

Centre for Community Child Health



# The Melbourne Children's Knowledge Translation and Research Impact Project

## **ENVIRONMENTAL SCAN:**

IMPLICATIONS OF THE EXTERNAL  
ENVIRONMENT FOR KNOWLEDGE  
TRANSLATION AND RESEARCH IMPACT  
AT MELBOURNE CHILDREN'S

JANUARY 2017



## Acknowledgement

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## Preface

This Environmental Scan is one of four publications resulting from The Melbourne Children's Knowledge Translation and Research Impact Project.

*The Melbourne Children's Knowledge Translation and Research Impact Project. Final Report: A Framework for Action.* Leone, V., Modica, L., & West, S. (2017). The Melbourne Children's Knowledge Translation and Research Impact Framework, and the findings and recommendations in the Final Report are based on an analysis of the Discussion Paper, Environmental Scan and Consultation Report. This data was supplemented and informed by internal and external review throughout the Project. The Framework is applied to selected campus knowledge translation case studies, and key findings and recommendations propose action to enhance knowledge translation and research impact at Melbourne Children's.

*The Melbourne Children's Knowledge Translation and Research Impact Project. Consultation Report: Perceptions of Knowledge Translation and Research Impact.* Fong, M., Rushton, S., & West, S. (2016). The Consultation Report summarises data collected from:

- external experts via semi-structured interviews based on their expertise in research translation, research impact and knowledge of the policy and funding environments [n=8, approx. 60 minutes each]
- campus leaders via semi-structured interviews [n=14, approx. 40 minutes each]
- campus staff via an online survey [n=109 fully completed]. Survey respondents worked in the following areas of Melbourne Children's:
  - 78 respondents worked in research
  - 33 respondents worked in clinical care
  - 30 respondents worked in education and training
  - 12 respondents worked in other areas including administration, service provision, knowledge translation, evaluation, policy, public affairs and coordination.

The consultations captured a range of perspectives about the prevailing funding environment, knowledge translation, key considerations, and opportunities and challenges for advancing research impact.

*The Melbourne Children's Knowledge Translation and Research Impact Project. Discussion Paper: Considerations for Knowledge Translation and Research Impact at Melbourne Children's.* Moore, T. Heiden, T. Leone, V., & West, S. (2017). The Discussion Paper identifies evidence and best practice in health and medical knowledge translation. It seeks to align key concepts with the broader vision and strategy of the Melbourne Children's by addressing the following questions:

- How are research translation and knowledge translation defined?
- What are the core concepts of knowledge translation?
- What is the relationship between knowledge translation and research impact?
- Where does research impact fit within the context of Melbourne Children's?
- What impact measurement framework will help us understand and conceptualise knowledge translation and inform our approach to enhancing and measuring research impact?

*The Melbourne Children's Knowledge Translation and Research Impact Project. Environmental Scan: Implications of the External Environment for Knowledge Translation and Research Impact at Melbourne Children's.* Heiden, T., Leone, V., & West, S. (2017). The Environmental Scan captures the changing landscape of research policy and funding in Australia. It identifies four relevant consultation and review processes, and their potential implications for Melbourne Children's.

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## ABBREVIATIONS

AAMRI	Association of Australian Medical Research Institutes
AHRTC	Advanced Health Research Translation Centres
ARC	Australian Research Council
CSC	Commonwealth Science Council
DET	Australian Government Department of Education and Training
ERA	Excellence in Research Australia
HERDC	Higher Education Research Data Collection
iMRC	Independent Medical Research Institute
MRFF	Medical Research Future Fund
MRI	Medical Research Institutes
NHMRC	National Health and Medical Research Council
NISA	National Innovation and Science Agenda
OECD	Organisation for Economic Co-operation and Development
RBG	Research Block Grants
RCH	The Royal Children’s Hospital, Melbourne
RCHF	The Royal Children’s Hospital Foundation
REF	Research Excellence Framework
UMDP	University of Melbourne Department of Paediatrics.

## Introduction

Melbourne Children's is the collaboration between The Royal Children's Hospital (RCH), the Murdoch Childrens Research Institute (MCRI), the University of Melbourne, Department of Paediatrics (UMDP) and The Royal Children's Hospital Foundation (RCHF). Based in Melbourne's Parkville precinct, the campus unites leaders to advance child and adolescent health through the integration of prevention and early intervention, clinical care, research, education and training, and academic leadership.

The Melbourne Children's Knowledge Translation and Research Impact Framework Project commenced in March 2016. Funded by The Royal Children's Hospital Foundation, the goal of the project was to establish a conceptual framework to advance knowledge translation and research impact on campus.

The development of the framework was informed by several key pieces of work: a discussion paper, extensive consultation, an environmental scan and case studies. These project components profile:

- the changing external policy affecting the environment in which research is undertaken [Environmental Scan]
- advice and input from experts and external stakeholders [Consultation Report: external interviews]
- advice and input from campus leads [Consultation Report: campus interviews]
- advice and input from staff [Consultation Report: campus survey]
- concepts of knowledge translation and research impact and their implications for Melbourne Children's [Discussion Paper]
- evidence and best practice in health and medical research translation [Discussion Paper]
- selected campus projects [case studies].

This material was supplemented by expert advice from an internal reference group, external advisors, and an expert advisor. Figure 1. Components contributing to the development of the framework, outlines the key elements that have informed the Report's key findings and recommendations.

