiotech and Johnson & Johnson Innovation Industry Leadership Award

MTPConnect Chair Sue MacLeman.

At the AusBiotech Conference, MTPConnect Chair Sue MacLeman was awarded the prestigious Industry Leadership Award for more than 30 years of outstanding contributions to the medical technology, biotechnology and pharmaceutical sector.

October 2019 (continued)

Sector-Supported Events

MTPConnect's Dr Kate Brooks presenting Tournicare's Niels van Sparrentak with the Medtech & Pharma Award at the Australian Technologies Competition in Melbourne.

October was a busy month for sector-supported activities, including the RACMA Conference in Adelaide, which explored the role of robotics and artificial intelligence in healthcare and medical administration; ACTA's International Clinical Trials Conference; the University of Western Australia's BioInnovation Symposium in Perth; Connecting Doctors & HealthTech with MedTech Actuator and Artesian Ventures; and partnering with fellow Growth Centres, AustCyber, METS Ignited, FIAL, AMGC and NERA, for CSIRO's Data61+ Live event. MTPConnect sponsored the Australian Technologies Competition and presented the Medtech & Pharma Award at the finals event held in Melbourne.

New Staff Addition

MTPConnect welcomed Caroline Duell to the team, who was appointed Director Communications and Events, based in the Melbourne office.

November 2019

MTPConnect's Antimicrobial Resistance Workshop Held in Canberra

In recognition of World Antibiotic Awareness Week (18–24 November), MTPConnect set up the Antimicrobial Resistance (AMR) workshop in partnership with Biointelect in Canberra. Dr Dan Grant joined then Australian Chief Medical Officer Professor Brendan Murphy and industry leaders at the workshop.

Services Exports Roundtable at Parliament House

Chair Sue MacLeman with then Austrade CEO Dr Stephanie Fahey and Minister for Trade, Tourism and Investment, Senator the Hon. Simon Birmingham MP, and others at the Services Sector Export Roundtable at Parliament House in Canberra.

MTPConnect Chair Sue MacLeman represented the sector at the Services Sector Export Roundtable at Parliament House, hosted by the Minister for Trade, Tourism and Investment, Senator the Hon. Simon Birmingham. The roundtable discussed ways to support Australian businesses to go global, removing barriers facing exporters abroad and simplifying regulation.

November 2019 (continued)

MTPConnect Podcast Guests

MTPConnect's Dr Dan Grant talks with Hon. Arthur Sinodinos, the incoming Australian Ambassador to the US, for an episode of the podcast in Sydney.

The MTPConnect podcast series continued to secure interesting guests and marked production of 38 episodes. The team interviewed the Hon. Arthur Sinodinos AO, who was preparing to take up the post of Australia's next Ambassador to the US. He shared his views on the future of genomics, regenerative medicine and more. Other podcast episodes this month included interviews from the 2019 Bridge Program Symposium and a 'Movember' prostate cancer research special with Monash University's Biomedicine Discovery Institute. The podcast also covered the BMTH Program's Value-Add Day held in Melbourne, interviewing some of the experts and project teams who presented at the event.

New Team Members

This month, two new team members joined the team in Melbourne. Jenny Devlin joined as Executive Assistant to the Managing Director and CEO. Dr Gerard Gibbs joined as Senior Director of the BioMedTech Horizons program.

Sector-Supported Events

In November, the MTPConnect team supported the 20th Science meets Parliament event in Canberra. It was an opportunity to promote the MTP sector more broadly to senators, MPs and senior government officials. In Perth, the MTPConnect WA Life Sciences Innovation Hub partnered with CSIRO's Ribit to host a forum for PhD students, early-to-mid-career researchers and postgraduates to connect with industry leaders and consider industry career options.

December 2019

17 Projects Awarded Funding Through BMTH and BTB Programs

To cap off the year, MTPConnect announced that nine projects in Round 2 of the BioMedTech Horizons program and eight projects in Round 1 of the Biomedical Translation Bridge program would receive a total of $14.8 million in MRFF funding. The projects leverage a further $25 million in contributions from industry. Together, these latest rounds of BMTH and BTB inject nearly $40 million into the MTP sector to support early-stage research.

BTB Round 2 Information Session – Perth

A second Round 2 information session was held at the Harry Perkins Institute of Medical Research in Perth with BTB partners BioCurate's Dr Eric Hayes, UniQuest's Dr Mark Ashton and MDPP's Dr Andrew Milligan engaging with the Western Australian medtech and life sciences sector to provide information about the process for applying for BTB funding.

December 2019 (continued)

Frugal Innovation Report Launched

MTPConnect's Dr Dan Grant with the George Institute for Global Health's Associate Professor Ruth Webster, Crescent Strategy Consulting's Sabeen Shaikh, Deloitte Access Economics' Dr Pradeep Philip and Asialink Business CEO Mukund Narayanamurti at the Frugal Innovation in Medical Devices and Technologies: The India Opportunity report launch in Melbourne.

MTPConnect joined Asialink Business to launch a new report, *Frugal Innovation in Medical Devices and Technologies: The India Opportunity,* at State Library Victoria. The report, prepared by Asialink, funded through the GC Project Fund and supported by Austrade, highlights the growing opportunities for future-focused Australian medical technologies businesses in India. The report can be downloaded from the website and a podcast episode was recorded live at the launch event.

West Tech Fest in Western Australia

The MTPConnect WA Life Sciences Innovation Hub sponsored the 2019 West Tech Fest at the State Theatre Centre in Perth, which brought together a host of industry leaders in health, medtech and digital technology. The MTPConnect podcast spoke with healthcare entrepreneur Dr Carlo Bellini during the event.

New Team Members

New appointments were announced, with Dr Rebecca Tunstall, Senior Director Stakeholder Engagement (Melbourne), Dr Duncan Macinnis, Director Stakeholder Engagement NSW (Sydney) and Dr David Fox, Senior Director Sustainability (Newcastle) commencing in January 2020.

Sector-Supported Events

A range of sector events were supported during the month, including MDPP's end-of-year celebration in Adelaide, Monash BDI's 'So You Think You Can Pitch' showcase and Austrade's Australian Export & Investment Awards.

January 2020

MTPConnect Director Communications and Events Caroline Duell with Professor Fiona Wood AM in Canberra for the MTPConnect podcast.

January 2020 (continued)

New BTB Projects Contracted and Commenced

Eight new BTB biomedical projects from Round 1 were contracted and research commenced, committing an additional $5 million of support to Australia's SMEs and researchers.

National Medicines Policy Review

Dr Dan Grant represented MTPConnect at a meeting of the National Medicines Policy (NMP) Committee in Canberra. The NMP is a framework focused on people's access to, and wise use of, medicines. The framework is being reviewed, with extensive input from key stakeholders. This collaborative process will ensure a fit-for-purpose NMP that continues to give Australians timely access to safe and high-quality medicines.

Alex Fowkes Joins MTPConnect Board

Alex Fowkes was appointed as a Non-Executive Director to the MTPConnect Board. Alex has returned to Australia from Singapore after serving as Chief Strategy Officer for WuXi NextCODE.

New Western Australia Team Member

The Western Australia team appointed Rebekah Craggs as Stakeholder Engagement Coordinator, working with Director of Stakeholder Engagement for Western Australia.

February 2020

Professor Trent Munro from the University of Queensland's Australian Institute for Bioengineering and Nanotechnology and Professor George Lovrecz from CSIRO discuss their vaccine research with the MTPConnect podcast team in Melbourne.

REDI Awarded to MTPConnect

MTPConnect was awarded the $32 million Researcher Exchange and Development within Industry (REDI) initiative, funded by the MRFF. Working with key partners, REDI will drive skills development and workforce training, bringing together researchers, clinicians, industry and the entrepreneurial ecosystem to enhance Australia's MTP sector workforce.

New BMTH Round 2 Projects Contracted and Round 3 Review

Nine new BMTH projects from Round 2 were contracted and research commenced, committing an additional $9 million of support for Australia's SMEs and researchers. In addition, Round 3 expressions of interest were reviewed.

New Appointment for Chair

At the end of February, MTPConnect's Chair Sue MacLeman was appointed to the Prime Minister's Digital Technology Taskforce in the Department of the Prime Minister and Cabinet to guide Australia on the path to be a leading digital economy by 2030. Sue will be a part of the Digital Experts Advisory Committee, working with other experts to support the MTP sector and grow innovation and commercialisation in the digital health environment.

February 2020 (continued)

TIA Forum 2020 in Brisbane

Dr Dan Grant presented at the TIA Forum 2020 in Brisbane on the challenges and opportunities for the sector, connecting with the researchers in biologics, cell and gene therapies.

Talking about Collaboration with Fellow Industry Growth Centres

MTPConnect's Chief Operating Officer Stuart Dignam joined a panel with representatives from the Department of Industry, Science, Energy and Resources (DISER) and other Industry Growth Centres – NERA, FIAL, AustCyber and AMGC – to talk to students and university staff at RMIT University's 'Engaging for Impact' series.

BTB Funding Information Sessions Wrap-Up

The BTB team finished touring Round 2 information sessions at the University of Sydney, as well as in Adelaide, Brisbane and at the Westmead Institute for Medical Research in Sydney's Greater Western region. Round 2 expressions of interest applications closed on Friday 6 March. Further details about the BTB program were broadcast via a special podcast episode.

Information Exchange at Monash Global Executive MBA

Chair Sue MacLeman presented to Monash University's Global Executive MBA program on megatrends and the future of health. This is the second time Sue has presented to the MBA class.

Jobs Networking for Industry and Students in Perth

MTPConnect initiated, sponsored and delivered a key workforce opportunities event in Perth. The MTPConnect WA Life Sciences Innovation Hub, in partnership with CSIRO's Data61, Ribit and the City of Perth, hosted the 'Speed Networking for Jobs' initiative, which saw 75 graduates meet with 16 medtech, biotech and pharma companies to gain tips about applying for positions and establish connections within industry.

The companies included:

- Teach For Australia
- Diag-Nose Medical
- Advance Genetic Testing
- Epichem
- Wise Realities
- Kelly Scientific Services
- Edith Cowan University (cybersecurity department)
- Fugro Remote Operations
- Proteomics International
- Ear Science Institute Australia
- WA Country Health Service
- PwC Life Sciences
- APR.Intern
- Linear Clinical Research
- KinChip Systems
- KPMG

Staff Update

MTPConnect bid farewell to BMTH Project Manager Divya Kalla, who left to take up another role.

March 2020

Taking Steps on COVID-19 Virus

In early March, due to the COVID-19 health emergency, MTPConnect's team commenced working from home, moving to a virtual office; suspended travel on international and domestic flights; and restricted staff attendance at meetings and conferences. MTPConnect was the first Industry Growth Centre to take this definitive step, taking a leadership role for the sector (see detailed information regarding MTPConnect's COVID-19-related activities on p. 15).

Stem Cells Public Forum

MTPConnect's Dr Duncan Macinnis with President of the Brain Foundation and Co-Director of the Brain and Mind Centre at the University of Sydney, Professor Matthew Kiernan; Sydney Health Ethics' Associate Professor Wendy Lipworth; Cerebral Palsy Alliance Chair, Professor Nadia Badawi; Patient advocate, James Taylor; Cerebral Palsy Alliance Head of Research, Professor Iona Novak; Cerebral Palsy Alliance Research Fellow, Dr Madison Paton; Research Australia CEO, Nadia Levin and forum presenter Karl Kruszelnicki at the 'Stem Cells for the Brain' public forum in Sydney. Photo by Stephen Blake Photography.

MTPConnect's Director Stakeholder Engagement for NSW Dr Duncan Macinnis presented at the Cerebral Palsy Alliance's 'Stem Cells for the Brain' public forum at the Seymour Centre in Sydney. Hosted by popular presenter Dr Karl Kruszelnicki, the forum also featured President of the Brain Foundation Professor Matthew Kiernan, Cerebral Palsy Alliance's Professor Iona Novak and Associate Professor Wendy Lipworth from Sydney Health Ethics in a panel session to discuss research in stem cells to combat cerebral palsy and other neurological and muscular diseases.

Released Research Report Digital Health in Indonesia: Opportunities for Australia

MTPConnect, in partnership with Asialink Business, released a new research report that explored why it's time for Australian businesses to take advantage of Indonesia's booming digital health ecosystem. It was the second of three industry guides in a major collaboration between MTPConnect and Asialink Business to assist the Australian MTP sector to understand and access export opportunities in Asian markets. The first industry guide, which focused on frugal innovation in India's medtech sector, was released in December 2019.

Discover How to Crack the US Market

MTPConnect hosted Medical Alley's Vice President of Intelligence Frank Jaskulke for the first instalment of the 2020 seminar series. MTPConnect's Stakeholder Engagement team, led by Dr Rebecca Tunstall, hosted the seminars around Australia, as we introduced Frank to the sector. Unfortunately, the tour was cut short by COVID-19 restrictions before reaching Adelaide and Melbourne. However, Frank was interviewed for the podcast and a wrap-up of the first seminar was published on the website.

Enhancing Start-Up Innovation in Western Australia

MTPConnect's Dr Kate Brooks joined Minister for Industry, Science and Technology Hon. Karen Andrews MP and StartupWA colleagues for a discussion about Western Australia's thriving innovation ecosystem and how to elevate it to the next level.

How COVID-19 is Impacting Clinical Trials with ARCS Australia

MTPConnect supported ARCS Australia's COVID-19 webinar series. The free 10-part webinar series covered a range of topics on how to manage the impact of COVID-19 on clinical trials, involving expert guests from the TGA, Medicines Australia, hospitals and more.

March 2020 (continued)

Making Sense of Manufacturing Minefields

MTPConnect's Senior Director of BioMedTech Horizons Dr Gerard Gibbs chaired a panel at the BioMelbourne Network's Devices + Diagnostics Lab. The panellists, including BioMelbourne Network Chair Lusia Guthrie, Planet Innovation Co-Founder and Co-CEO Stuart Elliott, Hon. Trish White, SeerPharma's Biju Kishor and Motherson Medical's Sam Vial, looked at the minefields for industry in advanced manufacturing in the health and medical sector, and provided advice on how to combat them.

Developing the WA Health and Medical Life Sciences Industry Growth Plan

During Frank Jaskulke's visit to Western Australia, the WA Life Sciences Innovation Hub organised a briefing with Deb Cousins from the Western Australian Government to discuss the WA Health and Medical Life Sciences Industry Growth Plan 2020–2025. Frank shared his global perspectives based on his involvement with Medical Alley. Chair Sue MacLeman has been appointed to the Steering Committee for this WA Growth Plan.

