

ENGAGING  
FOR IMPACT

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MAGAZINE

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# Acknowledgement of Country

EFI 2019 and RMIT University acknowledge the people of the Woi wurrung and Boon wurrung language groups of the eastern Kulin Nations on whose unceded lands we conduct this event.

EFI 2019 and RMIT University respectfully acknowledge Ancestors and Elders past, present and emerging.

RMIT also acknowledges the Traditional Custodians and their Ancestors of the lands and waters across Australia where we conduct our business.

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# Enabling Capability Platforms

Research at RMIT aims to solve critical global problems and to deliver significant economic, social and environmental impact. Unlike conventional discipline-based research structures, the Enabling Capability Platforms connect researchers from multiple disciplines and from across Colleges under a thematic umbrella.

An Enabling Capability Platform is defined by its people, infrastructure, relationships (internal and external), and subject matter expertise. This allows RMIT to deploy its areas of excellence and strength to comprehensively address critical local, national, regional and global challenges and to nimbly capture emerging opportunities.

The role of the ECPs is to:

- drive impact in research and innovation
- enable a significant lift in research capability
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- serve as focal points for strategic partnerships
- provide a catalyst for effective impact-associated research training
- underpin enhanced research capability supported by a positive culture of service and support.

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# Contents

<a href="#">Opening Address</a>	8
<a href="#">Melbourne 8 Million</a>	10
<a href="#">Engaging First Nations</a>	14
<a href="#">Empowering Health</a>	16
<a href="#">Sustainability at EFI</a>	20
<a href="#">Ethical Innovation &amp; Industry Transformation</a>	22
<a href="#">Event Partners</a>	25
<a href="#">Special Events &amp; Tours</a>	26
<a href="#">Collaborative Shared Futures</a>	28
<a href="#">Overheard at EFI</a>	34
<a href="#">EFI By the Numbers</a>	35
<a href="#">In Memoriam</a>	36
<a href="#">Acknowledgements</a>	37

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# Welcome to EFI 2019

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## Message from the DVC R&I

Engaging for Impact 2019 was RMIT's signature research and innovation event that brings together local and international leaders from industry, government and academia.

We had an exciting program and I'd like to thank you all for joining us for an inspiring three days as we heard from some of the leading researchers and thinkers in their fields.

We look forward to exploring how we can best work together to tackle some of the significant challenges arising, and to capture the many opportunities emerging, in our changing world.

I hope you all enjoyed Engaging for Impact 2019 and thank you for being a part of this event and helping to make it a success.

### **Prof Calum Drummond AO**

Deputy Vice-Chancellor Research and Innovation and Vice-President RMIT University

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## Message from the EFI Chair

Over the last three years, we have seen Engaging for Impact grow from strength to strength to become a major annual event for researchers to build collaborative engagement with industry and government.

Such an event succeeds only because of the outstanding effort and commitment from a very large number of staff, partners and stakeholders.

I would like to express my gratitude to our EFI Event team, our project support interns, Directors and affiliates of our Enabling Capability Platforms, the event Steering Group, event Partners and colleagues from many parts of RMIT.

We are looking forward to the next event and hope you will join us in co-creating Engaging for Impact 2020.

### **Prof Swee Mak**

Assoc Deputy Vice-Chancellor Research Capability, Professor of Innovation

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## Opening Session

A hush swept the audience as the Deputy Vice-Chancellor Research and Innovation and Vice-President of RMIT University, Professor Calum Drummond AO, took the stage. Introducing the opening of Engaging for Impact in his role as MC, Calum outlined the purpose of this signature research event: “Engaging for Impact has been designed to challenge our thinking and create the impact we can only achieve together.”

The Vice-Chancellor and President of RMIT University, Martin Bean CBE, delivered opening remarks. He stated “Engaging for Impact goes to the heart of what RMIT is all about ... Providing education that continues to translate to the real world.” RMIT has a rich history with a lot to be proud of and, in collaboration, we continue to grow and adapt. Children in today’s world have never known life without instant messaging. When a device the size of your hand can do so much, even making food materialise in front of you, the ability to keep pace is more critical than ever. Learning is a highly sought-after skill, and collaboration is an essential tool for having an impact. RMIT’s goal is to bridge the gap between knowledge and research. What we discover – we share. “Open your minds, lift your eyes and think forward,” he urged. “We can change the world.”