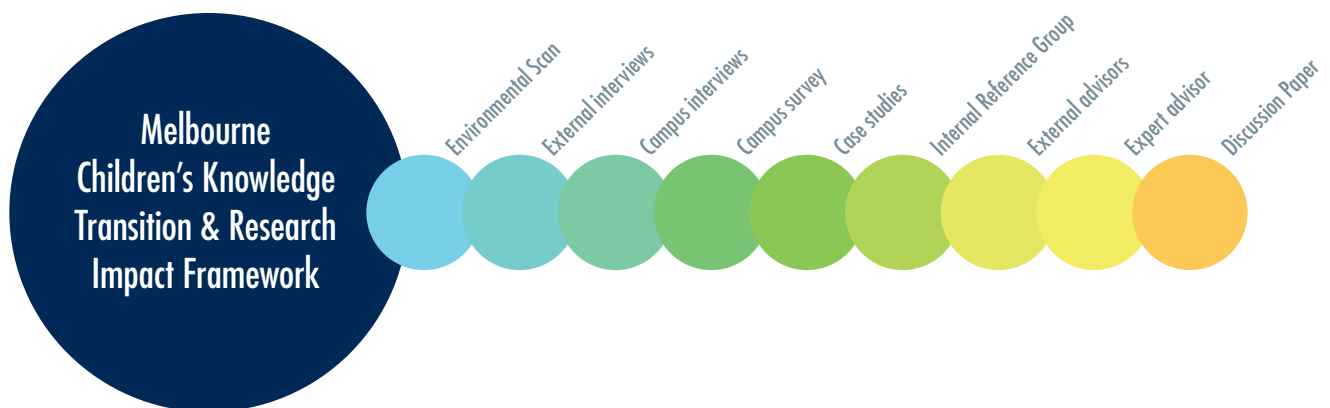


Figure 1: Components contributing to the development of the framework.

The project was undertaken by a team from the Centre for Community Child Health under the direction of Sue West, Group Leader, Policy, Equity and Translation MCRI, and Associate Director of the Centre for Community Child Health, with support from Professors Katie Allen, Frank Oberklaid and Sharon Goldfeld. See Figure 2 for governance details.

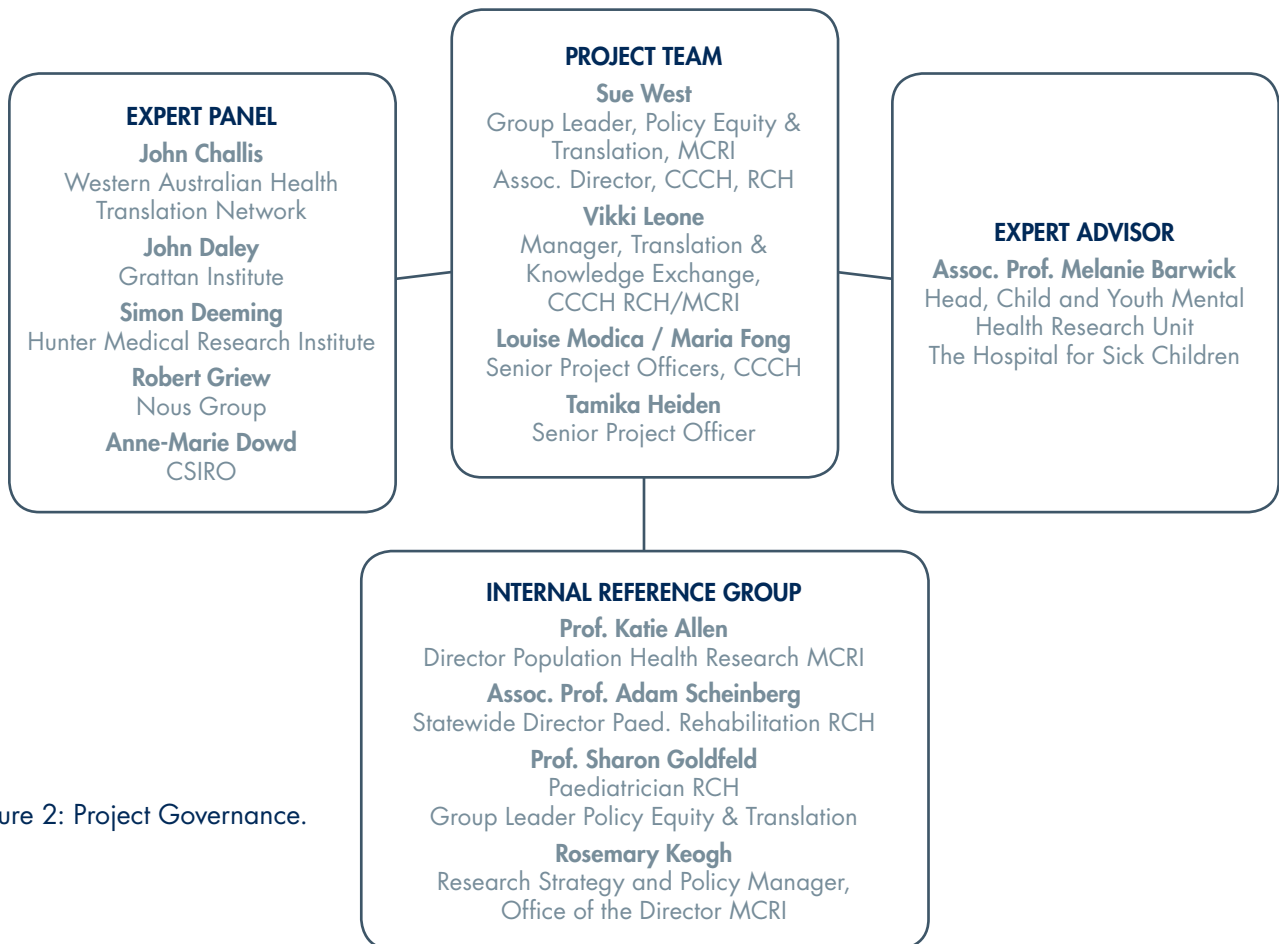


Figure 2: Project Governance.