DMTC Conference in Canberra

MTPConnect was a major sponsor of the DMTC Conference in Canberra, where Director of Stakeholder Engagement for Queensland Andrew Bowskill delivered a keynote on *Antimicrobial Resistance: Tackling a Global Health Challenge*. The keynote presentation was recorded and covered on the podcast.

April 2020

Victorian Comprehensive Cancer Centre's Dr David Kok, Course Convenor of the Master of Cancer Sciences degree at the University of Melbourne, with Dr Dan Grant at the MTPConnect podcast studio in Melbourne.

COVID-19 Response

Members of the MTPConnect Board and executive team participated in various taskforces and sub-committees to provide assistance with COVID-19 initiatives at state and national levels, working closely with many organisations and businesses to help coordinate and support the sector response to COVID-19. Relevant information was promoted to the sector including updates on government tenders and Requests for Information, as well as sharing opportunities and updates for research funding and clinical trial updates.

Podcast Milestone

The MTPConnect podcast celebrated its 50th episode. The milestone episode featured digital health start-up company Spokle, focusing on how it commercialised a speech therapy app and launched it to the Indonesian market (highlighting MTPConnect's major collaboration with Asialink Business to produce industry guides). In other episodes, the podcast covered improving workforce skills in cancer research with Dr David Kok from Victorian Comprehensive Cancer Centre (VCCC), and medtech start-up journeys for Navi Medical Technologies and Tournicare via the Australian Technologies Competition. The team also spoke with Western Australia's Epichem about their COVID-19 pivot to develop chemical-grade hand sanitiser and Deloitte Access Economics' Dr Pradeep Philip about COVID-19's impact on Australia's innovation mindset and the critical role of the MTP sector in Australia's pandemic response and recovery.

April 2020 (continued)

Supporting the 2020 Australian Technologies Competition

The 2020 Australian Technologies Competition (ATC) launched, with support from MTPConnect for the fifth consecutive year in the Medtech & Pharma Award category. The ATC is an acceleration initiative that assists technology scale-up companies to address major APAC community challenges to commercialise and expand in the region. The competition, also supported by other Industry Growth Centres, is in its 10th year and had to take its 2020 program online to adjust to the COVID-19 situation.

The University of Sydney Drug Discovery Initiative

MTPConnect's Dr Duncan Macinnis developed an interactive session for early-stage researchers at the University of Sydney to discuss their emerging drug discovery projects in infectious, inflammation, neurological and CNS diseases with industry leaders who offered pre-IP guidance on development plans. MTPConnect Director Julie Phillips represented Opal Biosciences on the panel.

2020 Bridge Program Launch

MTPConnect's Lauren Kelly made a virtual presentation about the BTB program and MTPConnect's growth initiatives at the 2020 Bridge program launch. The program inducted 101 participants this year and continues to support emerging PhD and postgraduate students to explore careers in the pharmaceutical sector, despite COVID-19 challenges.

ARCS Australia COVID-19 Webinar Series Continues

MTPConnect sponsored ARCS Australia's free weekly seminar series, 'COVID-19: considerations and strategies for running trials during the pandemic', which continued with three events covering topics such as Jurisdictions: Federal/States, Ethics Committees and Governance, and Role of Clinical Trial Sponsors.

Sector News

Chair Sue MacLeman, also the Chair of the Australian Academy of Technology and Engineering (ATSE) Health Forum, led the launch of ATSE's Health Technology report, *A New Prescription: preparing for a healthcare transformation,* which outlined how we can take best advantage of existing and emerging technology to meet future healthcare challenges such as COVID-19. This was released in partnership with CEDA.

May 2020

Linear Clinical Research Clinical Solutions Lead, Dougal Thring, presenting at the Australia Live Talk session at virtual BIO KOREA 2020.

Rapid BTB COVID-19 Funding Call

To support COVID-19 research efforts, MTPConnect launched a rapid funding round of the Biomedical Translation Bridge program, specifically targeting COVID-19 research. BTB will provide up to $1 million of matched funding to support eligible organisations – SMEs, medical research institutes and universities – to develop medical devices, diagnostics, prophylactic or therapeutic approaches that will achieve an impact on the global response to the pandemic in less than 12 months. The COVID-19 round was open for just two weeks, closing 1 June 2020.

May 2020 (continued)

MTPConnect 2020 Seminar Series Goes Online

MTPConnect launched a new webinar platform, taking its seminar series online for the first virtual event, 'MTP guide to cyber safety'. Representatives from fellow Industry Growth Centres, AustCyber CEO Michelle Price, Perx Health CEO and Co-Founder Hugo Rourke and Forticode CEO Tony Smales, joined the discussion, providing their insights about the intersection of health and cybersecurity. The webinar is also available as a bonus podcast episode.

Sector-Supported Events During COVID-19

MTPConnect continued to support collaboration throughout the sector with various sponsorships and virtual events. For the clinical trials community, ARCS Australia's 10-part webinar series, 'COVID-19: considerations and strategies for running trials during the pandemic', continued in April. The digital health sector was also a focus, with support for Cicada Innovations' Monthly Buzz event 'Digital Health: What's Next?' and the Quantum TX event in Perth, with a live stream event 'Investing In Digital Health' Masterclass for the Angel Investing Series 2020 with the Perth Angels.

PRAXIS Webinar Series for Clinical Trials Sector

MTPConnect announced its sponsorship of PRAXIS Australia's 2020 webinar series, 'Building Resilience in times of COVID-19', to provide continuing support to the HREC and clinical trials sector dealing with the impact of the pandemic. MTPConnect was one of a number of sponsors including Sophie Mepham GCP, the NSW Health Office for Health and Medical Research, SA Health Medical Education and Training Unit and Health Translation SA.

Podcast Reaches 10,000 Downloads

The virtual podcast studio was busy across the month of May, spotlighting Microscopy Australia's Technical Voucher Fund and discussing BIO KOREA 2020's virtual convention program. The team celebrated International Clinical Trials Day 2020 with Brisbane's Dr Paul Griffin from Nucleus Network and Director of Infectious Diseases at Mater Health Services sharing the news about starting the first COVID-19 vaccine clinical trial in Australia. Queensland-based artificial intelligence start-up Datarwe joined the podcast to discuss using real-world data to improve healthcare research in Australia.

May 2020 (continued)

Rolling Out REDI

The rollout of the Researcher Exchange and Development within Industry (REDI) initiative to drive workforce growth in our sector has commenced. To deliver this MRFF-funded program, MTPConnect is partnering with eight research, training and industry organisations to deploy an integrated, three-pillar plan driving skills development and workforce training that brings together researchers, clinicians, industry and the entrepreneurial ecosystem. This will include an assessment of Australia's infectious diseases capabilities and the health workforce required for future pandemic preparedness.

2020 SCP Released

The MTPConnect 2020 Sector Competitiveness Plan was released, providing a pre-COVID-19 snapshot of the advances made by the MTP sector up until 31 December 2019. And while the sector had shown a strong upward trajectory to that point, it's being tested. MTPConnect spent the month connecting with many leaders across the sector to get a firsthand understanding of the impacts of the pandemic and responses.

June 2020

June 2020 (continued)

BTB COVID-19 Call

To boost Australia's COVID-19 research efforts, MTPConnect launched a rapid round of the Biomedical Translation Bridge (BTB) program, specifically targeting COVID-19 projects, with expressions of interest closing this month. There was extremely strong interest from the sector. BTB will provide up to $1 million to support eligible organisations to develop medical devices, diagnostics, prophylactic or therapeutic approaches that will achieve an impact on the global response to the pandemic in less than 12 months.

COVID-19 Impact Reports Launched

During the last few months, MTPConnect undertook research in partnership with L.E.K. Consulting to examine ways in which the COVID-19 pandemic lockdown has affected organisations across the MTP sector's value chain. In June, those findings were published in the MTPConnect COVID-19 Impact Report, along with an exclusive story in The Australian Financial Review (see Appendix 2), revealing the first evidence of the lockdown's significant negative impacts across the sector, including hits to company values, the shutdown of clinical trials and the drying-up of capital to sustain R&D projects. A supplementary report, Collaborating in the Public Interest: How Australia's Medical Technology Sector joined with Government to fight COVID-19, published in collaboration with the Medical Technology Association of Australia, documents how the medtech sector joined with the Australian Government to fight COVID-19 and details the behind-the-scenes story of that unique collaboration that's become known as the 'Australia Model' and is now being replicated by many countries around the world.

REDI Partners Tackling Workforce Skills Gaps

MTPConnect launched the four-year Researcher Exchange and Development within Industry (REDI) initiative to enhance the sector's workforce, welcoming aboard APR.Intern, ANDHealth, the Bridge and BridgeTech programs, the George Institute for Global Health, VCCC, IMNIS, MDPP and the MedTech Actuator to support expansion of their proven training programs to deliver deeper impact by addressing known skills gaps.

Future Workforce Skills Survey Launched

Feedback from the sector was sought for the MTP Workforce Skills Survey, which was developed by a cross-industry project team including ANDHealth, AusBiotech, Medicines Australia and MTAA. The survey results were released in a report in Q1 2021.

Asialink Business Webinar in Western Australia

Dr Dan Grant joined a webinar organised by Asialink Business and City of Perth to discuss how Western Australian digital health, medtech and pharmaceutical companies could explore opportunities in Asia. He highlighted MTPConnect's reports, published in partnership with Asialink Business, that examine opportunities in India and Indonesia for digital health and frugal innovations.

Seminar Series: Exploring the Pathway to Commercialisation Success

MTPConnect continued to support collaboration throughout the sector with various sponsorships and virtual events to keep connected. The seminar series webinars continued with 'Charting your Course – Commercialising Health Innovations' featuring CIMIT's Chief Operating Officer Dr John Collins from Boston, US, who outlined benefits of the GAITS portfolio platform for commercialising healthcare innovations. Health Horizon Founder Marcus Dawe discussed how to track progress of innovations around the world, and OncoRes Medical CEO and Managing Director Dr Katharine Giles shared experiences and wisdom from her commercialisation journey. The webinar was reproduced as an episode for the MTPConnect podcast series.

June 2020 (continued)

Podcast Highlights Innovations in Australian Science

The virtual podcast studio has travelled around Australia this year to bring some great stories to the attention of the sector. The podcast caught up with Dr Keith Chappell and Professor Trent Munro from the University of Queensland's Australian Institute for Bioengineering and Nanotechnology for a progress report on their COVID-19 vaccine work that has the whole world watching. Other episodes covered Therapeutic Innovation Australia's national research facilities supporting COVID-19 research and explored the frontier of sports science and the emerging megatrend of biomechanics with the University of Western Australia's Associate Professor Jacqueline Alderson.

Guest of The Chair Applications Opened

MTPConnect thanked Dr Parisa Glass from the George Institute for Global Health for her contribution as inaugural Guest of the Chair and called for new applications for the position for the next 12 months.

Popular ARCS Australia Webinar Series Ends

ARCS Australia's 10-part webinar series 'COVID-19: considerations and strategies for running trials during the pandemic' concluded. The popular series, which hosted 35 speakers from the sector, attracted 3,595 registrations, over 1,880 YouTube views and the audience rated the sessions on average 85 percent 'good to excellent'.

Staff News

Dr Erin McAllum joined the MTPConnect team as Project Manager for the BioMedTech Horizons program. Erin was previously with the Florey Institute of Neuroscience and Mental Health, where she led a research program into dementia and Parkinson's disease. In other news, Dr Kate Brooks announced she would leave the WA Life Sciences Innovation Hub at the end of July to take up another role.

Communication Activities

Communication Activities

Published reports, promotional material, podcast series episodes, website news stories, webinars, media publicity, and other documentation relevant to promoting the activities of MTPConnect and the MTP sector are detailed in this chapter, covering the period of 1 July 2019 to 30 June 2020.

Case Studies:

Q1

The Journey to Personalising Hearing Technology

MedTech Start-Ups Have Talent

Industry Mentoring Boosts Connections in STEM

Q2

CRITERIA: to improve job-readiness for MTP graduates

Bridging the Biologics Gap in Thailand

Q3

Opening Up International Markets: Helping Businesses Expand to India and Indonesia

Patient Access is Key for Rural Clinical Trials

Reducing Barriers Through Providing Affordable Technical Services to Medtech Companies

Q4

Clinical Manufacturing Training Hub Accelerates Research Translation

Australia's AxceldaPen: Developing 3D Bioprinting for Stem Cell Repair in Surgery

Media Mentions:

Q1

Demand high for new Life Science funding program, Health Industry Hub
https://www.healthindustryhub.com.au/pharmaceutical-news-trends/demand-high-for-new-life-science-funding-program/

NEW QUEENSLAND OFFICE FOR MTPCONNECT AT TRI, TRI news
https://www.tri.edu.au/news/new-mtpconnect-queensland-office-tri-0

The lucrative job of national research, InnovationAus
https://www.innovationaus.com/the-lucrative-job-of-national-research

Q2

Boosting STEM skills in regional Queensland, DISER
https://www.minister.industry.gov.au/ministers/karenandrews/media-releases/boosting-stem-skills-regional-queensland

Government launches roadmap for stem cell therapies mission, BiotechDispatch
https://biotechdispatch.com.au/news/government-launches-roadmap-for-stem-cell-therapies-mission

Boosting STEM skills in regional Queensland, BiotechDispatch
https://biotechdispatch.com.au/news/boosting-stem-skills-in-regional-queensland

Federal government launches STEM initiative in Queensland, PACE Today
https://pacetoday.com.au/federal-government-launches-stem-initiative-queensland/

Collaboration – The key to med-tech success, AMT Magazine
http://amtil.com.au/collaboration-the-key-to-med-tech-success/

Fast track to innovation in biomechanics research, Mirage News
https://www.miragenews.com/fast-track-to-innovation-in-biomechanics-research/

Competitive grants of up to $1 million to turn medical discoveries into clinical reality, Department of Health

https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/competitive-grants-of-up-to-1-million-to-turn-medical-discoveries-into-clinical-reality

New MRFF Funding to Support Australian MedTech Innovators, Mirage News
https://www.miragenews.com/new-mrff-funding-to-support-australian-medtech-innovators/

FEDERAL, MTP CONNECT 'UP TO $1m' DEVICE GRANTS, Biotech Daily
(data on file)

Medtech funding programme opens for innovators, BiotechDispatch
https://biotechdispatch.com.au/news/medtech-funding-programme-opens-for-innovators

Melbourne hosts 2019 Bridge Symposium, BiotechDispatch
https://biotechdispatch.com.au/news/melbourne-hosts-2019-bridge-symposium