**“Engaging for Impact has been designed to challenge our thinking and create the impact we can only achieve together.”**

Special guest, Frank McGuire MP stepped up to deliver a formal welcome, acknowledging RMIT’s research excellence and genuine engagement with Indigenous reconciliation. Frank has passionately driven Victoria’s medical research strategy and paved the way in the United States for partnerships with major research institutions. He was notably enthusiastic to take up then President Barack Obama’s challenge to find a cure for cancer, calling for a partnership with the former President’s ‘Moonshot’ quest to cure cancer. “We need to aggregate our assets and create bigger opportunities,” he stated. “When you see an opportunity, take your idea to a higher level.”

Frank spoke on the case of the ‘populate or perish’ argument, based on the belief that economic growth can be obtained through a surge in population numbers – having migrated as an infant in 1958 to the raw fringe of Broadmeadows, community growth was a topic close to his heart. This mention led to a story of his youth in Broadmeadows where he would make his way to university, through the saw-toothed factories that etched the skyline,

smelling the fear from the slaughterhouse, bypassing the hustling dealers around Spencer St and making his way through the swarm of factory workers donning their hairnets and reading romance comics. On this daily pilgrimage he saw that we needed to focus on the bigger picture and bigger ideas. “This is your start in the land of opportunity.”

**“Engaging for Impact goes to the heart of what RMIT is all about ... education that translates to the real world.”**

Distinguished Professor Billie Giles-Corti, Director Urban Futures Enabling Capability Platform, spoke on Melbourne’s population growing faster than any other Australian city. While this raised many challenges related to infrastructure and services, she saw the biggest problem as the pressure on our ecosystem. Reaffirming RMIT’s commitment to the Sustainable Development Goals and reducing our carbon footprint, she welcomed further discussion and research on new ways forward. To wrap up her speech, a snippet of the short documentary film ‘Living Liveable,’ recently produced by the Urban Futures Enabling Capability Platform and later launched at EFI, was shown.

Professor Magdalena Plebanski, Director Biomedical and Health Innovation Enabling Capability Platform, introduced the topic of Empowering Health. “Kodokushi means solitary death in Japanese,” she related. “1 in 6 Australians are over the age of 65, and most of them are lonely and at risk.” She cautioned that with demographic changes occurring, there just aren’t enough people to look after our elderly, before citing another concerning statistic: the first cause of death in individuals aged 25 to 45 is suicide. Mental health is an alarming public health issue – if you’re a member of the Indigenous community you are twice as likely to commit suicide, and if you are LGBTQI that number quadruples. But in positive news, technology growth means we are more connected than ever, and these technologies can be harnessed in a more socially responsible manner to have a better impact on the community. “It’s very exciting to feel the pace of innovation in biomedicine.”

Professor Anne-Laure Mention, Director, Global Business Innovation Enabling Capability Platform, rounded out the opening address with a discussion of Ethical Innovation and Industry Transformation. Beginning with the role that educators have to play in ethical innovation, she then spoke of hope, fear, opportunities and the future with evolutionary robotics such as robot priests. “How can we define which actions are justifiable?” she queried. “It’s unreasonable to expect that every stakeholder is a trained ethicist.”

Sufficiently energised by these scene-setting perspectives, Professor Calum Drummond AO issued this challenge to the audience: “Let’s go co-create our future.”



## Drawing for Impact with Sketch Group and the EFI app

For EFI 2019 we partnered with Sketch Group to provide live sketch visualisations of the keynote panels and sessions throughout the event. Situated at the back of the auditorium during keynotes, our artist Lucinda brought to life the ideas and arguments being presented by our speakers.