The Environmental Scan was initiated at the commencement of the project in May 2016. The purpose of the scan was to capture the changing landscape of research policy and funding in Australia and consider how this may affect or inform the development of a framework for Melbourne Children’s. The scan begins by providing background to the increasing focus on research policy and funding arrangements in Australia, and presents the context and key elements of four relevant consultation and review processes:

1. Australian Research Council (ARC) and Australian Government Department of Education and Training (DET) Engagement and Impact Framework Consultation.
2. Medical Research Future Fund (MRFF) Strategy Consultation.
3. Review to Strengthen Independent Medical Research Institutes.
4. National Health and Medical Research Council (NHMRC) Funding Review.

Key implications for the project arising from this scan include:

- The Melbourne Children’s Knowledge Translation and Research Impact Framework Project is timely and may assist Melbourne Children’s to prepare for the changes occurring in Australian research funding and measurement.

- A Melbourne Children's framework to facilitate knowledge translation and research impact should be informed by, and consistent with, wider funding and measurement requirements. Changes undertaken at Melbourne Children's should seek to build agility and capacity, but not be in advance of recommendations or changes that are likely to affect the campus. Melbourne Children's should be aware of:
  - the development of engagement and impact measures and assessment processes piloted by DET/ARC that may inform the key types of impacts and associated terminology used in Australia and by research funding bodies.
  - the measures and the range of indicators selected by DET/ARC may have implications for the future assessment of the research impact of Melbourne Children's.
  - MRFF impact areas for any future assessment of the research impact of Melbourne Children's.
  - opportunities to collaborate with the University of Melbourne to learn from the 2017 ARC engagement and impact assessment pilot.

## Background

In July 2015, the Minister for Education and Training appointed Dr Ian Watt AO to conduct a Review of Research Policy and Funding Arrangements (also known as the Watt Review). This review was completed in November 2015 and described as the cornerstone of Australia's approach to innovation. The Report of the Review made 28 recommendations for: strengthening Australia's research system; improving research and industry collaboration; and translating research into economic and social benefits. The Australian Government accepted all 28 recommendations on 6 May, 2016 (DET, 2016).

Although the recommendations were formally accepted in 2016, findings from the Watt Review provided much of the direction for the development of the National Innovation and Science Agenda (NISA, 2015). The National Innovation and Science Agenda (NISA) was introduced by the Federal Government in December 2015. Pertinent recommendations from the Report announced as part of the package of measures under the NISA included:

- a discussion paper for consultation on increasing incentives for business and other research end-user engagement and innovation, and review of Research Block Grants (RBG) engagement data
- adoption of the recommended changes to move the ARC Linkage Projects Scheme to a continuous application and peer assessment process
- the development of an impact and engagement assessment framework to inform future research funding.

The NISA focuses on four key pillars: culture and capital; collaboration; talent and skills; and government as an exemplar. The collaboration pillar aims to address Australia's low industry-research collaboration record. Australia's current rate of collaboration between industry and researchers (2-3 per cent) is the lowest in the Organisation for Economic Co-operation and Development (OECD), where the average rate is 14-37 per cent (NISA, 2015).

Several strategies were announced within the NISA collaboration pillar, including the implementation of a continuous ARC Linkage Projects Scheme to encourage faster collaboration, shorter review and decision times and – to take into account the anticipated benefits of the research – the development and introduction of an impact and engagement assessment of universities (NISA, 2015).

Shortly following the Watt Review consultation, in September 2015 the ARC began to make changes to the Linkage Projects Scheme. The changes included: consideration of whether the proposed research addresses a specific market opportunity and important problems for partners; whether it will benefit partners and other relevant end-users; and whether there is a business model for implementation of research outcomes. The final changes to the ARC Linkage Project Scheme, as per the NISA, were scheduled to commence on 1 July 2016.



## 1. ARC/DET Impact and Engagement Framework

As part of the NISA the Government announced the development of a national engagement and impact assessment pilot to examine how universities are translating their research into economic, social and other benefits, and will seek to incentivise greater collaboration between universities, industry and other end-users of research. The ARC and the Department of Education and Training (DET) will be responsible for implementing the assessment (NISA Engagement & Impact Consultation Paper, 2016).

The process for the impact and engagement assessment began with the announcement of a panel of experts (Steering Committee, see Appendix A) on 10 March 2016, appointed for two years to help develop the process. The committee is co-chaired by Professor Aidan Byrne (ARC) and Mr Dominic English (DET). This was followed by the 30 March 2016 announcement of two working groups, the Engagement and Impact Technical Working Group, and the Performance and Incentives Working Group (see Appendix B).

The Australian Government, ARC and DET released the *Engagement and Impact Assessment Consultation Paper* in May 2016 to seek the views of stakeholders on the framework for developing the national assessment. The consultation period closed June 2016 (*Engagement and Impact Assessment Consultation Paper*, 2016).

The consultation process sought feedback in several areas including: the development or use of definitions of impact and engagement; how the scope of the assessment should be defined: existing available data that could contribute to the assessment: and the types of impact and engagement indicators that should be used in the assessment.

The new assessment measures will sit alongside the existing Excellence in Research Australia (ERA) assessment and will be implemented every three years. The aim is to capture the current engagement and impact of research conducted in universities, and to encourage universities to improve collaboration and focus on research that directly benefits Australia. The outcomes of the consultation were reported to the Minister in September 2016, and the design of the pilot assessment was completed by the end of 2016. The pilot assessment is scheduled to take place in 2017, with the first national assessment in 2018. It is possible that the impact and engagement assessment will influence between 10-20 per cent of the RBG to universities from 2019 (DET, 2015).