Biotech's leading lights recognised at annual Awards, BiotechDispatch
https://biotechdispatch.com.au/news/biotechs-leading-lights-recognised-at-annual-awards

Biotech leaders recognised by Industry Excellence Awards, Mirage News
https://www.miragenews.com/biotech-leaders-recognised-by-industry-excellence-awards/

New figures show strength of Australian regenerative medicine sector, BiotechDispatch
https://biotechdispatch.com.au/news/new-figures-show-strength-of-australian-regenerative-medicine-se

'No other market offers more growth prospects' for med-techs than India; but they'll have to go low-cost, Stockhead
https://stockhead.com.au/health/no-other-market-offers-more-growth-prospects-for-med-techs-than-india-but-theyll-have-to-go-low-cost/

Australia- India economic growth: Frugal innovation the key to driving business links for the future, Australian Manufacturing
https://www.australianmanufacturing.com.au/82134/australia-india-economic-growth-frugal-innovation-the-key-to-driving-business-links-for-the-future

Medical Research Future Fund boost to take satellite technology from space to the eye clinic, CERA news
https://www.cera.org.au/medical-research-future-fund-boost-to-take-satellite-technology-from-space-to-the-eye-clinic/

Adalta gets $1m in govt's latest biotech cash splash, Stockhead
https://stockhead.com.au/health/adalta-gets-1m-in-govts-latest-biotech-cash-splash/

ANU wins $8 million for innovative medical research, Mirage News
https://www.miragenews.com/anu-wins-8-million-for-innovative-medical-research/

Medical Research Future Fund boost to take satellite technology from space to eye clinic, Mirage News
https://www.miragenews.com/medical-research-future-fund-boost-to-take-satellite-technology-from-space-to-eye-clinic/

Government invests $14.7 million in innovative medical projects, Mirage News
https://www.miragenews.com/government-invests-147-million-in-innovative-medical-projects/

CRCs providing real boost to small businesses, The Australian Financial Review
https://www.afr.com/companies/afraug14srsmesdigital-transformation-special-report--20180812-h13vda

Q3

Startup wants to translate your tummy rumbles with AI, The Sydney Morning Herald
https://www.smh.com.au/business/small-business/startup-wants-to-translate-your-tummy-rumbles-with-ai-20200115-p53rox.html

MTPCONNECT APPOINTS ALEX FOWKES DIRECTOR, Biotech Daily
(data on file)

Ex-Pfizer joins MTPConnect, Pharma in Focus
https://www.pharmainfocus.com.au/news.asp?newsid=15897

MTPConnect appoints experienced industry and R&D executive, BiotechDispatch
https://biotechdispatch.com.au/news/mtpconnect-appoints-experienced-industry-and-rd-executive

FEDERAL $32m FOR RESEARCH INNOVATION PARTNERSHIPS, Biotech Daily (data on file)

$32 million to turn more research ideas into reality, Department of Health
https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/32-million-to-turn-more-research-ideas-into-reality

MTPConnect to Drive Workforce Growth Through New REDI Program, Mirage News
https://www.miragenews.com/mtpconnect-to-drive-workforce-growth-through-new-redi-program/

MTPConnect wins industry exchange program grant, BiotechDispatch
https://biotechdispatch.com.au/news/mtpconnect-wins-industry-exchange-program-grant

PM&C names digital advisory board, InnovationAus
https://www.innovationaus.com/pmc-names-digital-advisory-board/

'At a crossroads': Calls for biotech investment rethink, The Sydney Morning Herald
https://www.smh.com.au/business/small-business/at-a-crossroads-calls-for-biotech-investment-rethink-20200305-p5477f.html

Q4

New Covid19 Research Funding, InnovationAus
https://www.innovationaus.com/new-covid19-research-funding

Help us identify your workforce skill gaps, BiotechDispatch
https://biotechdispatch.com.au/news/help-us-identify-your-workforce-skill-gaps

How COVID-19 crippled and strengthened medtech all at once, The Australian Financial Review
https://www.afr.com/companies/healthcare-and-fitness/how-covid-19-crippled-and-strengthened-medtech-all-at-once-20200616-p5536k

Podcasts Episodes:

Q1

- Exploring Emerging Megatrends to Innovate Your Health
- Bionics in Boston: Join our delegation to the 2019 MedTech Conference
- Spotlight: Therapeutics and the Importance of Cancer Research
- Spotlight: MTP skills and manufacturing capabilities with TRI & Vaxxas
- On the Ground at the ARCS Australia Conference
- Kath & Kate - Enhancing MedTech Innovation in WA
- Spotlight: Enhancing Australia's 3D Bioprinting Capabilities with TRICEP
- Why Australia is a Go-To Destination for Clinical Trials
- Making Connections at the 2019 MedTech Conference
- Introducing Noisy Guts – an Australian Nobel Laureate's take on MedTech Commercialisation
- Opening up International Markets: On the Ground at the 2019 MedTech Conference

Q2

- Part 2 – The 2019 MedTech Conference
- MTPConnect Launches in Queensland
- Spotlight: Anatomics Opens New 3D Printing Facility in Melbourne
- Meet Our Guest of the Chair - Dr Parisa Glass
- From Uni to Industry - 2019 Bridge Program Symposium
- Reflections of a Senator - Arthur Sinodinos AO
- Movember @ Mo-nash – Raising Awareness for Prostate Cancer Research
- Building Project Success Through Translation
- West Tech Fest – Inspiring Innovation In WA
- Spotlight: Unpacking the 'India Opportunity'

Q3

- Travel to the Borders of Knowledge: Meet Professor Fiona Wood AM

- Digital Health – The Future of Tomorrow
- Funding on Offer Through the Biomedical Translation Bridge Program
- Australia's Novel Response to the New Coronavirus
- Meet Dr Amanda Caples - Victoria's Lead Scientist
- Diving into Deep Tech with Cicada Innovations
- Tackling a Global Health Challenge in Antimicrobial Resistance
- Spotlight: How Tele Trials Are Giving Rural Cancer Patients Access to New Treatments with COSA
- Part 2: Australia's Position to Tackle Antimicrobial Resistance
- Opening up International Markets: Developing a U.S. Market Entry Strategy

Q4

- Digital Health – Giving Children Back Their Sparkle
- Improving Workforce Skills – Keeping Pace with Cancer Research
- COVID-19 Pivot: EpiChem's Novel Response
- Aussie Start-Ups on the Commercialisation Runway – Meet Tournicare & Navi Medical Technologies
- The Innovation Upside of COVID-19 - Dr Pradeep Philip's Novel Response
- Spotlight: Microscopy Australia's Technical Voucher Fund Breaks Down Barriers
- BONUS: Is Your MTP Company Cyber Safe? Listen to Our Webinar!
- Opening Up International Markets: BioKorea 2020 Goes Virtual
- COVID-19 Pivot: Industry's Response on International Clinical Trials Day
- How Artificial Intelligence is Transforming Healthcare with DataRWE
- COVID-19 Pivot: Therapeutic Innovation Australia's Rapid Response
- Spotlight: Getting Skin Deep with WearOptimo
- Part 2: Australia's Rapid Response to the Coronavirus
- The New Frontier in Sports Science

Website News Stories:

Q1

- 9 July 2019: Secure your place in the Australian MedTech Conference delegation
- 11 July 2019: Get Your BMTH EOIs in Quick
- 19 July 2019: Demand High for New Life Science Funding Program
- 2 August 2019: In Case You Missed It: Here's what the MTPConnect team has been up to in July
- 12 August 2019: Introducing Dr Kate Brooks: WA's Newest Director Stakeholder Engagement
- 19 August 2019: Introducing Andrew Bowskill – MTPConnect's Stakeholder Engagement Director Queensland
- 2 September 2019: Congratulations to our Guest of the Chair Appointment – Dr Parisa Glass
- 5 September 2019: In Case You Missed It: Here's what the MTPConnect team has been up to in August
- 16 September 2019: Introducing Lauren Kelly: Director of the Biomedical Translation Bridge Program
- 23 September 2019: Introducing Noisy Guts – an Australian Nobel Laureate's take on MedTech Commercialisation

Q2

- 8 October 2019: In Case You Missed It: Here's what the MTPConnect team has been up to in September
- 10 October 2019: BLOG by Dr Kate Brooks: Top 5 Boston medtech take-aways - not all lobster tails and chowder
- 14 October 2019: New MRFF Funding to Support Australian MedTech Innovators
- 17 October 2019: ICYMI: MTPConnect opens Queensland office
- 31 October 2019: Sue MacLeman honoured for decades of leadership in the Australian life sciences and medical technologies sector
- 1 November 2019: ICYMI: MTPConnect @ AusBio19
- 6 November 2019: Introducing Jenny Devlin – Executive Assistant to the Managing Director & CEO
- 11 November 2019: In Case You Missed It: Here's what the MTPConnect team has been up to in October
- 22 November 2019: WA Industry Panel: How to Kickstart Your Career
- 25 November 2019: Introducing Dr Gerard Gibbs – Senior Director BioMedTech Horizons Program
- 5 December 2019: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in November
- 9 December 2019: Introducing Dr Rebecca Tunstall – Senior Director Stakeholder Engagement
- 10 December 2019: Australia- India Economic Growth: Frugal Innovation the Key to Driving Business Links for the Future
- 12 December 2019: $14.8M Research Boost to Develop Breakthrough Ideas for Better Health
- 19 December 2019: Introducing Dr Duncan Macinnis – Director Stakeholder Engagement for NSW
- 19 December 2019: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in December

Q3

- 7 January 2020: Introducing Rebekah Craggs – Stakeholder Engagement Coordinator WA
- 20 January 2020: Alex Fowkes Joins MTPConnect Board
- 21 January 2020: Introducing Dr David Fox – Senior Director Sustainability
- 5 February 2020: MTPConnect to Drive Workforce Growth Through New REDI Program
- 7 February 2020: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in January
- 13 February 2020: New BTB Funding Opens 17 February
- 4 March 2020: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in February
- 13 March 2020: Steps We're Taking on COVID-19 Virus
- 16 March 2020: Australian innovators of digital health technologies need to seize emerging opportunities in Indonesia
- 20 March 2020: In Case You Missed It: How to Crack the U.S. Market - the First Seminar Series
- 25 March 2020: Support for Australian Businesses and Households Impacted by COVID-19

Q4

- 2 April 2020: Showcase your Health Innovation: 2020 Australian Technology Competition
- 2 April 2020: Supporting Businesses & Employees - JobKeeper Payment
- 3 April 2020: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in March
- 7 April 2020: Working Together to Safeguard Current Clinical Trials During COVID-19
- 17 April 2020: How Australia is Pivoting: COVID-19 Response
- 24 April 2020: Is your MTP company cyber safe? Join our webinar on cyber security

- 29 April 2020: Therapeutic Innovation Australia opens up access to translational R&D facilities for COVID-19 Response
- 4 May 2020: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in April
- 5 May 2020: The Innovation Upside of COVID-19 - Dr Pradeep Philip's Novel Response
- 13 May 2020: German Technology Service searching for Australian medtech companies developing anti-biofilm agents for wound care dressings
- 15 My 2020: New Funding on Offer to Turbo Charge Australian COVID-19 Research
- 20 May 2020: Celebrating International Clinical Trials Day 2020
- 26 May 2020: First COVID-19 Vaccine Clinical Trial Begins in Australia
- 1 June 2020: Become the Next Guest of the Chair
- 4 June 2020: Are You Exploring a Pathway to Commercialisation? Join our Webinar
- 4 June 2020: In Case You Missed It: Here's What The MTPConnect Team Has Been Up To in May
- 11 June 2020: We Want Your Input: MTP Workforce Skills Survey
- 16 June 2020: MTPConnect Welcomes Partners to Drive Workforce Growth Through REDI Program
- 17 June 2020: Australia's MTP sector hit hard by COVID-19 but still plays critical role in response and pandemic research: New Report
- 17 June 2020: Introducing Dr Erin McAllum – BMTH Project Manager
- 17 June 2020: SpeeDx Signs Deal with Roche to Develop Antibiotic Resistance Diagnostics
- 22 June 2020: Podcast Tracks Australia's Quest For a COVID-19 Vaccine
- 23 June 2020: 2020 BIO International Convention Goes Digital with a Special Guest from Australia
- 25 June 2020: New COVID-19 Report Reveals Critical Role of Medtech Sector in COVID-19 Response

Webinars:

Q4

- 6 May 2020: MTP Guide to Cyber Safety
- 30 June 2020: Charting Your Course – Commercialising Health Innovations

The MTPConnect Podcast Series

The MTPConnect Podcast series, launched in February 2019, is now a popular weekly podcast that promotes the people, projects and issues behind the Australian MTP sector. The show published 45 weekly episodes, pivoting swiftly to adapt to a virtual studio during the COVID-19 lockdown. Speaking with more than 50 guests during the year and reaching listeners in over 63 countries, the podcast was downloaded more than 10,146 times.