With multiple sessions running at the same time, it seemed impossible for her to continue this craft beyond the keynote panels, but thanks to the official EFI app and the social wall, she was able to create visualisations of multiple sessions taking place at once.

The EFI app was developed as an all-in-one event tool, providing the program, check-in details, information on

speakers, networking capabilities, and the social wall for attendees to share their insights. When not connecting with fellow attendees, guests could open up the social wall and share comments and pictures of what was setting their mind on fire during EFI. Lucinda was able to engage these comments from the social wall to sketch out the brightest spots of each session and create a visual rendering of what happened during every presentation at EFI.

We've reproduced the resulting graphic recordings throughout the magazine. We hope you enjoy the results.





# Melbourne 8 Million

With Melbourne's population set to reach 8 million by 2051, the work of building a robust and resilient city for our communities must start now.

## Fast facts about Melbourne's growth

- Melbourne now ranks with the fastest-growing cities in China, India and Columbia.
- Melbourne's CBD is home to 160,000 people, but the number of daily visitors is more than 900,000.
- More than 560,000 people in Melbourne live in poverty.
- Over 20,000 people are homeless each night in Melbourne.
- Melbourne's rate of population growth is increasing.
- Australia is one of the few developed countries without a high-speed rail.
- With a population of 8 million, Melbourne will need 670 billion litres of water a year, but current estimates predict we'll have only 400–500 billion.

Professor Paul Gough chaired a relevant and thought-provoking keynote panel addressing the challenges of Melbourne's rapid growth. With a population boom unrivalled by any other Australian city, Melbourne faces critical issues around housing, sustainability, social equity, transport and resources that the panel speakers tackled in depth.

Uniquely qualified in this topic, as former Deputy Premier and Minister for Environment and Water and now chair of Monash Sustainable Development Institute, Professor John Thwaites opened the discussion on Melbourne's need to find viable future water sources for the growing population and protect the health of our waterways. With the unpredictable effects of global warming and our ever-expanding roads and pavements that render the ground impermeable to water, Thwaites argued for diverse sources of water, including recovering storm and recycled water. Turning to the role of research in policy development, Thwaites was blunt in his assessment: "5,400 research papers are published every day. Are they translated into effective action? In short, no. They have very little impact on policy." Conceding that things need to change "on both sides," Thwaites encouraged researchers to engage with industry and develop networks outside academia.

**"Melbourne's title of 'the most liveable city' is a bit hollow."**

Emma King, CEO of the Victorian Council of Social Services, started her speech with a reminder that while the future beckons there is much work still to do in Melbourne's present. "Melbourne's title of 'the most liveable city' is a bit hollow," she contended, "the truth is more complicated." Citing the recent Poverty Atlas findings, King said that while poverty has an uneven distribution around Melbourne and Victoria, "not one suburb is poverty-free." More than 560,000 people in Melbourne currently live in poverty, 40 per cent of whom are under 24 years old. With jobs no longer a guarantee of comfort and over 20,000 people homeless each night, the face of poverty is changing. "For many," King said, "Melbourne is not very liveable. We can and must do better." Arguing for a systemic approach that joins the dots between individual policies, King also stressed the importance of



consulting with the populations affected by poverty. “The question needs to be: how can we help?”

Deputy Pro Vice-Chancellor Ralph Horne turned the discussion to how Melbourne might accommodate eight million people, arguing that previous strategies such as building urban high-rises or encouraging movement to regional areas were limited. With our present model of suburban sprawl reaching its natural limit, and with commute times already prohibitively long, Horne suggested that it was time to think seriously about multiple urban centres connected by high-speed trains.

Lord Mayor Sally Capp brought the panel to a close by enumerating the City of Melbourne’s many projects, initiatives and achievements in sustainability and community co-creation. “For Melbourne, this is an exciting pivot point. We’re certainly feeling the growing pains, but the many challenges need our optimism and hard work.” She emphasised the challenges of implementing policy in a city as large as Melbourne: “New policy and action will largely need to be retrofitted to a city that needs to keep moving at full pelt. Melbourne is an economic powerhouse.”