The ARC consultation paper drew on the recommendation from the Watt Review that the framework require the inclusion of both qualitative and quantitative measures of engagement and impact. The review suggests using the quantitative measures proposed by the Academy of Technological Sciences and Engineering (ATSE) in their March 2015 report, *Research Engagement for Australia: Measuring research engagement between universities and end users*, as a starting point for the consultation. Specifically, the measures suggested are research income categories two to four of the ERA and Higher Education Research Data Collection (HERDC), which consider the amount of research income a university receives from industry and other end-users (see Appendix C for research income categories). Notably, ATSE did not look at measures of impact within their report.

The difficulties of measuring impact, considering the differences across disciplines and the time lags inherent in impact measurement, are acknowledged within the ARC/DET consultation paper (2016). They recognise that a “focus on the processes or approaches to impact used by universities may be more appropriate in the Australian context. By focussing on impact processes – rather than the impacts – many of the concerns regarding extensive time-lags or reliance on conditions outside of the researcher’s/university’s control can be minimised”.

For qualitative measures of engagement and impact, the Watt Review recommends looking to the lessons learned from the Research Excellence Framework (REF) process from 2014.

For the purposes of the planned pilot, DET/ARC define engagement and impact as follows:

- Research engagement is the interaction between researchers and research end-users (including industry, government, non-governmental organisations, communities and community organisations) for the mutually beneficial exchange of knowledge, technologies and methods, and resources in a context of partnership and reciprocity.

- Research impact is the contribution that research makes to economy, society and environment, beyond the contribution to academic research. (EI Pilot Overview, 2016).

Significantly, the Watt Review and the ARC and DET developments on research impact and engagement focus only on measuring university research. The Association of Australian Medical Research Institutes (AAMRI) President, Professor Doug Hilton, has spoken of the ongoing issue of medical research institutes (MRI's), hospitals, and other publicly-funded research organisations being overlooked and disadvantaged when it comes to Australian Government Funding for indirect costs (Australian Association of Independent Medical Research Institute, 2016). At present, and as outlined in the Watt Review, indirect costs are funded at different rates depending on whether a researcher is from a university, a MRI, a hospital or other organisation. Indirect costs of universities are covered mostly by the RBG funds received from the Government. It is not yet clear what steps will be taken and how the current proposed changes to measurement and funding will impact on MRIs directly. By association with Melbourne University, and through joint appointments or higher degree students, there may be implications for Melbourne Children's.

## **What does this mean for the Melbourne Children's Knowledge Translation and Research Impact Project?**

- *The DET/ARC engagement and impact pilots may inform the key types of impacts and associated terminology used in Australia and by research funding bodies. It is unclear how this may affect research funding for Independent Medical Research Institutes.*
- *Measurement of impact by the ARC/DET may recognise processes or approaches to impact rather than the resultant outcomes.*
- *Melbourne Children's researchers with ARC grants and a University appointment will be required to report engagement and impact from 2018. There may be implications for researchers with joint appointments.*
- *The measures and the range of indicators selected for these measures may have implications for the future assessment of the research impact of Melbourne Children's.*
- *The participation of the University of Melbourne in the 2017 pilot may be a learning opportunity for Melbourne Children's and may inform the development or implementation of the knowledge translation and research impact framework.*

## **2. Medical Research Future Fund Strategy Consultation**

As part of the 2014-15 Federal Budget, the Australian Government announced the establishment of the \$20 billion Medical Research Future Fund (MRFF). The fund will provide the single largest boost in health and medical research funding in Australia's history, and is expected to disburse around \$1 billion per year for prioritised medical research. It is envisaged that the MRFF will provide long-term, stable funding for medical research (Medical Research Future Fund, 2016).

The Medical Research Future Fund Act 2015 (Cth) was passed in both Houses of Parliament on 13 August 2015, following widespread consultation and Senate Committee Hearings. The Australian Medical Research Advisory Board was announced by Health Minister Sussan Ley (Binsted, 2016). Chaired by Professor Ian Frazer, the MRFF Advisory Board was tasked with determining the five-year Australian Medical Research and Innovation Strategy and related Priorities for the next two years.

*The MRFF Act establishes the Medical Research Future Fund (MRFF) to provide grants of financial assistance to support health and medical research and innovation. These grants will aim to translate research findings into clinical practice, with the objective of improving the health and wellbeing of all Australians. (Medical Research Future Fund Consultation for the development of the Australian Medical Research and Innovation Strategy and related Priorities, 2016)*

The MRFF has a large focus on research translation, with its funding aiming to: address medical research priorities; drive innovation; improve healthcare delivery; create a more efficient and effective health system; and contribute to economic growth (see Appendix D). The proposed approach to funding from the MRFF aims to address medical research priorities in a more cohesive and coordinated way than under previous approaches.

The MRFF will operate within a whole-of-government research agenda that includes the Commonwealth Science Council (CSC), the National Health and Medical Research Council (NHMRC), the ARC, and the NISA.

Funding from the MRFF will be guided by the Strategy and Priorities developed by the Advisory Board and submitted to government, following a public consultation process. The Strategy will be reviewed every five years, and the Priorities will be reviewed each two years.

In 2016 a two-stage consultation process occurred and in November the Australian Medical Research Advisory Board released the *Australian Medical Research and Innovation Strategy 2016-2021* (the Strategy) along with the *Australian Medical Research and Innovation Priorities 2016-2018* (the Priorities).

The Strategy vision: "A health system fully informed by quality health and medical research" has knowledge translation at its core (Australian Government, 2016).