10,146 podcast downloads

54 guests

63 countries

45 episodes

Top 10

Podcast episodes by downloads:

1. Australia's Novel Response to the New Coronavirus (published 11 February 2020) – 320
2. Funding on Offer Through the Biomedical Translation Bridge Program (published 7 February 2020) – 300
3. Digital Health – The Future of Tomorrow (published 29 January 2020) – 299
4. Spotlight: Unpacking the 'India Opportunity' (published 13 December 2019) – 274
5. Travel to the Borders of Knowledge: Meet Professor Fiona Wood AM (published 22 January 2020) – 262
6. Exploring Emerging Megatrends to Innovate Your Health (published 3 July 2019) – 251
7. Diving into Deep Tech with Cicada Innovations (published 27 February 2020) – 248
8. Kath & Kate – Enhancing MedTech Innovation in WA (published 15 August 2019) – 248
9. Spotlight: MTP skills and manufacturing capabilities with TRI & Vaxxas (published 30 July 2019) – 246
10. Tackling a Global Health Challenge in Antimicrobial Resistance (published 4 March 2020) – 244

Top 10

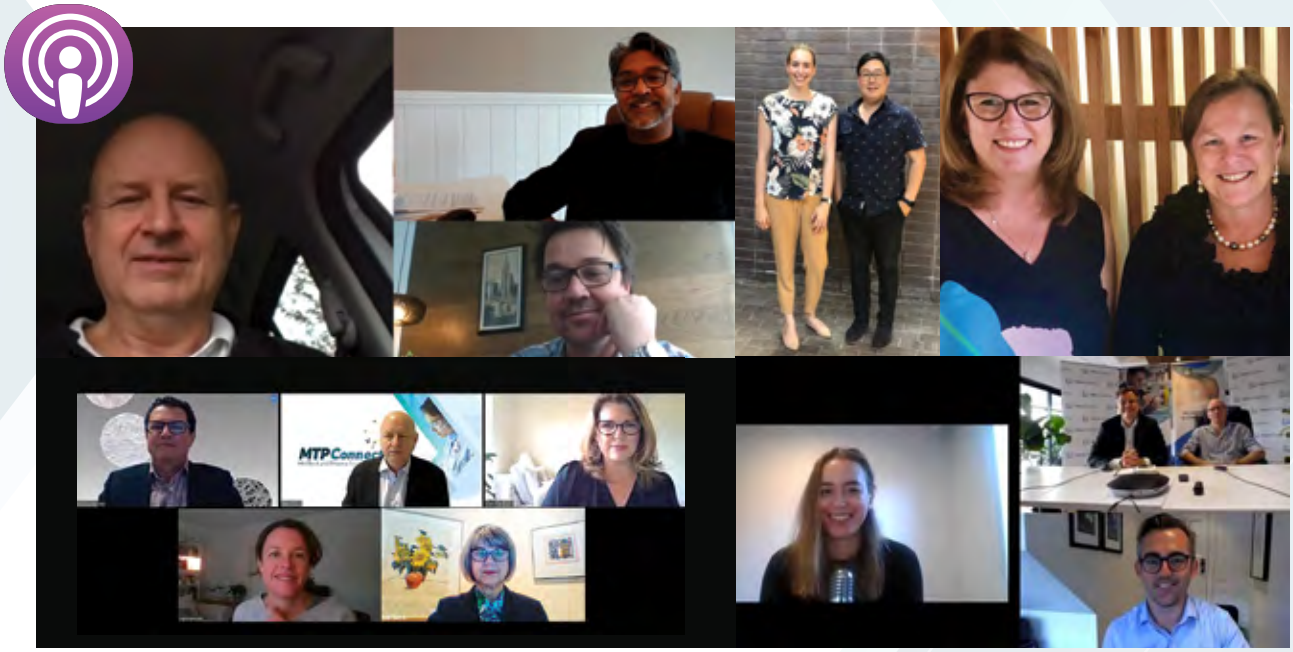
Countries listening:

1. Australia
2. US
3. UK
4. New Zealand
5. Taiwan
6. Germany
7. France
8. Canada
9. Japan
10. Singapore

Podcast guests (54):

- Bionics Institute CEO Robert Klupacs (BMTH project)
- Cancer Therapeutics CRC CEO Brett Carter (GC project)
- ARCS Australia CEO Dr Shanny Dyer (GC project)
- OncoRes Medical CEO Dr Katharine Giles (BMTH project)
- TRICEP Director Professor Gordon Wallace and Associate Professor Stephen Beirne (GC project)
- Pfizer Ventures Managing Partner Dr Barbara Dalton
- Nobel Laureate & Noisy Guts Co-Founder Professor Barry Marshall and Noisy Guts CEO and Co-Founder Dr Josephine Muir (BTB project)
- Minister for Industry, Science and Technology Hon. Karen Andrews MP
- Anatomics Executive Chairman Dr Paul D'Urso (BMTH project) and Minister for Health Hon. Greg Hunt MP
- The George Institute for Global Health Director, Entrepreneurship and Innovation, Dr Parisa Glass (REDI partner)
- Queensland University of Technology Executive Director of Bridge and BridgeTech programs Professor Lyn Griffiths (GC project)
- Former Senator the Hon. Arthur Sinodinos AO
- Biomedicine Discovery Institute Deputy Director Professor Dena Lyras
- Health Innovation Performance (HIP) Consulting Dr Carlo Bellini
- Asialink Business CEO Mukund Narayanamurti (GC project); Dr Pradeep Philip, Partner at Deloitte Access Economics; Sabeen Shaikh, Managing Director of Crescent Strategy Consulting; and Associate Professor Ruth Webster, Global Head of Medicine, George Health Technologies at the George Institute for Global Health (GC project)

- Burns surgeon Professor Fiona Wood AM
- Curve Tomorrow Head of Product Management Arthur Ong
- BioCurate's Dr Tifelle Reisinger, UniQuest's Dr Mark Ashton and the Medical Device Partnering Program's Dr Andrew Milligan (BTB partners)
- Professor George Lovrecz from CSIRO and Professor Trent Munro from the University of Queensland's Australian Institute for Bioengineering and Nanotechnology
- Cicada Innovations CEO Sally-Ann Williams
- Professor Adrian Towse from the Office of Health Economics in the UK
- Director Emeritus, from the Office of Clinical Oncology Society of Australia (COSA) CEO Marie Malica and Professor Sabe Sabesan, Director of Medical Oncology at the Townsville Cancer Centre (GC project)
- Medical Alley's Vice President of Intelligence Frank Jaskulke
- Spokle Co-Founder Elisabeth Yunarko
- Dr David Kok, Radiation Oncologist, Director of Training at the Peter MacCallum Cancer Centre and Victorian Comprehensive Cancer Centre (VCCC) Course Convenor of the Master of Cancer Sciences degree at the University of Melbourne
- Epichem CEO Colin La Galia
- Tournicare Co-Founder and CEO Niels van Sparrentak and Navi Medical Technologies Co-Founder and Co-CFO Brad Bergmann
- Dr Pradeep Philip from Deloitte Access Economics
- Microscopy Australia's Marketing and Business Development Manager Dr Jenny Whiting (GC project)
- AustCyber CEO Michelle Price, Perx Health Co-Founder and CEO Hugo Rourke and Forticode CEO Tony Smales
- Austrade Senior Trade Commissioner Julie Quinn and Orthocell Managing Director Paul Anderson
- Dr Paul Griffin, Associate Professor of Medicine at the University of Queensland's Faculty of Medicine, Director of Infectious Diseases at Mater Health Services and Medical Director and Principal Investigator at Nucleus Network/Q-Pharm; Carrie Bloomfield, Co-Chair of the industry-supported R&D Taskforce and Head of Clinical Operations at GlaxoSmithKline
- Datarwe Chief Technology Officer Dr Kelvin Ross and CEO Steve Woodyatt
- TIA CEO Dr Stuart Newman and Dr Marian Sturm, Facility Director of Royal Perth Hospital's Cell and Tissue Therapies WA
- WearOptimo Founder and CEO Professor Mark Kendall and Chief Technology Officer Professor Stephen Wilson (BMTH project)
- The University of Queensland Australian Institute for Bioengineering and Nanotechnology's Dr Keith Chappell and Professor Trent Munro
- The University of Western Australia's Associate Professor Jacqueline Alderson



Published Reports

MTPConnect Reports – pageviews on website:

1. MTPConnect 2020 Sector Competitiveness Plan – 1,917
2. Company Reports (Annual Report, Business Plan) – 640
3. COVID-19 Impact reports (editions 1 & 2, Supplementary Report with MTAA) – 286
4. Frugal Innovation in Medical Devices and Technologies: The India Opportunity – 280
5. Digital Health in Indonesia: Opportunities for Australia – 171

Digital and Social Media Metrics

3,980 Twitter followers

3,400 LinkedIn followers

2,952 Newsletter subscribers

40,704 Website total users

MTPConnect Website

Reach:

- 40,704 total users
- 40,229 new users
- 61,587 sessions
- 129,963 pageviews
- Users spent an average of 0:01:56 on every page

Top locations of website visitors:

1. Australia – 29,912
2. US – 5,342
3. India – 917
4. UK – 491
5. Singapore – 369

Top pages viewed:

1. Homepage – 18,501
2. BTB page – 18,481
3. BMTH page – 10,435
4. GC Project Fund Program page – 3,156
5. MTPConnect Overview – 3,047

MTPConnect Newsletter

- Recipients at June 2020 – 2,952
- Average open rate over 12 months – 29%
- Average click rate over 12 months – 24%

MTPConnect Social Media

MTPConnect Twitter:

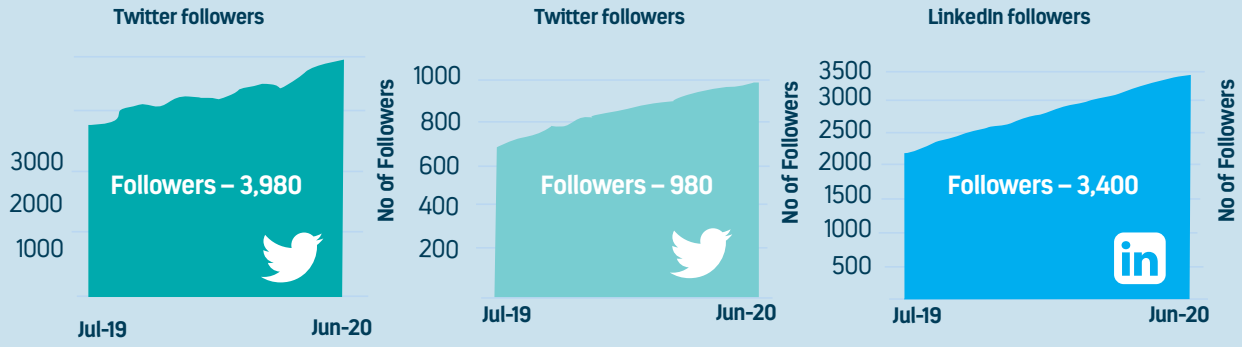
- 3,980 followers
- Total number of tweets – 802
- 1,215,000 impressions
- Average engagement rate over 12 months – 1.5%

Managing Director and CEO Twitter:

- 980 followers
- Total number of tweets – 177
- 325,300 impressions
- Average engagement rate over 12 months – 1%

MTPConnect LinkedIn:

- 3,400 followers
- 148,480 impressions
- Average engagement rate over 12 months – 4.9%



Financial Information and Directors' Report

A financial report on MTPConnect

Annual Financial Statements
MTP-IIGC LTD
ABN 53 608 571 277
For the year ended 30 June 2020

Directors' Report

MTP-IIGC LTD

For the year ended 30 June 2020

The directors present their report together with the financial statements of MTP-IIGC Ltd ('the Company' or 'the entity') for the year ended 30 June 2020.

Directors

The following persons were directors of MTP-IIGC Ltd during the whole of the financial year and up to the date of this report unless otherwise stated.

- **Ms Sue MacLeman**
- **Dr Nicholas Cerneaz**
- **Dr Douglas Robertson**
- **Ms Julie Phillips**
- **Dr Daniel Grant**
- **Alexander Fowkes (Appointed 23 December 2019)**

Principal activities

During the financial year, the principal activities of the Company were to boost competitiveness, productivity and innovative capacity of Australia's Medical Technologies and Pharmaceuticals sector by identifying opportunities to reduce regulatory burden, increasing collaboration and commercialisation, improving capabilities to engage with international markets and global supply chains and enhancing management and workforce skills.

The impacts of the COVID-19 pandemic have had minimal impact on the operations on the Company during the period. Despite working in a remote environment due to restrictions, the Company has been able to continue to achieve the Company's objectives. Management will continue to evaluate and mitigate the impact of COVID-19 on the operations of the Company.

Short-term and Long-term Objectives

The Company's short-term objectives are to:

- Accelerate industry initiatives aimed at enhancing competitiveness and productivity, in particular those that have the strongest impact on supporting SMEs.
- Increase coordination across the sector to link industry public and private research organisations to state and Australian Government initiatives, reduce duplication and identify opportunities for alignment.
- Develop a more competitive market for investment and funding.
- Build a skills and knowledge base to embed a commercialisation culture that pulls research through to market development.
- Improve capabilities to engage with international markets and global supply chains.

The Company's long-term objectives are to:

- Create a vibrant and prosperous MTP Sector.
- Build, strengthen and expand the connections for long term sector success:
  - Facilitate collaboration.
  - Educate and disseminate knowledge.
  - Identify and encourage the removal of unnecessary regulatory barriers.
  - Redefine and execute next phase of programs.
  - Establish a sustainable funding base for MTPConnect.

Strategies

To achieve its stated objectives, the Company will take action, be an independent voice and fund projects to achieve the following strategies:

- Align investment in Knowledge Priorities that meet current and future market needs.
- Create a highly productive commercialisation environment from research to early clinical trials and proof-of-concept.
- Transform the SME sub-sector to support the growth of smaller companies into larger, more stable and successful companies.
- Support the development of digital healthcare solutions: devices and data analytics.
- Strengthen Australia as an attractive clinical trial research destination.
- Position Australia as a preferred partner for international markets.
- Support advanced manufacturing as part of the broader Australian innovation ecosystem.

Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Company during the financial year.

Matters subsequent to the end of the financial year

Apart from matters already disclosed in this report, no other matter or circumstance has arisen since balance date that has significantly affected, or may significantly affect the Company or the results of its operations in future financial years.

Environmental regulation

The Company is not subject to any significant environmental regulation under Australian Commonwealth or State law.

Information on directors

Ms Sue MacLeman

Chair (Re-elected 20 Nov 2019)

Sue has more than 30 years' experience as a pharmaceutical, biotechnology and medical technology executive with senior roles in corporate, medical, commercial and business development. Sue has served as CEO and Board member of several ASX and NASDAQ listed companies in the sector.

She is currently Chair - MTPConnect (Medical Technology and Pharmaceuticals Industry Innovation Growth Centre), Chair - Anatara Lifesciences (ASX:ANR), Chair of Tali Digital Ltd (ASX:TD1), Non-Executive Director of Palla Pharma Ltd (ASX:PAL), Non-Executive Director - Oventus Medical Ltd (ASX: OVN), and Non-Executive Director of veski.

Sue is also appointed to a number of academic and government advisory committees including the COVID- 19 Vaccines and Treatments for Australia - Science and Industry Technical Advisory Group, PM Digital Expert Advisory, CSIRO Health and Biosecurity, Genomics Health Futures Expert Advisory Committee (MRFF), DMTC medical countermeasures and various COVID-19 Taskforces. Sue is also Chair of ATSE Health Technology Forum and ATSE Policy Committee. Her broad commercial experience is underpinned by graduate qualifications in pharmacy and post graduate qualifications in corporate governance, commercial law, business administration and marketing.

Dr Nicholas Cerneaz

Non-Executive Director (Re-elected 20 Nov 2019)

Dr Cerneaz has been building companies to commercialise academic research for more than two decades. After gaining a D. Phil (doctorate) in mammography technologies assisting the management of breast cancer from Oxford University in the early 1990s, he has worked extensively guiding the development of a number of medical technology startup companies, covering fields from radiology, oncology, ophthalmology, pathology and immunology. Other industrial experience includes automation and process optimisation in heavy manufacturing and process industries, astronomy instrumentation design and implementation, and advanced computer vision safety systems for the automotive industry. Dr Cerneaz has previously been a director of NFP and AIM listed companies, and advisor to both research and education sector enterprises.