Following the individual speakers, the panel Q&A prompted conversation regarding how we should build better relationships between academic research and government, with trust seen as a critical factor. Interdisciplinary research, work with industry and learning to pitch work in a political context were good ways to broaden the sphere of impact to the benefit of Victorian, Australian and international communities.

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## Keynote Speakers

**Sally Capp**  
Lord Mayor, City of Melbourne

**Prof Paul Gough**  
Pro Vice-Chancellor, Design and Social Context and Vice-President, RMIT

**Prof Ralph Horne**  
Deputy Pro Vice-Chancellor, Design and Social Context, RMIT

**Emma King**  
CEO, Victorian Council of Social Service

**Prof John Thwaites**  
Chair, Monash Sustainable Development Institute, ClimateWorks Australia and Melbourne Water

# Melbourne 8 Million Sessions

Experts from industry and the academy tackled the challenges facing a rapidly growing Melbourne in these key sessions.



## Metropolitan Governance: the Victorian challenge

Industry and research professionals have investigated whether Victoria's model of metropolitan governance can effectively address Melbourne 8M. Effective metropolitan governance is at the heart of addressing the issues around population growth in the Melbourne 8M scenario and achieve the Sustainable Development Goals. Victoria has been at the forefront of experiments in metropolitan governance in Australia but where have we landed in the 21st century? We considered the four R's of transformative governance – rescaling, responsibility, roles and resources – in relation to Melbourne's key growth challenges.

## Housing Victoria's future

The market provision of new housing as a combination of low density sprawl plus super-dense apartments is not the answer for Victoria's housing future. We need a new model for housing growth that can turn around unsustainable urban development patterns. We also need to provide for the increasing number of households who are neither able to enter the housing market in an appropriate location, nor eligible for social housing, with viable, secure housing options.

New design solutions, ways of financing development and strategies for managing growth were proposed. Working together, Victoria can become a leader in the global conversation about the future of cities and human habitation.

## Australia's next-generation smart power and energy systems

Australia's energy industry is in transition as old paradigms are replaced by new technology. This fundamental transition poses a number of challenges for the energy industry that require collaboration with leading research institutes. Important topics discussed include frequency regulation and control in power grids, and applications of data analytics and machine learning in the energy industry. This dialogue between industry and the RMIT community will lead to fostered industry engagement and joint projects such as internships, scholarships, capstone projects and Australian Research Council Linkage Projects.

## Transport@RMIT Network Launch

The interdisciplinary nature of transport requires solutions that bring together expertise across a range of fields. Transport@RMIT is a University-wide network of transport researchers and educators to enhance, promote and deploy the University's interdisciplinary capability in transport.

This session formally launched the Transport@RMIT Network and included two panel members from the transport industry who set out key transport issues. A discussion of potential solutions was presented by RMIT researchers in response to these issues. This led to future opportunities to shape and deliver research projects that respond to the needs of the transport industry.



## How to use crowdsourcing to increase community engagement in local and global issues

The complexity and interdependence of cities calls for input from the whole community to solve city challenges. New collaborative models are now providing new avenues for civic engagement and shifting the influence of citizens from participation and inclusion to active collaboration and empowerment. It's important to expand communications about research interests and opportunities in this area through collaborative design thinking. The results of these discussions informed creation of an online platform (Crowdsourcing Research Network) to provide a collaborative space for participants and create a crowdsourced repository of best practices and future work in this field.

## Simulating the city: implications for policy, practice and the research agenda

We explored how new advances in large-scale urban simulation can be utilised to conduct policy-relevant research. New technologies, faster computers and better modelling frameworks have made it possible to conduct large-scale urban simulation across many different domains.

We heard from government organisations and universities on how they are using urban simulation to influence policy and practice across domains including transport, emergency management and public health. We also provided an overview of the recent ABM Hack event, Melbourne's first interdisciplinary multi-institution urban simulation hackathon.

## Tackling energy hardship: creating synergies with Ageing in Place initiatives

Home support and care enables 750,000 older Australians to live independently as they age. However, current services do not address the significant energy-related challenges they may face, due to a combination of poor housing, low incomes and rising energy prices.