Much like the focus by DET/ARC on impact and engagement, the Strategy outlines the importance of research translation, including stronger consumer and industry engagement and the measurement of impact. The proposed key indicators of impact for the MRFF have been identified as:

- better patient outcomes
- beneficial change to health practices
- evidence of increased efficiency in the health system
- commercialisation of health research outcomes
- community support for the use of and outcomes from funding. (Australian Medical Research and Innovation Strategy 2016-2021. Australian Government, 2016)

A priority for the MRFF is to establish a measurement framework to support ongoing monitoring of return on investment.

First disbursements from the fund will occur in 2017 with a projected \$800 million to be available over the following four years. How the MRFF disbursements mechanisms will work has not been announced, but the Advanced Health Research and Translation Centres (AHRTC), recently accredited by the NHMRC, are identified in the Strategy as "ready to embrace and facilitate translation" (Australian Government, 2016).

### **What does this mean for the Melbourne Children's Knowledge Translation and Research Impact Project?**

- *Melbourne Children's is likely to be subject to MRFF impact assessment metrics and processes in the future. This makes the development and consideration of a Melbourne Children's framework timely and relevant.*
- *MRFF impact areas will be important to consider for any future assessment of the research impact of Melbourne Children's.*

### 3. National Health and Medical Research Council Funding Review

In April 2015, the NHMRC undertook a public consultation to consider the current and emerging issues for its Fellowship Schemes (NHMRC, 2016). There were many outcomes and proposed solutions reported to the Research Committee in November 2015, however two of these have led to a subsequent review process.

It was recommended that a whole sector discussion including universities, government, funding bodies, independent medical research institutes, charities and industry was long overdue and would be valuable in providing a broader discussion and review of the entire NHMRC funding system. It was also recommended that this review take into consideration, and make use of, successful international funding models as proof of principle.

An Expert Advisory Group, chaired by Professor Steve Wesselingh, was established to undertake an overarching review of the NHMRC funding programmes. The review terms of reference were to examine the structure of the grant programmes and consider alternative grant models internationally (NHMRC, 2016). It is of note that the Watt Review raised the possibility that the NHMRC may consider how multiple or continuous rounds could be implemented in their small programmes, for example, the Development Grants Scheme (DET, 2016).

The review was due for completion at the end of 2016 however in November the NHMRC announced further and targeted consultations for early 2017, with changes to be announced in 2017.

#### **What does this mean for the Melbourne Children's Knowledge Translation and Research Impact Project?**

- *There is no direct discussion of knowledge translation or research impact within the current public documentation in relation to the NHMRC Funding Review. However, the review terms of reference include looking to international models, which may involve greater consideration of knowledge translation than the existing NHMRC funding models.*

Also of relevance to the Melbourne Children's Knowledge Translation and Research Impact Project is the NHMRC accredited Advanced Health Research and Translation Centres (AHRTCs). In March 2015, the NHMRC recognised four Advanced Health Research and Translation Centres:

1. Alfred Health and Monash Health and Partners AHRTC
2. Melbourne Health Care Partners AHRTC
3. South Australian AHRTC
4. Sydney Health Partners AHRTC.

The AHRTCs were established to encourage leadership in research translation. The AHRTCs are also positioned as highly collaborative, with centres needing to demonstrate excellence across the areas of research, translation, health care and training. Centres are expected to share a vision, strategy, and clarity of purpose. The UMDP, MCRI and RCH are members of the Melbourne AHRTC, now known as Melbourne Academic Centre for Health.

Whilst there is no specific funding devoted to AHRTC's, in 2016 the NHMRC announced Translational Research Projects funding for one year up to a maximum of \$100,000. Eligibility was limited to accredited AHRTC's. Additionally, the AHRTC's may be eligible for future MRFF funding.

### 4. Independent Medical Research Institutes review

In October 2014, the Commonwealth Minister for Health, the Hon Peter Dutton MP, announced a review to strengthen independent Medical Research Institutes (iMRIs). The purpose of the review was to establish what is required for iMRIs to continue to “make a strong contribution to a vibrant, collaborative, and innovative health and medical research sector in Australia” (Department of Health, *Review to Strengthen Independent Medical Research Institutes*, 2014, p.9).

In November 2014, the Review Panel released an Issues Paper and Business Models template as part of the review’s consultation strategy and invited responses through a submission process. Subsequently, a discussion paper was released in February 2015 setting out the Panel’s preliminary views and inviting supplementary submissions. The discussion paper specifically referenced research translation and potential options to increase the translational impacts of iMRIs.

It was the preliminary view of the Panel that:

*Translational research is critical to ensure that the Australian population receives the greatest possible benefit from government investment in health and medical research. The Panel is of the preliminary view that translation can be better facilitated through closer relationships with clinicians, hospitals and health services. The Panel is also of the preliminary view that opportunities exist for increased commercialisation, through stronger sharing of resources and attracting investment by industry. (Department of Health, Review to Strengthen Independent Medical Research Institutes Discussion Paper, 2015, p.7).*

Additionally the Panel noted that:

*The sector needs agreed measures for translational impact – There is work occurring at many levels across Australia and internationally to increase the translational effectiveness of research. These have identified many potential measures that need to be further refined. (Department of Health, Review to Strengthen Independent Medical Research Institutes Discussion Paper, 2015, p.36).*

To date there have not been any recommendations from the Review but it’s clear that the Panel considered the capability of iMRIs to translate research and measure and report their impacts as important features in the context of the MRFF.

## Other sources explored

### 5. Chief Scientist Office

At present, there is nothing relevant to the current impact agenda and reviews on the website of the Chief Scientist. The Chief Scientist is, however, leading the 2016 National Research Infrastructure Roadmap.

### 6. Association of Australian Medical Research Institutes

The Association of Australian Medical Research Institutes (AAMRI) has no further information to guide our process at this time.