Dr Douglas Robertson

Non-Executive Director (Re-elected 28 Nov 2018)

Dr Robertson has been the Director of Research Services at The Australian National University since July 2013 and has over 30 years' experience in research, economic development, technology transfer, spin-out companies and commercialisation in the UK and Australia. During that time, he has negotiated over $3.9bn of research funding, served on the boards of over 20 technology companies and assisted the establishment of over 20 other early stage technology businesses.

Dr Robertson was a founding Director of PraxisAuril (formerly Praxis), a major UK and international technology transfer and training association, from 2003-2013 and Chair in 2012 and 2013. Dr Robertson serves on the boards of four NCRIS facilities and is passionate about seeing the outcomes of research leading to economic and social benefit.

Ms Julie Phillips

Non-Executive Director (Re-elected 20 Nov 2019)

Ms Julie Phillips is Chief Executive Officer and a Director of BioDiem Ltd and Managing Director of BioDiem's subsidiary, Opal Biosciences Ltd. She has a strong background in the biotech and pharmaceutical industry, having worked as the CEO and Director of start-up Australian biotechnology companies operating in the life sciences sector. Her technical background in clinical trials, regulatory affairs and pharmacoeconomic assessment/pricing of therapeutics was gained in multinational pharmaceutical companies. From 2014-2020 she was Chair of AusBiotech Ltd, the peak biotechnology industry association in Australia.

Julie chairs Innovation and Science Australia's R&D Incentives Committee. She is a member of the University of Newcastle Council, the NH&MRC's Health Innovation Advisory Committee and the SA Premier's Science and Innovation Advisory Committee.

Dr Daniel Grant

Executive Director

Dr Dan Grant has spent more than 25 years in senior roles in the pharmaceutical, higher education and medical research sectors. Prior to joining MTPConnect, Dr Grant was the inaugural Pro Vice Chancellor for Industry Engagement at La Trobe University where he had oversight of the university's innovation, commercialisation and industry engagement activities. He was also the Senior Director and Head of Pfizer's External Research and Development Innovation group for ANZ/Singapore and their head of open innovation. Dan also sits on the Expert Advisory Panel for the MRFF Stem Cell Mission. He has a PhD in Cardiovascular Physiology and an MBA.

Dr Grant has previously been a director of several unlisted biotechnology companies and several NFP organisations.

Alexander Fowkes (Appointed 23 December 2019)

Non-Executive Director

Alex Fowkes was the Chief Strategy Officer for WuXi NextCODE, based in Singapore. As a life science executive, he is an experienced leader and thought partner for life science strategy, commercial operations and business development. He has extensive experience in leading strategy development and operational improvement projects within the pharmaceutical, contract research and bioinformatics industries with a core expertise in the strategy, execution and management of strategic partnerships. His specialties are life science strategy & operations, business development and strategic transactions.

Meetings of directors

The number of meetings of the board of the Company during the year ended 30 June 2020 and number of meetings attended by each director were:

	Board		Audit		Remuneration	
	Number eligible to attend	Number attended	Number eligible to attend	Number attended	Number eligible to attend	Number attended
Ms Sue MacLeman	10	10	-	-	3	3
Dr Nicholas Cerneaz	10	10	4	4	-	-
Dr Douglas Robertson	10	10	4	4	-	-
Ms Julie Phillips	10	10	-	-	3	3
Dr Daniel Grant	10	10	-	-	-	-
Alexander Fowkes	5	5	-	-	1	1

Rounding

The amounts contained in this report and in the financial report have been rounded to the nearest $1 (where rounding is applicable) and where noted ($) under the option available to the Company under ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191. The Company is an entity to which the legislative instrument applies.

Auditor's independence declaration

A copy of the Auditor's Independence Declaration as required under s.60-40 of the Australian Charities and Not-for-profits Commission Act 2012 is included in page 7 of this financial report and forms part of the Company' Report.

This report is made in accordance with a resolution of Board of directors of the Company and is signed on behalf of the directors by:

Ms Sue MacLeman
23 September 2020
Melbourne

Dr Daniel Grant
23 September 2020
Melbourne

Auditor's Independence Declaration

Collins Square, Tower 5
727 Collins Street
Melbourne VIC 3008

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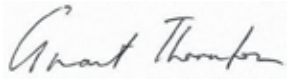
Melbourne VIC 3001

T +61 3 8320 2222
F +61 3 8320 2200
E info.vic@au.gt.com
W www.grantthornton.com.au

Auditor's Independence Declaration

To the Directors of MTP-IIGC LTD

In accordance with the requirements of section 60-40 of the *Australian Charities and Not-for-profits Commission Act 2012*, as lead auditor for the audit of MTP-IIGC LTD for the year ended 30 June 2020, I declare that, to the best of my knowledge and belief, there have been no contraventions of any applicable code of professional conduct in relation to the audit.



Grant Thornton Audit Pty Ltd
Chartered Accountants

M A Cunningham
Partner - Audit & Assurance

Melbourne, 23 September 2020

Statement of Profit or Loss and Other Comprehensive Income

MTP-IIGC LTD

For the year ended 30 June 2020

Income	Notes	30 June 2020	30 June 2019
		$	$
Grants	2	14,967,040	13,508,801
Interest		5,177	40,894
Other Income		128,326	112,324
Total Income		**15,100,543**	**13,662,019**
Expenses			
Travel and accommodation		268,462	286,597
Accounting, legal & audit		375,559	245,943
Depreciation and amortisation		103,244	25,636
Employment costs		2,796,192	1,683,010
Consulting Fees		109,284	274,975
Corporate communications & sponsorship		395,976	275,227
Office and Administration		293,875	174,539
Sector Support Projects		1,529,220	915,250
Project Funding		9,095,228	9,739,948
Total Expenses		14,967,040	13,621,125
Surplus before taxation		**133,503**	**40,894**
Net surplus for the period		**133,503**	**40,894**
Total comprehensive surplus for the period		**133,503**	**40,894**

Statement of Financial Position

MTP-IIGC LTD

As at 30 June 2020

	Notes	30 June 2020	30 June 2019
		$	$
Assets			
Current Assets			
Cash and cash equivalents		44,408,629	31,844,959
Trade and other receivables	3	235,333	45,620
Right of Use Asset	4	138,237	-
Total Current Assets		44,782,199	31,890,579
Non-Current Assets			
Property, plant and equipment	5	47,077	28,639
Right of Use Asset	4	57,599	
Total Non-Current Assets		104,676	28,639
Total Assets		**44,886,875**	**31,919,218**
Liabilities			
Current Liabilities			
Trade and other payables	6	1,386,600	2,439,319
Contract liability	7	42,870,702	29,307,741
Provisions	8	163,262	62,567
Lease liability	4	152,988	-
Total Current Liabilities		44,573,552	31,809,627
Non-Current Liabilities			
Provisions	8	11,937	7,754
Lease liability	4	66,046	-
Total Non-Current Liabilities		77,983	7,754
Total Liabilities		**44,651,535**	**31,817,381**
Net Assets		**235,340**	**101,837**
Equity			
Current Year Earnings		133,503	40,894
Retained Earnings (Members Funds)		101,837	60,943
Total Equity		**235,340**	**101,837**

Statement of Changes in Equity

MTP-IIGC LTD

For the year ended 30 June 2020

Equity	30 June 2020	30 June 2019
	$	$
Opening Balance	101,837	60,943
Increases		
Net surplus for the period	133,503	40,894
Total comprehensive surplus for the period	**133,503**	**40,894**
Total Equity	**235,340**	**101,837**

Statement of Cash Flows

MTP-IIGC LTD

For the year ended 30 June 2020

	30 June 2020	30 June 2019
	$	$
Cash flows from Operating Activities		
Receipts from grants for internal funding and deployment of projects	28,430,000	22,452,556
Payments to suppliers, employees and deployment of projects	(15,845,598)	(11,808,255)
Interest received	5,177	39,024
Cash receipts from other operating activities	81,208	112,324
Total Cash flows from Operating Activities	**12,670,787**	**10,795,648**
Cash flows from Investing Activities		
Payment for property, plant and equipment	(42,515)	(30,455)
Total Cash flows from Investing Activities	**(42,515)**	**(30,455)**
Cash flows from Financing Activities		
Repayment of lease liability	(64,602)	-
Total Cash flows from Investing Activities	**(64,602)**	**-**
Net increase/(decrease) in cash held	**12,563,670**	**10,765,194**
Cash Balance		
Opening cash balance	31,844,959	21,079,766
Closing cash balance	**44,408,629**	**31,844,959**

Notes to the Financial Statements

1. Statement of Significant Accounting Policies

a. Basis of Preparation

MTP-IIGC LTD applies Australian Accounting Standards – Reduced Disclosure Requirements as set out in AASB 1053: *Application of Tiers of Australian Accounting Standards* and AASB 2010–2: *Amendments to Australian Accounting Standards arising from Reduced Disclosure Requirements*.

The financial statements are general purpose financial statements that have been prepared in accordance with Accounting Standard AASB 134: *Interim Financial Reporting,* Australian Accounting Standards – Reduced Disclosure Requirements of the Australian Accounting Standards Board (AASB) and the *Australian Charities and Not-for-profits Commission Act 2012.* The Company is a not-for-profit entity for financial reporting purposes under Australian Accounting Standards.

Australian Accounting Standards set out accounting policies that the AASB has concluded would result in financial statements containing relevant and reliable information about transactions, events and conditions. Material accounting policies adopted in the preparation of these financial statements are presented below and have been consistently applied unless stated otherwise.

The financial statements, except for the cash flow information, have been prepared on an accruals basis and are based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and financial liabilities. The amounts presented in the financial statements have been rounded to the nearest dollar.

The financial statements were authorised for issue on 23 September 2020 by the Directors of the Company.

b. New and Revised Accounting Standards Adopted by the Company

The Company has considered the implications of new and amended Accounting Standards which have become applicable for the current financial reporting period. The Company had to change its accounting policies and make adjustments as a result of adopting the following Standard:

- AASB 15 Revenue from Contracts with Customers
- AASB 1058 Income of Not-for Profit Entities
- AASB 16 Leases

The impact of the adoption of these Standards and the respective accounting policies is disclosed in Note 1.c below.

c. Changes in accounting policy, disclosures, standards and interpretations

AASB 15 Revenue from Contracts with Customers

The Company has adopted AASB 15 from 1 July 2019 using the modified retrospective approach. Under this method, the cumulative effect of initial application is recognised as an adjustment to the opening balance of retained earnings at 1 July 2019 and comparatives are not restated. In accordance with the transition guidance, AASB 15 has only been applied to contracts that are incomplete as at 1 July 2019.

The standard provides a single comprehensive model for revenue recognition. The core principle of the standard is that an entity shall recognise revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard introduced a new contract-based revenue recognition model with a measurement approach that is based on an allocation of the transaction price. This is described further in the accounting policies below.

AASB 1058 Income of Not-for Profit Entities
The Company has adopted AASB 1058 from 1 July 2019. The standard replaces AASB 1004 'Contributions' in respect to income recognition requirements for not-for-profit entities.

The timing of income recognition under AASB 1058 is dependent upon whether the transaction gives rise to a liability or other performance obligation at the time of receipt.

Income under the standard is recognised where:
- an asset is received in a transaction, such as by way of grant, bequest or donation;
- there has either been no consideration transferred, or the consideration paid is significantly less than the asset's fair value; and
- where the intention is to principally enable the entity to further its objectives.

For transfers of financial assets to the entity which enable it to acquire or construct a recognisable non-financial asset, the entity must recognise a liability amounting to the excess of the fair value of the transfer received over any related amounts recognised.

Related amounts recognised may relate to:
- contributions by owners;
- AASB 15 revenue or contract liability recognized;
- lease liabilities in accordance with AASB 16;
- financial instruments in accordance with AASB 9; or
- provisions in accordance with AASB 137.

There has been no significant impact to the Company as a result of applying AASB 15 and AASB 1058. Where the agreements for entered into by the Company include conditions that are 'enforceable' and 'sufficiently specific', there will be a contract liability and revenue will be recognised under AASB 15 when (or as) 'performance obligations' are satisfied by the provision of goods or services.

AASB 16 Leases
This note describes the nature and effect of the adoption of AASB 16: Leases on the Company's financial statements and discloses the new accounting policies that have been applied from 1 July 2019, where they are different to those applied in prior periods.

As a result of the changes in Company's accounting policies on how leases are recognised in the accounts, the prior year financial statements of the Company were not required to be restated given the lease agreement that attracted the provisions of AASB 16: Leases commenced in December 2019.

The Company as lessee
At inception of a contract the Company assesses if the contract contains or is a lease. If there is a lease present, a right-of-use asset and a corresponding lease liability are recognised by the Company where the Company is a lessee. However, all contracts that are classified as short-term leases (i.e. leases with a remaining lease term of 12 months or less) and leases of low-value assets are recognised as an operating expense on a straight-line basis over the term of the lease.

Initially, the lease liability is measured at the present value of the lease payments still to be paid at the commencement date. The lease payments are discounted at the interest rate implicit in the lease. If this rate cannot be readily determined, the Company uses incremental borrowing rate.

Lease payments included in the measurement of the lease liability are as follows;
- fixed lease payments less any lease incentives;
- variable lease payments that depend on index or rate, initially measured using the index or rate at the commencement date;
- the amount expected to be payable by the lessee under residual value guarantees;
- the exercise price of purchase options if the lessee is reasonably certain to exercise the options;

Notes to the Financial Statements

- lease payments under extension options, if the lessee is reasonably certain to exercise the options; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of options to terminate the lease.

The right-of-use assets comprise the initial measurement of the corresponding lease liability less, any lease payments made at or before the commencement date and any initial direct costs. The subsequent measurement of the right-of-use assets is at cost less accumulated depreciation and impairment losses.

Right-of-use assets are depreciated over the lease term or useful life of the underlying asset, whichever is the shortest.

Where a lease transfers ownership of the underlying asset or the costs of the right-of-use asset reflects that the Company anticipates to exercise a purchase option, the specific asset is depreciated over the useful life of the underlying asset.

Initial Application of AASB 16: Leases
The Company has adopted AASB 16: Leases retrospectively with the cumulative effect of initially applying AASB 16 recognised as of 1 July 2019. In accordance with AASB 16, the comparatives for the 2019 reporting period have not been restated. Further, as there was no pre-existing lease arrangement attracting the provisions of AASB 16: Leases as of 1 July 2019, no adjustments were made to retained earnings.

The Company has recognised a lease liability and right-of-use asset for all leases (with exception of short-term and low value leases) recognised as operating leases under AASB 117: Leases where the Company is a lessee.

Lease liabilities are measured at the present value of the remaining lease payments. The Company's incremental borrowing rate as at the commencement of the lease was used to discount the lease payments.

The right-of-use assets were measured at their carrying values as if AASB 16 Leases had been applied since the commencement date but discounted using the Company's incremental borrowing rate per lease term. The right-of-use assets have been recognised in the statement of financial position upon the commencement of the lease agreements.

The following practical expedients have been used by the Company in applying AASB 16 Leases for the first time:

- Leases that have remaining lease term of less than 12 months as at 1 July 2019 have been accounted for in the same way as short-term lease.
- The use of hindsight to determine lease terms or contracts that have options to extend or terminate.

The Company incremental borrowing rate applied to the lease liabilities was 5.03%.

Other standards not yet applicable
There are no other standards that are not yet effective and that would be expected to have a material impact on the Company in the current or future reporting periods and on foreseeable future transactions.

d. Accounting Policies

i. Revenue

Under AASB15 Revenue from Contracts with Customers, revenue is recognised when a performance obligation is satisfied, being when control of the goods or services underlying the performance obligation is transferred to the customer.

ii. Government grants

Grant income without sufficiently specific and enforceable performance obligations
Grant funds received by the Company that do not have sufficiently specific and enforceable performance obligations are recognised as income on receipt of the funds.

Grant revenue with sufficiently specific and enforceable performance obligations
Grant funds received by the Company that have sufficiently specific and enforceable performance obligations, in accordance with AASB 15, are recognised as a contract liability on receipt and are recognised as revenue, over time, as the Company satisfies its performance obligations.

Fundraising and donation income
Fundraising and donation income are recognised when the Company gains control of the funds and are only recognised as income when the funds have been provided to further the Company's objectives for no consideration or where consideration is significantly less than the funds provided and when the funds provided do not give rise to an obligation.

iii. Property, Plant and Equipment

Buildings, plant and other equipment (comprising fittings and furniture) are initially recognised at acquisition cost or manufacturing cost, including any costs directly attributable to bringing the assets to the location and condition necessary for it to be capable of operating in the manner intended by the Company's management.

Buildings, plant and other equipment are subsequently measured using the cost model, cost less subsequent depreciation and impairment losses.

Depreciation is recognised on a straight-line basis to write down the cost less estimated residual value of buildings, plant and other equipment. The following useful lives are applied:

- Furniture and equipment up to seven years
- Computer equipment up to three years

Material residual value estimates and estimates of useful life are updated as required, but at least annually.

Gains or losses arising on the disposal of property, plant and equipment are determined as the difference between the disposal proceeds and the carrying amount of the assets and are recognised in profit or loss within other income or other expenses.

Impairment of Assets

At the end of each reporting period, the Company assesses whether there is any indication that an asset may be impaired. If such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs of disposal and value in use, to the asset's carrying amount. Any excess of the asset's carrying amount over its recoverable amount is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with another Standard (e.g. in accordance with the revaluation model in AASB 116: *Property, Plant and Equipment*). Any impairment loss of a revalued asset is treated as a revaluation decrease in accordance with that other Standard.

Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Notes to the Financial Statements

iv. Employee Benefits

Short-term employee benefits

Provision is made for the Company's obligation for short-term employee benefits. Short-term employee benefits are benefits (other than termination benefits) that are expected to be settled wholly within 12 months after the end of the annual reporting period in which the employees render the related service, including wages, salaries and annual leave. Short-term employee benefits are measured at the (undiscounted) amounts expected to be paid when the obligation is settled.

The Company's obligations for short-term employee benefits such as wages, salaries and annual leave are recognised as a part of current trade and other payables in the statement of financial position.

Retirement benefit obligations

Defined contribution superannuation benefits - all employees of the Company receive defined contribution superannuation entitlements, for which the Company pays the fixed superannuation guarantee contribution (currently 9.5% of the employee's average ordinary salary) to the employee's superannuation fund of choice. All contributions in respect of employees' defined contribution entitlements are recognised as an expense when they become payable. The Company's obligation with respect to employees' defined contribution entitlements is limited to its obligation for any unpaid superannuation guarantee contributions at the end of the reporting period. All obligations for unpaid superannuation guarantee contributions are measured at the (undiscounted) amounts expected to be paid when the obligation is settled and are presented as current liabilities in the Company's statement of financial position.

v. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within short-term borrowings in current liabilities on the statement of financial position.

vi. Good and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO).

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows included in receipts from customers or payments to suppliers.

vii. Income Tax

No provision for income tax has been raised as the entity is exempt from income tax under Div. 50 of the *Income Tax Assessment Act 1997.*

viii. Provisions

Provisions are recognised when the Company has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result, and that outflow can be reliably measured. Provisions recognised represent the best estimate on the amounts required to settle the obligation at the end of the reporting period.

ix. Trade and Other Receivables

Trade receivables and other receivables are recognised at the nominal transaction value without taking into account the time value of money. If required a provision for doubtful debt has been created. Trade and other receivables represent the assets for goods and services supplied by the Company during the reporting period that remain unpaid at the end of the reporting period. The balance is recognised as a current asset with the amount normally received within 30 days of recognition of the asset.

x. Trade and Other Payables

Trade and other payables represent the liabilities for goods and services received by the Company during the reporting period that remain unpaid at the end of the reporting period. The balance is recognised as a current liability with the amount normally paid within 30 days of recognition of the liability.

xi. Significant management judgement in applying accounting policies

When preparing the financial statements, management undertakes a number of judgements, estimates and assumptions about the recognition and measurement of assets, liabilities, income and expenses.

Estimation uncertainty

Information about estimates and assumptions that have the most significant effect on recognition and measurement of assets, liabilities, income and expenses is provided below. Actual results may be substantially different.

Impairment

In assessing impairment, management estimates the recoverable amount of each asset or cash-generating unit based on expected future cash flows and uses an interest rate to discount them. Estimation uncertainty relates to assumptions about future operating results and the determination of a suitable discount rate.

Useful lives of depreciable assets

Management reviews its estimate of the useful lives of depreciable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical obsolescence that may change the utility of certain software and IT equipment.

xii. Economic Dependence

MTP-IIGC LTD is dependent on the Department of Industry, Science, Energy and Resources for the majority of its revenue used to operate the business. As of the date of this report, the Board of Directors has no reason to believe the Department will not continue to support MTP-IIGC LTD.

xiii. Fair Value of Assets and Liabilities

The Company measures some of its assets and liabilities at fair value on either a recurring or non-recurring basis, depending on the requirements of the applicable Accounting Standard.

"Fair value" is the price the Company would receive to sell an asset or would have to pay to transfer a liability in an orderly (i.e. unforced) transaction between independent, knowledgeable and willing market participants at the measurement date.

As fair value is a market-based measure, the closest equivalent observable market pricing information is used to determine fair value. Adjustments to market values may be made having regard to the characteristics of the specific asset or liability. The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data.

Notes to the Financial Statements

xiii. *Fair Value of Assets and Liabilities (Continued)*

To the extent possible, market information is extracted from the principal market for the asset or liability (i.e. the market with the greatest volume and level of activity for the asset or liability). In the absence of such a market, market information is extracted from the most advantageous market available to the Company at the end of the reporting period (i.e. the market that maximises the receipts from the sale of the asset or minimises the payments made to transfer the liability, after taking into account transaction costs and transport costs).

For non-financial assets, the fair value measurement also takes into account a market participant's ability to use the asset in its highest and best use or to sell it to another market participant that would use the asset in its highest and best use.

The fair value of liabilities and the Company's own equity instruments (if any) may be valued, where there is no observable market price in relation to the transfer of such financial instrument, by reference to observable market information where such instruments are held as assets. Where this information is not available, other valuation techniques are adopted and, where significant, are detailed in the respective note to the financial statements.

xiv. Reporting period

The current period of the financial statements is from 1 July 2019 to 30 June 2020.

2. Grants

	30 June 2020	30 June 2019
	$	$
Grants from DISER	6,979,098	9,035,718
Grants from DOH (BMTH 1)	2,436,331	4,341,628
Grants from DOH (BMTH 2)	2,126,866	-
Grants from DOH (BTB)	1,912,316	-
Grants from DOH (REDi)	1,230,564	-
Grants from WA Government	281,865	131,455
Total	**14,967,040**	**13,508,801**

3. Trade and other receivables

	30 June 2020	30 June 2019
	$	$
Prepayments	49,599	19,050
Trade Receivables	111,626	444
Income Accrued	50,000	4,043
Other Receivables	24,108	22,083
Total	**235,333**	**45,620**

4. Right of use asset and lease liability

	30 June 2020	30 June 2019
Right of use asset:	**$**	**$**
Current	138,237	-
Non-current	57,599	-
	195,836	-
On initial recognition	276,474	-
Accumulated Depreciation	(80,638)	-
Carrying Value at end of period	195,836	-
Lease Liability:		
Current	152,988	-
Non-current	66,046	-
	219,034	-
Depreciation – right of use asset	80,638	-
Interest expense – lease liability	7,162	-
Lease payments during the year	64,602	-

Option to extend or terminate

The Company uses hindsight in determining the lease term where the contract contains options to extend or terminate the lease**.**

Property leases

The above right-of-use asset and lease liability relate to the office lease entered-into by the Company. The lease has been accounted for in accordance with AASB 16 adopted by the Company on 1 July 2019 under the modified retrospective approach.

The right-of-use asset is measured at the amount equal to the lease liability at initial recognition and then amortised over the life of the lease. The lease liability and ROU asset at initial recognition is $276,474.

Right-of-use asset is being depreciated over the lease term on a straight-line basis which is 24 months for the lease in place as at 30 June 2020. Depreciation expense of $80,638 was charged as an expense over the period.

At initial recognition, the lease liability was measured as the present value of minimum lease payments using the Company's incremental borrowing rate of 5.03%. The incremental borrowing rate was based on the unsecured interest rate that would apply if finance was sought for an amount and time period equivalent to the lease requirements of the Company. Each lease payment is allocated between the liability and interest expense. The interest expense of $7,162 was charged as an expense over the period.

Notes to the Financial Statements

5. Property, Plant and Equipment

	30 June 2020	30 June 2019
	$	$
At Cost	135,714	98,241
Accumulated depreciation	(88,637)	(69,603)
Total	**47,077**	**28,639**

Movements in carrying amounts:

Movement in carrying amounts for property, plant and equipment between the beginning and the end of the current and prior financial periods are presented as follows:

	Furniture and Office Equipment	Low-Value Pool	Total
	$	$	$
2019			
Balance at the beginning of the period	23,520	300	23,820
Additions at cost	28,058	2,397	30,455
Depreciation expense	(23,239)	(2,397)	(25,636)
Balance at the end of the period	**28,339**	**300**	**28,639**
2020			
Balance at the beginning of the period	28,339	300	28,639
Additions at cost	37,473	3,571	41,044
Depreciation expense	(19,035)	(3,571)	(22,606)
Balance at the end of the period	**46,777**	**300**	**47,077**

6. Trade and other payables

	30 June 2020	30 June 2019
	$	$
Trade Creditors	174,568	1,018,306
Accrued Expenses	542,265	216,097
Other payables	669,767	1,204,916
Total	**1,386,600**	**2,439,319**

7. Contract liability

Deferred income represents the life to date surplus of grants received as compared to expenditure (on both operating and project activities) incurred for respective funding:

	30 June 2020	30 June 2019
	$	$
Deferred income related to funding received from:		
Department of Industry, Science, Energy and Resources	7,812,420	10,072,081
Department of Jobs, Tourism, Science and Innovation (WA)	686,680	468,545
Department of Health (BioMedTech Horizons Program)	1,266,044	3,702,376
Department of Health (BioMedTech Horizons 2 Program)	12,839,802	4,966,668
Department of Health (Biomedical Translation Bridge Program)	13,485,756	10,098,072
Department of Health (Researcher Exchange and Development within Industry Program)	6,780,000	-
Total	**42,870,702**	**29,307,741**

8. Provisions

	30 June 2020	30 June 2019
Current – Provision for Annual Leave	163,262	62,567
Non-current – Provision for Long Service Leave	11,937	7,754
Total	**175,199**	**70,321**

9. Income Tax

MTP-IIGC Ltd is exempt from Income Tax as it is a registered charity under Australian Charities and Not-for-Profits Commission**.**

10. Events after reporting date

The directors are not aware of any significant events since the end of the reporting period.

11. Key management personnel compensation

Any person(s) having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly, including any director (whether executive or otherwise) of that Company is considered key management personnel ("KMP").

The total remuneration paid to KMP of the organisation during the period are as follows:

	30 June 2020	30 June 2019
	$	$
KMP compensation for the year	1,099,268	947,193

Notes to the Financial Statements

12. Other related party transactions

There have been related party transactions during the period ending 30 June 2020 totaling $37,566 exclusive of GST for Graphic Design work for Conference Brochures, Business Cards and Annual Highlights document.

Other related parties include close family members of key management personnel and entities that are controlled or jointly controlled by those key management personnel individually or collectively with their close family members.

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other persons unless otherwise stated.

13. Contingent Liabilities

There are no significant commitments and contingencies at balance date in the current or prior reporting periods.

14. Events after the reporting period

On 13 July 2020 the Australian Government announced that MTPConnect will operate the $47 million Targeted Translation Research Accelerator (TTRA) initiative for diabetes and cardiovascular disease.

Other than the above, there has not been any matter or circumstance that has arisen since the end of the financial year that has significantly affected or may significantly affect the operations of the Group, the results of these operations , or the state of affairs of the Group in future financial years.

Directors' Declaration

MTP-IIGCLTD
For the year ended 30 June 2020

The directors have determined that the Company is not a reporting entity and that this deduced disclosure financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

The directors of the Company declare that:

1. The financial statements and notes, present fairly the Company's financial position as at 30 June 2020 and its performance for the year ended on that date in accordance with the accounting policies described in Note 1 to the financial statements; and
2. In the directors' opinion there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the Board of Directors.

Director: Dr Daniel Grant 

Director: Ms Sue MacLeman 

Sign date: 23 September 2020

Auditor's Report

Grant Thornton

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Independent Auditor's Report

To the Members of MTP-IIGC LTD

Report on the audit of the financial report

Opinion

We have audited the financial report of MTP-IIGC LTD (the "Registered Entity"), which comprises the statement of financial position as at 30 June 2020, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the Directors' declaration.