# Conclusion

How to maximise the benefits of investment in research is under national scrutiny. This Environmental Scan identifies changes underway in the Australian research funding and measurement landscape, and some questions for exploration. The finalisation of the four consultation and review processes identified in this Environmental Scan will provide a clearer direction for the future of research funding and impact measurement in Australia.

The categories of impact currently identified the ARC/DET and MRFF are identified in Table 1. No specific categories have been identified by the NHMRC – these may also be informed by the current reviews/pilots.

Table 1: Categories of research impact.

CATEGORIES OF IMPACT IDENTIFIED BY DET/ARC	CATEGORIES OF IMPACT IDENTIFIED BY MRFF
<p><i>Research impact is the contribution that research makes to:</i></p> <ul style="list-style-type: none"> <li>• <i>economy</i></li> <li>• <i>society</i></li> <li>• <i>environment</i></li> <li>• <i>beyond the contribution to academic research.</i></li> </ul>	<p><i>Research impact is the contribution that research makes to:</i></p> <ul style="list-style-type: none"> <li>• <i>better patient outcomes</i></li> <li>• <i>beneficial change to health practices</i></li> <li>• <i>evidence of increased efficiency in the health system</i></li> <li>• <i>commercialisation of health research outcomes; and</i></li> <li>• <i>community support for the use of and outcomes from funding.</i></li> </ul>

Categories of impact identified and refined during the pilots will have implications for Melbourne Children’s.

The Melbourne Children’s Knowledge Translation and Research Impact Project is timely and will assist Melbourne Children’s to be ready for the changes ahead. It will also be important to align work of the campus with recommendations and findings that may emerge from this work in the future. Anticipated activity is outlined in Table 2.

A framework developed to support Melbourne Children’s to advance research impact will need to be consistent with assessment, engagement and impact frameworks developed and tested by research funders in Australia in the coming years.

**Key implications for the Melbourne Children’s Knowledge Translation and Research Impact Project** from the Environmental Scan are as follows:

- *The project is timely and will assist Melbourne Children’s to be prepared for the changes occurring in the Australian research engagement, funding and measurement landscape.*
- *It will be important for Melbourne Children’s to ensure that a campus framework aligns with changes in the sector and links with the multiple impact assessment frameworks that are currently being developed and tested by funders in Australia in the coming years including:*
  - *the development of engagement and impact measures and an assessment process by DET/ARC*
  - *the range of measurement indicators selected by DET/ARC.*
- *The identification of categories of impact from the current reviews/pilots will have implications for Melbourne Children’s.*
- *As the University of Melbourne is participating in the 2017 ARC engagement and impact assessment pilots, there may be an opportunity to work with this campus partner to further identify implications for Melbourne Children’s.*

Table 2: Timeline for activity.

TIMELINE	ACTIVITY	AGENCY/FUNDING SOURCE
<b>2015</b>		
8th April 2015	NHMRC Fellowship Scheme consultations	NHMRC
7th July 2015	Watt Review of University Research Funding commenced	Government - Boosting the Commercial Returns from Research Strategy
11 August 2015	Watt Review - Issues paper released/ consultations	Government - Boosting the Commercial Returns from Research Strategy
13th August 2015	MRFF Established	Medical Research Future Fund
18th Sept 2015	Watt Review - Consultation period end	Government - Boosting the Commercial Returns from Research Strategy
30th Nov 2015	Watt Review final report to government	Government - Boosting the Commercial Returns from Research Strategy
December 2015	National Innovation & Science Agenda Announced	Federal Government/NISA
<b>2016</b>		
<b>January</b>		
28th January 2016	Review of the structure of NHMRC grant programme announced	NHMRC funding system review
<b>February</b>		
February 2016	NHMRC Review First Expert Advisory group meeting	NHMRC funding system review
<b>March</b>		
10th March 2016	ARC/DET Steering Committee announced - Impact and engagement framework	Minister for Industry, Innovation & Science & Minister for Education and Training
30th March 2016	ARC/DET Working groups announced - Impact and engagement framework	Australian Research Council (ARC) & Department of Education and Training (DET)
<b>April</b>		
April 2016	NHMRC Review Second Expert Advisory group meeting	NHMRC funding system review

TIMELINE	ACTIVITY	AGENCY/FUNDING SOURCE
<b>May</b>		
2nd May 2016	ARC/DET Engagement and Impact Consultation Paper released	ARC & DET
4th May 2016	MRFF First Board Meeting	Medical Research Future Fund
6th May 2016	MRFF Call for submissions/consultation process	Medical Research Future Fund
6th May 2016	Watt Review - Government accepted all 28 recommendations	Government - Boosting the Commercial Returns from Research Strategy
<b>June</b>		
6th June 2016	MRFF Consultation submissions close	Medical Research Future Fund
Mid June 2016	NHMRC Grant Program review - Discussion Paper to be released	NHMRC funding system review
24th June 2016	ARC/DET Engagement and Impact Consultation period ends	Australian Research Council (ARC) & The Department of Education and Training.
Late June 2016	MRFF Second Meeting of Advisory Board scheduled	Medical Research Future Fund
<b>July</b>		
1st July 2016	ARC Linkage project changes to come into effect	Australian Research Council/ NISA
July 2016	NHMRC Grant review public forums	NHMRC funding system review
<b>September</b>		
September 2016	ARC/DET Engagement and Impact consultation outcomes report to Minister	ARC & DET
<b>November</b>		
November 2016	ARC/DET Engagement and Impact pilot assessment announced	ARC & DET
<b>Future</b>		
Early 2017	NHMRC Funding Review to be finalised	NHMRC funding system review
Start 2017	ARC/DET Engagement and Impact Assessment piloted	ARC & DET
Late 2017	ARC/DET Engagement and Impact adjusted based on pilot	ARC & DET
2018	First full ARC/DET Engagement and Impact exercise with ERA	ARC & DET