In our opinion, the accompanying financial report of MTP-IIGC LTD has been prepared in accordance with Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012*, including:

a giving a true and fair view of the Registered Entity's financial position as at 30 June 2020 and of its financial performance for the year then ended; and

b complying with Australian Accounting Standards and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Registered Entity in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information other than the financial report and auditor's report thereon

Management is responsible for the other information. The other information comprises the information included in the Registered Entity's annual report for the year ended 30 June 2020, but does not include the financial report and our auditor's report thereon.

Grant Thornton

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the financial report

The Directors of the Registered Entity responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the ACNC Act, and for such internal control as the Directors determine is necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the Directors are responsible for assessing the Registered Entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Registered Entity or to cease operations, or has no realistic alternative but to do so.

The Directors are responsible for overseeing the Registered Entity's financial reporting process.

Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Registered Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
- Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Registered Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Registered Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Grant Thornton Audit Pty Ltd
Chartered Accountants

M A Cunningham
Partner – Audit & Assurance

Melbourne, 23 September 2020

MTPConnect Industry Growth Centre **Projects**

The following pages provide an overview of MTPConnect's Growth Centre projects and their impact on the sector. More information can be found at mtpconnect.org.au

MTPConnect Industry Growth Centre Projects

The following provides an overview of MTPConnect's GC projects. More information can be found at mtpconnect.org.au

Finished Projects

Growth Centre Objective addressed by Project

Improving collaboration and commercialisation

Management and workforce skills

International markets and global value chains

Regulation reform

Accelerating Australia – Stage 1

Centre for Entrepreneurial Research and Innovation (CERI)

Project description: A national consortium for translational medical technology and pharmaceuticals research and training. Small grant offered for scoping/development project on governance and national collaboration work.

Outcomes: Governance developed to allow network of translational activities in the future as well as pilot training programs. Training courses were attended by 194 people. The trainees invented 19 new medical technology opportunities and have since won commercial grants, seed funding, placements in accelerator programs, established companies and filed patent applications.

Accelerating Australia – Stage 2

Centre for Entrepreneurial Research and Innovation (CERI)

Project description: Accelerating Australia is a national consortium of biomedical research institutions, universities, healthcare providers and companies. It facilitates translation of biomedical research through experiential entrepreneurial courses, brokerage and early-stage commercialisation support services, collaborating across sectors, organisations and disciplines to identify and reduce hurdles in our biomedical translation ecosystem.

Outcomes: Commercialisation training and support for at least 949 individuals (students and clinicians from 20 partner universities and companies) – resulting in 120 new technologies, 25 new jobs and $6.5 million of investment into the companies. Improved collaboration between universities and companies within each state node.

ANDHealth

ANDHealth

Project description: Creating an integrated ecosystem for the development and commercialisation of evidence-based digital health products.

Outcomes: Supported 10 evidence-based digital health product companies, which has created 188 new jobs, an investment of $30.5 million, and treated over 91,000 patients. Additional funding for five-day training course was granted in December 2018, which has been delivered to additional audiences with other sponsors in FY2020.

ASIALINK

Asialink Business

Project description: Developed two Asia industry guides: 'digital health in Indonesia' and 'frugal innovation ecosystem in India' as well as identification of Asia capable leaders with Australia's ASX-listed MTP companies.

Outcomes: Two of the guides have been launched and well received, one in Melbourne with 46 attendees and the second as an online seminar. The third report on Asia capable leadership assessment is yet to be released.

Australia-China Life Sciences Partnership Program

AusBiotech Ltd

Project description: The Australia-China Life Sciences Partnership Program aimed to increase awareness, and thus opportunities for communication, collaboration and commercialisation between the life sciences sectors in Australia and China.

Outcomes: A free-to-use database was generated. Uptake was lower than expected and the project was terminated.

Australian Regenerative Medicine Institute (ARMI) – Stage 1

Monash University

Project description: CCRM Australia, an Australian hub of Canada's Centre for Commercialization of Regenerative Medicine (CCRM) will support the development of foundational technologies to accelerate the commercialisation of regenerative medicine products and therapies.

Outcomes: Ten regenerative medicine product companies are collaborating internationally to advance their product commercialisation. Five collaboration events with over 500 attendees, as well as the support of three inbound and three outbound trade missions.

BioFab3D@ACMD

St Vincent's Hospital Melbourne

Project description: Support for BioFab3D@ACMD, a robotics and biomedical engineering centre, embedded within a hospital. Researchers, clinicians, engineers and industry partners will work alongside each other to build biological structures such as organs, bones, brain, muscle, nerves and glands.

Outcomes: Since the start of the project the BioFab3D centre has trained over 233 individuals and progressed 21 new technologies. The centre is also being used by two medtech start-ups.

Clinical Trial Assist – facilitating clinical trial recruitment in general practice

VentureWise Pty Limited

Project description: To identify, develop and evaluate a model to support clinical trials in Australia by providing access to the leading clinical data set in Australia to: (1) guide clinical trial protocol development; (2) assess feasibility of protocols and recruitment; (3) facilitate direct patient recruitment; and (4) engage the general practice sector.

Outcomes: Fifty-two GPs attended education sessions and an additional 38 GP practices were engaged with assisted recruitment. Three clinical trials were assisted with recruitment and 54 individuals recruited in total during the project. No progress has been made in this work since the project conclusion due to the labour-intensive work needed.

Comprehensive Global Investment Programme

AusBiotech Ltd

Project description: Development of a comprehensive global investment education program for the Australian life science sector – companies, investors and researchers.

Outcomes: This project held 13 events with over 1,300 attendees and supported one inbound and five outbound trade missions. While the direct continued benefits are not known the indirect benefits are being seen through increased investment into MTP companies.

CRITERIA – Building clinical trial capability and capacity

ARCS Australia Ltd

Project description: This project aims to connect MTP companies with appropriately trained graduates to equip them with job-ready skills to meet this gap.

Outcomes: ARCS has trained 52 graduates in all aspects of pharmaceutical medicine and clinical research through 44 training events. Forty graduates of the CRITERIA program now have jobs within the clinical trial industry.

Enabling precision cancer clinical trials for SMEs

The Garvan Institute of Medical Research

Project description: To deliver a molecular profiling platform to increase capacity in Australia's clinical trial sector, and increase the attractiveness of Australia to the international pharmaceutical industry. The platform includes a clinically accredited molecular test for cancer trials, a genomics data platform to support clinical trials, and patient-matching capabilities to facilitate recruitment.

Outcomes: To date the project has trained over 400 individuals. The project team has processed over 1,250 samples and engaged with six Australian-based SMEs including four clinical trials.

Establishment of an MTP competency-based manufacturing skills development facility/training hub and early-stage clinical trial manufacturing facility

Translational Research Institute

Project description: This project will establish a medtech/pharma clinical manufacturing and training hub at the Translational Research Institute (TRI) in Brisbane to enable the translation of concepts into products for clinical studies.

Outcomes: Improvements in the cleanroom facilities are now complete with over 60 individuals trained using the facilities, four companies using the facilities and three clinical trials commenced, treating 120 patients.

Herston Biofabrication Institute

Queensland University of Technology (QUT)

Project description: Support for a biofabrication research centre located on a hospital campus utilising 3D digital scanning, modelling and advanced manufacturing technologies. Initially scanning and modelling ears for children with microtia. Specifications for a biofabrication centre, with industry partners engaged.

Outcomes: At least eight children recruited to a pilot project investigating biofabrication of ears.

Finished Projects (continued)

Hit ID platform

Cancer Therapeutics CRC Pty Ltd (CTx)

Project description: Build on a national framework to provide Australian drug discovery organisations access to a comprehensive Hit ID platform that includes: a fit-for-purpose drug discovery library (up to 300,000 compounds); an ultra-high throughput screening facility; fragment-based drug design capability; and a state-of-the-art software platform for in silico drug discovery.

Outcomes: New storage infrastructure and 310,000 compound bank to allow fast screening of compounds to determine new target drug formulations. Six screenings have already been performed since the project's completion.

Industry Mentoring Network in STEM (IMNIS) program – Stage 1

ATSE

Project description: Aiming to narrow the cultural gap that exists in Australia between business and academia through the Industry Mentoring Network in STEM (IMNIS) program, which will develop a national mentoring program linking PhD students with qualified industry mentors.

Outcomes: Four hundred industry knowledgeable PhD students have been trained. Over 80 percent of mentees were maintaining contact with their industry mentor after their one-year program has ended.

Installation of robotic sterile finished product clinical trial manufacturing capability

Pharmaceutical Packaging Professionals Pty Ltd

Project description: This project creates a fully robotic, sterile vial-filling line to manufacture Phase II and III products.

Outcomes: Project was terminated due to change of focus due to company relocation.

Medical Device Partnering Program (MDPP) – Stage 1

Flinders University

Project description: Initial scoping of the rollout of a national Medical Device Partnering Program (MDPP) to bring together research, clinical and industry partners in a streamlined process for collaboration and product development.

Outcomes: A national program is in place across all states with appropriate guidelines and governance determined. A lead for each state has been identified and is driving the program.

National MTP+D Live Showcase: Searchable, trackable, public pipelines for medtech, pharmaceutical and digital health innovations

Health-Innovate Pty Ltd

Project description: To catalogue and track publicly exposed MTPD innovations under development in Australia. The catalogue will be publicly and globally accessible and kept up-to-date using a humanised machine learning system.

Outcomes: A learning platform following at least 1,200 Australian products has been developed and has been showcased at the World Hospital Congress. It can be used to demonstrate trends and funding focus opportunities.

The Actuator

The Actuator Operations Ltd

Project description: To leverage Australia's existing industry and research capabilities in the acceleration of new high-value, medical device technology development opportunities through a number of focused, 15-month actuator programs.

Outcomes: Thirty-two new companies have been supported, creating over 53 new technologies and $25 million of investment.

Improving collaboration and commercialisation

International markets and global value chains

Management and workforce skills

Regulation reform

The Bioprint Facility for Translational Science and Medicine in the MTP Sector

University of Wollongong

Project description: To create a facility (Bioprint) to expedite the development of commercial opportunities in 3D bioprinting. It will provide the technical expertise and facilities to enable the development of commercial opportunities identified with/by the clinical partners, the partner SMEs and other industries for the production of relevant biomaterials, formulations of bioinks or customised bioprinting systems.

Outcomes: A new facility (TRICEP – Translational Research Initiative for Cellular Engineering and Printing) has been established at Wollongong. Ten new products have been developed within the facility, with two new start-up companies formed. TRICEP has supported over 100 inbound and outbound missions through speakers and facility tours.

The Bridge program

Queensland University of Technology (QUT)

Project description: A consortium of 15 companies, universities and industry associations that aims to transfer practical skills on pharmaceutical commercialisation through online and residential training in drug discovery and development, and direct exposure to industry practitioners in the scientific, legal, financial, clinical, regulatory and reimbursement disciplines that contribute to the commercialising of medicines.

Outcomes: Four hundred and seventy-six early-career researchers have been trained in pharmaceutical commercialisation. An FY2020 survey revealed five new products launched, six licenses negotiated and seven start-up companies formed since the project started. This project is now funded through the BTB fund.

The Bridge Tech program

Queensland University of Technology (QUT)

Project description: The Bridge Tech program will enable Australia to more effectively capitalise on its world-class medical technology–medical device research sector by providing mid-career and senior entrepreneurs and scientists with relevant, specific commercialisation training. The program will be delivered by companies, universities and industry operating in the sector through online mediums; residential training; and networking events.

Outcomes: Three hundred and thirty-one early-career researchers have now trained in medical device commercialisation. As of June 2020 this has resulted in eight new companies, four products launched and twelve pre-clinical or clinical trial. Networks have developed between participants and industry. This project is now funded by the BTB fund.

Training programs for the biologics and biomedical-based industry sector

Australian Institute for Bioengineering and Nanotechnology, the University of Queensland

Project description: The project created training programs for industry associated with the R&D and advanced manufacturing of biologic medicines and more broadly for industry associated with biomedical sciences. The training program fills a gap in the required knowledge and skills base necessary for advancement of Australian industry.

Outcomes: Four hundred and ninety participants received training during the project; this is a mixture of in-person training and access to an e-learning platform. One additional clinical trial has commenced from the trainees.

Vaccine research in Australia: Landscaping capabilities and relevant service

Vaxine Pty Ltd

Project description: Project to assist in landscaping Australia's vaccine research capabilities and relevant services for use by the whole MTP sector in a searchable database. Australia's first national vaccine conference.

Outcomes: A better connected Australian vaccine community, engaging through events and in person. Ten events have been held with over 350 attendees. Two products have been developed and five pre-clinical and one clinical trial have commenced.

Ongoing Projects

Improving collaboration and commercialisation

International markets and global value chains

Management and workforce skills

Regulation reform

A cloud-based AI digital health platform (Hospital 4.0) applied to nationwide cardiovascular clinical decision support

Integrated Cardiovascular Clinical Network (iCCnet) SA

Project description: To implement a cloud-based artificial intelligence (AI) digital health platform to eliminate avoidable/preventable errors in healthcare services by automating best practice clinical guidelines, invoking AI risk stratification (triage) and delivering real-time guidance to clinical decision makers, via notifications and escalations. The initial clinical focus will be on chronic disease services in rural/remote South Australia; however, the infrastructure will be commercially scalable to other diseases, across Australia and beyond.

Outcomes: Initial health data has been uploaded and presented on a platform, which has allowed panels of experts to quantify clinical guidance principals. Clinical AI algorithms have been developed and the team is developing user interfaces, while collecting a year's worth of comparison data to prove the system.

Ab Initio Pharma – Formulation and GMP product manufacturing services for clinical trials in Australia

The University of Sydney

Project description: To establish a manufacturing and training facility that provides cost-effective pharmaceutical manufacturing solutions for SMEs, academics, clinicians and larger pharma for early-phase clinical trials in Australia. Twenty postgraduates trained in production system.

Outcomes: Facility has been designed. Build to begin and installation of machinery planned for FY2021.

Accelerating precision therapies through digital infrastructure for adaptive trials and trial-ready cohort studies

Queensland University of Technology (QUT)

Project description: To develop digital infrastructure to support adaptive clinical trials and 'trial-ready' natural history cohort studies. The open-source solution is specifically intended to facilitate capture of clinical evidence to inform the licensure and funding of new therapeutic products.

Outcomes: The open-source adaptive clinical trial platform has been developed and is being used with three rare disease populations (motor neurone disease, cystic fibrosis and Angelman syndrome) and a separate project has been commenced to use the system for COVID-19 clinical trial analysis.

Certara-Monash University Industry Fellowship Program

Certara Australia Pty Ltd

Project description: The Certara-Monash Fellowship Program in drug development and pharmaceutical science will identify and develop the next generation of pharmaceutical scientists. The program will be located at Monash University's Faculty of Pharmacy and Pharmaceutical Sciences and will involve a combination of academic coursework, hands-on industry training and research.