## References

- Academy of Technological Sciences and Innovation (2015) Research Engagement for Australia. Measuring Research Engagement between Universities and End Users. Retrieved from: <https://www.atse.org.au/Documents/reports/research-engagement-australia.pdf>
- Association of Australian Medical Research Institutes. (May 2016). Missed opportunity for fair and transparent funding for research. Retrieved from: <http://aamri.org.au/news-events/aamri-news/missed-opportunity-for-fair-and-transparent-funding-for-research>
- Australian Government, Australian Research Council, Department of Education and Training (2016). National Innovation and Science Agenda Engagement and Impact Assessment Consultation Paper. Retrieved from: [http://www.arc.gov.au/sites/default/files/filedepot/Public/ARC/consultation\\_papers/ARC\\_Engagement\\_and\\_Impact\\_Consultation\\_Paper.pdf](http://www.arc.gov.au/sites/default/files/filedepot/Public/ARC/consultation_papers/ARC_Engagement_and_Impact_Consultation_Paper.pdf)
- Australian Government (2016). Australian Medical Research and Innovation Strategy 2016-2021. [https://health.gov.au/internet/main/publishing.nsf/Content/mrff/\\$FILE/Australian%20Medical%20Research%20and%20Innovation%20Strategy%202016.pdf](https://health.gov.au/internet/main/publishing.nsf/Content/mrff/$FILE/Australian%20Medical%20Research%20and%20Innovation%20Strategy%202016.pdf)
- Australian Research Council. (December 2016). EI Pilot Overview. Retrieved from: <http://www.arc.gov.au/ei-pilot-overview>
- Australian Research Council (May 2016). Media Release: ARC. Research Engagement and Impact working groups announced. Retrieved from: <http://www.arc.gov.au/news-media/media-releases/research-engagement-and-impact-working-groups-announced>
- Australian Research Council (2016). National Innovation and Science Agenda Engagement and Impact Consultation Paper. Retrieved from: <http://www.arc.gov.au/nisa>
- Binsted, T., (2016, April 3). Sussan Ley to unveil new Medical Research Future Fund advisory board. Australian Financial Review. Retrieved from: <http://www.afr.com/news/sussan-ley-to-unveil-new-medical-research-future-fund-advisory-board-20160403-gnx9o9>
- Commonwealth of Australia, Department of the Prime Minister and Cabinet. (2015). National Innovation and Science Agenda Report. <http://www.innovation.gov.au/page/national-innovation-and-science-agenda-report>
- Department of Education and Training. (2015). Report of the Review of Research Policy and Funding Arrangements. Retrieved from: <https://docs.education.gov.au/node/38976>
- Department of Education and Training. (May 2016). Turnbull Government Response - Review of Research Policy and Funding Arrangements. Retrieved from: <https://docs.education.gov.au/documents/turnbull-government-response-review-research-policy-and-funding-arrangements>
- Department of Health. (May 2016). Medical Research Future Fund Consultation for the development of the Australian Medical Research and Innovation Strategy and related Priorities. Australian Government Department of Health. Retrieved from: <https://consultations.health.gov.au/research-data-and-evaluation-division/mrff/>
- Department of Health. (May 2016) Medical Research Future Fund consultation for the development of the Australian Medical Research and Innovation Strategy and related Priorities. Retrieved from <https://consultations.health.gov.au/research-data-and-evaluation-division/mrff>
- Department of Health (2016). Medical Research Future Fund. Retrieved from: <http://health.gov.au/internet/main/publishing.nsf/Content/mrff>
- Department of Health. Review to Strengthen Independent Medical Research Institutes (2014). Retrieved from: <http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2014-dutton093.htm>
- Department of Health (2015). Review to Strengthen Independent Medical Research Institutes. Retrieved from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/imri-consultation>
- Department of Health. (2015) Review to Strengthen Independent Medical Research Institutes. Final Report. Retrieved from: [https://www.health.gov.au/internet/main/publishing.nsf/Content/FC5882EA77349CDFCA257D770016B72F/\\$File/11145\\_Review%20to%20Strengthen%20Independent%20Medical%20Research%20Institutes%20Final....pdf](https://www.health.gov.au/internet/main/publishing.nsf/Content/FC5882EA77349CDFCA257D770016B72F/$File/11145_Review%20to%20Strengthen%20Independent%20Medical%20Research%20Institutes%20Final....pdf)
- National Health and Medical Research Council. (May 2016). Current and Emerging Issues for - NHMRC Fellowship Schemes. National Health and Medical Research Council. Retrieved from: [http://consultations.nhmrc.gov.au/public\\_consultations/nhmrc-fellowship-schemes](http://consultations.nhmrc.gov.au/public_consultations/nhmrc-fellowship-schemes)
- National Health and Medical Research Council (2016) Structural Review of NHMRC's grant program – Public Consultation. Retrieved from: <https://www.nhmrc.gov.au/grants-funding/structural-review-nhmrc-s-grant-program/structural-review-nhmrc-s-grant-program>

# Appendices

## Appendix A

### ARC/DET Steering Committee Members

- Mr Graeme Whickman, President and CEO, Ford Motor Company Australia
- Dr Shanny Dyer, Managing Director, Wavefront Biometric Technologies
- Mr Ken Boal, Vice-President, Cisco Australia and New Zealand
- Emeritus Professor Lesley Johnson, University of Technology Sydney and Griffith University
- Professor Ian Jacobs, President and Vice-Chancellor, University of New South Wales
- Ms Belinda Robinson, CEO, Universities Australia
- Professor Scott Bowman, Vice-Chancellor and President, CQ University Australia
- Professor Anne Kelso, CEO, National Health and Medical Research Council
- Mr Mark Cully, Chief Economist, Department of Industry, Innovation and Science
- Dr Alan Finkel, Chief Scientist
- Professor Shearer West, Deputy Vice-Chancellor, University of Sheffield.