Outcomes: Four postdoctoral fellows have been appointed and started their training. Feedback from academic and industry mentors is positive with respect to the skills being learnt by the fellows and their impact on the projects they are involved in.

Clinical Trial: Impact and Quality (CT:IQ)

Bellberry Ltd

Project description: Clinical Trial Improvement Initiative – based on the CTTI (US) model with a vision for a whole-of-sector approach to improve the quality, efficiency and impact of clinical trials.

Outcomes: Five sector-wide, industry-led projects are complete, including checklist and additional information for clinical trial design and an investigation into electronic consent. The consortium has presented its projects at nine events to over 1,000 attendees.

ClinTrial Refer – Improve recruitment to all clinical trials in Australia

South Eastern Sydney Local Health District

Project description: ClinTrial Refer is a mobile smartphone and web-based platform connecting doctors and patients to recruiting clinical trials across research networks. This project will develop a new IT platform to integrate the 19 derivative apps, create one combined database, create new search functions, enable electronic referrals, link to ANZCTR and build a national solution to trials recruitment.

Outcomes: A single 'ClinTrial Refer' application has been launched on Apple and Android platforms and has been loaded with active trials. Over 60 individuals have been trained on how to load clinical trials and the app has seen an increase of over 2,300 users since its new launch.

IMNIS Stage 2

ATSE

Project description: To continue with PhD mentoring activities, develop an alumni program and pilot rural and remote mentoring.

Outcomes: This IMNIS program has connected over 217 students from 14 universities to an industry mentor. The rural pilot has been positive, with six mentees from JCU and CQU in Queensland connecting with mentors remotely. Thirty-six mentees have gained employment in industry across both projects.

Microscopy Australia – Technical Voucher Fund

The University of Sydney

Project description: The scheme will fund vouchers to support medtech R&D by providing easy and discounted access to microscopy services. It is designed to reduce barriers and provide industry with access to analytical tools and Microscopy Australia's experts.

Outcomes: Six vouchers have been issued to SMEs, progressing three product concepts and one clinical trial.

National Expansion of the MDPP Stage 2

Flinders University

Project description: To expand the Medical Device Partnering Program nationally. It builds on the review and scoping work undertaken in 2017 and 2018, funded by MTPConnect, and seeks to establish the foundations for national operations.

Outcomes: An MDPP has beeen established in Victoria and supported by the Victorian Government. Additional funding for the ongoing program has been provided in South Australia by the South Australian Government. Discussions are progressing with Tasmania, Queensland, New South Wales and Western Australia. A medtech facilities mapping exercise is complete, with a user interface designed, and will be launched in FY2021.

Operationalise the Centre for Commercialization of Regenerative Medicine (CCRM) Australia

Monash University

Project description: To accelerate the commercialisation of Australian regenerative medicine technologies, therapies and related products. This is achieved by fostering increased collaboration between industry, clinicians and academia, both locally and globally; and nurturing local regenerative medicine companies for the international market.

Outcomes: CCRM Australia has completed a pilot mentoring program, launched a regenerative medicine database and hosted national online seminars. Over 400 attendees have attended training, collaboration and information events.

Pilot implementation of the Australasian Tele-Trial Model

Clinical Oncology Society of Australia (COSA)

Project description: COSA has developed a national guide for implementation of the Australasian Tele-Trial Model in consultation with clinical trial sponsors, clinicians, health administrators and regulatory bodies. This project will implement a feasible and effective tele-health strategy to increase access to clinical trials closer to home, while at the same time ensuring the proper conduct of cancer clinical trials.

Outcomes: The Tele-Trials Consultation Guide has been approved for National Mutual Acceptance (NMA) and is now available as generic national documents. Six clinical trials have commenced with 81 patients recruited, 75 of whom are rural.

Upgrade CSIRO protein production platform

CSIRO

Project description: To upgrade the CSIRO (Clayton) protein production platform to human GMP capability for pilot-scale (<=200L) for a variety of expression systems (mammalian/yeast/bacterial) as well as scale-up of cells. Will include a training program for postgraduate study.

Outcomes: This project will deliver and commission equipment for a facility to produce small volumes of cells for Phase II and Phase III human clinical trials. Twenty postgraduates will be trained in the production system.

MRFF-Funded Projects

MRFF-Funded Projects

The following summary provides an overview of research programs funded by the Medical Research Future Fund and delivered by MTPConnect.
More information can be found at mtpconnect.org.au

BioMedTech Horizons (BMTH) Program

BMTH Round 1

- Allegra Orthopaedics Ltd, New South Wales, is developing the B3D Cervical Interbody Fusion Device, a synthetic spinal cage to assist with spinal fusions following injury
- Anatomics Pty Ltd, Victoria, is developing and commercialising a porous polyethylene implant material 'StarPore' for cranio-maxillofacial (CMF) implants
- Bionics Institute, Victoria, is developing Ear Genie, an innovative system for personalised management of hearing impairment for children enabling life-long benefits
- Biotech Resources Pty Ltd, Victoria, is developing a rapid diagnostic test for the pathogens that cause sepsis
- Carina Biotech Pty Ltd, South Australia, is developing CAR-T immunotherapies for the treatment of solid cancers
- Garvan Institute of Medical Research, New South Wales, is advancing a clinically accredited and commercial-ready genome profiling platform to enable precision cancer medicine
- Griffith University, Queensland, is developing a 3D printed graft for surgical repair of the Scapholunate Interosseous wrist ligament (SLIL)
- Indee Pty Ltd, New South Wales, is optimising for clinical use a microfluidic gene delivery device for immune cell modification
- Monash University, Victoria, is developing a brain-machine interface prothesis to restore functional vision in blind individuals
- The University of Melbourne, Victoria, is developing AxceldaPen, a surgical bioprinting technique to deliver a patient's own stem cells to the point of need for the treatment of cartilage injuries
- WearOptimo, Queensland, is developing microwearables, minimally invasive sensors applied to the skin, for detection of biomarkers and biosignals

BMTH Round 2

- Cyban Pty Ltd, Victoria, is developing a novel brain pulse oximeter to monitor brain oxygen levels following traumatic brain injury
- Kunovus, New South Wales, is developing an elastomeric motion-preserving implant to treat lumbar spine osteoarthritis as an alternative to fusion
- Macuject Pty Ltd, Victoria, is developing artificial intelligence-based clinical decision support software for intravitreal management of age-related macular degeneration
- Advanced Genetic Diagnostics Pty Ltd, Western Australia, is developing genetic tests to identify people at high risk of heart disease
- IntelliDesign Pty Ltd, Queensland, is developing portable bedside low field magnetic resonance imaging
- PolyActiva Pty Ltd, Victoria, is developing sustained release ocular implants for delivery of steroids and non-steroidal anti-inflammatory medications to the eye for the prevention and treatment of macular oedema
- IDE Group, New South Wales, is developing a control sleeve for intravitreal injection systems
- WearOptimo, Queensland, is advancing cardiac microwearables for rapid, minimally invasive personalised cardiovascular medicine
- Enlighten Imaging Pty Ltd, Victoria, is developing a novel hyperspectral retinal imaging platform for next generation artificial intelligence diagnostics

BMTH Round 3

- Anatomics, Victoria, is developing digitally enabled skullcaps to monitor brain swelling in craniectomy patients to optimise timing of skull reconstruction surgery
- Anisop Holdings Pty Ltd, New South Wales, is developing a nano-optimised surface to prevent orthopaedic and dental implant infections
- Apollo Medical Imaging Technology Pty Ltd, Victoria, is developing an artificial intelligence-based clinical decision support software for guided acute stroke therapy
- Artrya Pty Ltd, Western Australia, is developing artificial intelligence methods for evaluating cardiac CT angiography and high-risk imaging biomarkers
- Atmo Biosciences Pty Ltd, Victoria, is developing an application of Atmo ingestible gas-sensing capsule to diagnose Irritable Bowel Syndrome (IBS) and Small Intestinal Bacterial Overgrowth (SIBO)
- Bionic Vision Technologies Pty Ltd, Victoria, is developing an implantable vision system and algorithm in their Bionic Eye Generation 3 device to restore functional vision for blind patients
- Carbon Cybernetics, Victoria, is developing a high-resolution cortical recording of the brain for the prediction and prevention of epileptic seizures
- Ear Science Institute Australia, Western Australia, is advancing the commercialisation of its ClearDrum® device, which is an acoustically optimised silk fibroin implant for the treatment of chronic middle ear disease
- Ferronova Pty Ltd, South Australia, is working to improve colorectal cancer outcomes with hybrid cancer tracers
- Hemideina, Victoria, is developing a miniature, low-energy wireless power and data transmission system for implantable medical devices
- Inventia Life Science Pty Ltd, New South Wales, is developing a 3D bioprinting system for intraoperative skin regeneration
- Merunova Pty Ltd, New South Wales, is developing an augmented digital reconstruction and re-visualisation of spine MRI for the personalised diagnosis of back pain
- Miniprobes Pty Ltd, South Australia, is developing a smart brain biopsy needle for faster, safer neurosurgery
- Neuromersiv Pty Ltd, New South Wales, is advancing the commercialisation of its hand and arm wearable device for use with the Neuromersiv virtual reality rehabilitation system
- Northern Research Pty Ltd, New South Wales, is advancing the commercialisation of its PulseVAD pulsatile rotary blood pump that is designed to treat patients suffering from a form of Congestive Heart Failure (CHF) for which, at present, there is no effective treatment
- OncoRes Medical Pty Ltd, Western Australia, is developing compact wireless technology for improvement in accuracy during breast conserving surgery
- OptiScan Pty Ltd, Victoria, is developing its non-invasive confocal endomicroscopy system to enhance oral cancer screening and surgical margin assessment
- Seer, Victoria, is developing personalised epilepsy treatment via mobile and wearable monitoring
- Synchron Australia Pty Ltd, Victoria, is advancing the commercialisation of its Stentrode: a minimally invasive brain-computer interface being designed to enable people with paralysis to restore functional independence by engaging in activities of daily living – such as email communication, text messaging and online shopping – by controlling apps and external devices through thought alone, and without requiring open brain surgery
- VenstraMedical Pty Ltd, New South Wales, is enhancing the development of a transcatheter blood pump system for Cardiogenic Shock and Hemodynamically Compromised patients
- ZiP Diagnostics, Victoria, is establishing domestic capabilities for combined R&D and manufacture of point-of-care diagnostics

Biomedical Translation Bridge (BTB) Program

BTB Round 1

- AdAlta Limited, Victoria, is developing clinical imaging of the cell surface receptor CXCR4 in idiopathic pulmonary fibrosis (IPF) patients. IPF is a progressive lung disease consisting of recurring inflammation and damage that causes the lung to stiffen, making it hard to breathe
- Australian National University, Australian Capital Territory, is developing rapid and objective eye and brain testing for better management of ophthalmic and neurological diseases
- DBS Technologies Pty Ltd, Victoria, is developing an innovative device providing adaptive deep brain stimulation for people with Parkinson's disease
- MecRx Pty Ltd, Victoria, is developing novel, small molecule therapeutics for the treatment of lung cancer
- Noisy Guts Pty Ltd, Western Australia, has developed a non-invasive acoustic belt that uses artificial intelligence to decode gut noises to accurately diagnose and monitor common gut disorders such as Irritable Bowel Syndrome
- SpeeDx Pty Ltd, New South Wales, is seeking to commercialise its ResistancePlus® MABSC/MAC test – a rapid in vitro diagnostic tool to accurately and quickly identify bacterial infections related to cystic fibrosis, while using gene markers to predict antibiotic susceptibility or resistance
- The University of Melbourne's Melbourne Dental School, Victoria, is progressing a novel dental implant to commercialisation
- Vast Bioscience, Queensland, is developing 3D small molecule sodium channel inhibitors for the treatment of post-surgical pain

BTB Round 2 (Announced September 2020)

- BARD1 Life Sciences Limited, Victoria (ASX listed), is developing a novel high-throughput SubB2M-based liquid biopsy blood test for breast cancer screening and monitoring based on a unique cancer-specific probe
- Cincera Therapeutics Pty Ltd, Victoria/South Australia, is developing a new drug treatment for metabolic and fibrotic disease
- Envision Sciences Pty Ltd, South Australia, is developing diagnosis and prognostic detection methods for prostate cancer, using blood and tissue samples
- LBT Innovations Limited, South Australia (ASX listed), is developing APAS®-AMR: an Automated Plate Assessment System for Antimicrobial Resistance using artificial intelligence
- Pharmaxis Ltd, New South Wales (ASX listed), is developing compound PXS-4699 with tailored dual action to treat Duchenne Muscular Dystrophy
- The University of Adelaide, South Australia, is developing a world-first needle-free zika virus vaccine
- The Florey Institute of Neuroscience and Mental Health, Victoria, is developing a device for guiding therapy in ataxia and imbalance
- UniQuest Pty Ltd, Queensland, is developing first-in-class drug candidates for the treatment of prostate and other cancers

BTB Round 3 (Announced September 2020)

- Dimerix Biosciences Pty Ltd, Victoria (ASX listed), is developing a new treatment for respiratory complications resulting from COVID-19 in a global clinical study with a potential fast-track pathway to clinical practice
- Starpharma Pty Ltd, Victoria (ASX listed), is developing an intranasal spray, utilising an already-marketed, broad-spectrum antiviral dendrimer for COVID-19 and potential use in future pandemics
- SpeeDx Pty Ltd, New South Wales, is developing the InSignia™ Respiratory Virus Host Response test – a rapid-response COVID-19 assay to enhance Australia's current and future pandemic preparedness
- The University of Melbourne, Victoria, is developing a novel ventilated hood for patient isolation to provide better patient respiratory treatment and protect hospital staff from COVID-19
- Vaxine Pty Ltd, South Australia, is developing an Australian COVID-19 vaccine, COVAX-19®, which comprises a recombinant spike protein antigen formulated with Vaxine's proprietary Advax™ adjuvant

Researcher Exchange and Development within Industry (REDI) initiative

- Australian Academy of Technology and Engineering Limited (IMNIS)
- Flinders University (MDPP)
- ANDHealth Ltd
- The Actuator Operations Ltd (MedTech Actuator)
- Queensland University of Technology (Bridge and BridgeTech intern program as part of Pillar Three)

Targeted Translation Research Accelerator (TTRA) Program

The TTRA funding agreement was executed on 29 June 2020, with the program to be rolled out in FY2021 through until FY2024.

2020

MTPConnect
MedTech and Pharma Growth Centre

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