## Appendix B

### Engagement and Impact—Technical Working Group

- Leanne Harvey, Executive General Manager, Australian Research Council (Co-Chair)
- Ms Virginia Hart, Branch Manager, Research Funding and Policy, Department of Education and Training (Co-Chair)
- Dr Eric Archambault, President, Science-Metrix (Canada)
- Professor Jonathan Adams, Chief Scientist, Digital Science
- Emeritus Professor Graeme Turner, Institute for Advanced Studies in the Humanities, The University of Queensland
- Professor Andy Pitman, Director, ARC Centre for Climate System Science, The University of New South Wales
- Mr Tony Sheil, Deputy Director, Research Policy, Griffith University
- Dr Sybille Hinze, Deputy Director, Research System and Research Dynamics, Deutsches Zentrum für Hochschul und Wissenschaftsforschung (Germany)
- Dr Diana Hicks, Professor of Public Policy, Georgia Tech (USA)
- Mr Andrew Calder, Director of Research Services, Bond University
- Ms Sue Mikilewicz, Director, Business Intelligence and Planning, University of South Australia
- Professor Richard A Jefferson, Chief Executive Officer, Cambia
- Dr Marcus Nicol, Director, Research Excellence Branch, Australian Research Council.

Source: ARC. Research Engagement and Impact working groups announced. (2016). Available at: <http://www.arc.gov.au/news-media/media-releases/research-engagement-and-impact-working-groups-announced> (Retrieved: May, 2016)

### Engagement and Impact—Performance and Incentives Working Group

- Leanne Harvey, EGM, Australian Research Council (Co-Chair)
- Ms Virginia Hart, Branch Manager, Research Funding and Policy, Department of Education and Training (Co-Chair)
- Mr Conor King, Executive Director, IRU (Innovative Universities Australia)
- Professor Mike Brooks, Deputy Vice-Chancellor and Vice-President (Research), The University of Adelaide
- Professor Kevin Hall, Deputy Vice-Chancellor (Research and Innovation), University of Newcastle
- Professor Robyn Owens, Deputy Vice-Chancellor (Research), The University of Western Australia
- Professor Arun Sharma, Deputy Vice-Chancellor (Research and Commercialisation), Queensland University of Technology
- Dr Bronwyn Evans, CEO, Standards Australia
- Professor Attila Brungs, Vice-Chancellor and President, University of Technology Sydney
- Professor Mark Harvey, Deputy Vice-Chancellor Research and Innovation, University of Southern Queensland
- Professor Andrew Reeves, Senior Research Adviser to The Vice-Chancellor, Deakin University
- Mr Mark Bazzacco, Executive Manager, Performance and Evaluation, CSIRO
- Mr Luke Meehan, Senior Economist, IP Australia
- Professor Duncan Ivison, Australian Academy of the Humanities
- Professor Margaret Sheil, Australian Academy of Technological Sciences and Engineering
- Professor David Day, Australian Academy of Science
- Professor Glenn Withers, President, Academy of the Social Sciences in Australia.

## Appendix C

### Categories and sub-categories of research income collected by HERDC

Category 2: Other public sector research income

- Australian Government (non-Category 1)
- State or territory government
- Government business enterprises
- Cooperative Research Centres (CRC).

Category 3: Industry and other research income

- Australian contracts
- Australian grants
- Donations, bequests and foundations
- HDR fees for domestic students
- International: competitive, peer-reviewed research grant income
- International: other income
- International: HDR fees for international students.

Category 4: CRC research income

- Research income derived from Australian Government grants to CRC
- Research income derived from non-university members of CRC
- Research income derived from external parties contributing to CRC.

Table D3: Building Blocks for the Australian Health and Medical Research and Innovation Strategy.

<b>CURRENT CHALLENGES</b>								
Facilitate the translation of research into health outcomes	Research universally embedded across the health system	Maximise productivity within the health and research system	Reduce barriers to collaboration	Support research and innovation from concept to delivery	Enhance and sustain research enabling technologies, infrastructure and workforce	Continuous improvement and efficiency in healthcare delivery		
<b>AIMS AND OBJECTIVES</b>								
An excellent and responsive health and medical research system that improves lives.		Preventions and cures of tomorrow	Leveraging and enhancing collaboration and integration		A balanced and appropriately skilled workforce			
		Economic benefits	A translation pathway that maximises opportunities for success		A research engaged workforce			
		Sustainable, high-quality, cost-effective health care	Healthcare policy and delivery have a strong evidence base		Contemporary infrastructure that meets research needs			
<b>MANDATORY CONSIDERATIONS</b>								
Burden of disease on the Australian community		How to deliver practical benefits from medical research and medical innovation to as many Australians as possible		How to ensure that financial assistance provides the greatest value for all Australians				
		How to ensure that financial assistance provides the greatest value for all Australians		How to ensure that disbursements complement and enhance other assistance provided to the sector				
<b>KEY INTERACTIONS AND STAKEHOLDERS</b>								
National Health and Medical Research Council	Industry, philanthropy, the taxation system and other grants	National Innovation and Science Agenda	National Science and Research Priorities	State and territory health and medical research initiatives	The health system - medical workforce, hospitals	Commonwealth Health Portfolio priorities	Health and medical researchers	Consumers

Department of Health (2016) *Medical Research Future Fund Consultation for the development of the Australian Medical Research and Innovation Strategy and related Priorities.*

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The Centre for Community Child Health is a department of The Royal Children's Hospital  
and a research group of Murdoch Childrens Research Institute.