An innovative RMIT-funded project examined ways to better support the 280,000 older Australians experiencing energy poverty by integrating efficiency and affordability initiatives into the Care at Home system.

Industry partners and researchers reflected on their findings, explored upscaling opportunities and shared their insights on how other multidisciplinary efforts could reduce energy-related problems.

## Urban greening and waterways: transformative research and policy

There is significant investment directed at transforming Melbourne's waterways into biodiverse, healthy, green spaces. These transformations offer new opportunities for driving positive socio-ecological outcomes through innovative research and policy making.

A panel of industry partners and researchers, involved in major urban water transformations currently underway in Melbourne, shared their insights, findings and future plans. This was a must-attend session for researchers and potential partners interested in future collaborations on urban waterway and greening transformations.

# — Engaging First Nations



Since 1992, RMIT has dedicated itself towards a vision for reconciliation to which Engaging For Impact 2019 proudly contributed. Recognising the importance of building better relationships between the wider community and Australia's First Nation people for the benefit of all Australians, EFI 2019 went to great lengths to ensure mutual respect and understanding. This could be seen firsthand through several of the initiatives undertaken during the event.

## Welcome to Country

Our Welcome to Country was provided by Wurundjeri Elder, Perry Wandin, who shared a story of his father's relationship with the land that was, and always will be, theirs. Perry is a Cultural Heritage Officer with the Wurundjeri Land Council.

## Combining culture and art

Tasked with creating the visual identity for each of the four topics Engaging For Impact 2019, Taylah Cole approached the weighty task with confidence. As a proud First Nation woman and recent RMIT graduate, Taylah believes that she produces her best work by sharing her culture through her art – a statement hard to refute when you see the final results.

"Indigenous people in the past haven't been able or allowed to practise culture and art," she said. "I am so lucky and honoured to remember them during this process. I hope it prompts others to take up opportunities and give it a go."

Taylah's design, used across the four Engaging For Impact 2019 topics, features the native plant *Banksia Marginata*. Commonly known as the Silver Banksia, the highly versatile shrub has been utilised by Victorian Indigenous communities throughout history in a myriad of ways.

The pod of the Banksia was repurposed as a comb, the flower spikes were often soaked in water and mixed with wattle gum to create a sweetened drink and the dried flowers used as a strainer for drinking water, or as a paintbrush. As such a transformative plant, it's very fitting that Taylah chose to incorporate the Banksia into her design, representing the event's values through its useful and adaptive nature.

**"I am so lucky and honoured to remember my ancestors during this process."**

## Walk with Boon wurrung elder

During EFI, attendees were given the opportunity to explore the multiple, multisensorial and contested modes of making place with TIMeR, an Augmented Reality audio-walk featuring stories of land, river and sky with Boon wurrung Elder N'Arweet Carolyn Briggs.

Participants were transformed into wayfarers as they moved across the RMIT campus to uncover new insights on familiar routes. Those unable to make the hosted tour could use the EFI 2019 app to take a self-guided tour instead.

TIMeR is the first in a series of projects exploring stories of place from multiple positions grounded in Indigenous Australian knowledge, developed with collaboration from the Ngarara Willim Centre and Elders in Residence. A special thanks to Hugh Davies, Olivia Guntarik and Troy Innocent for bringing this incredible tour to life.



## Indigenous flavours

As a way to both acknowledge and celebrate the traditional owners of the land, the catering at EFI 2019 served up mouth-watering dishes made from delectable native flavours of Australia. Throughout the three days, attendees and speakers were treated to meals featuring aromatic lemon myrtle, versatile pepperberry, tart-yet-sweet rosella, rich-in-minerals bush tomato and coffee-like wattleseed. The polenta cakes with tangy lemon-myrtle syrup were a particular favourite!

Guests paired these flavours with sugar-free Australian mineral water provided by Sips Sparkling, which were infused with native Australian Kakadu Plum, Lemon Myrtle, Strawberry Gum and Davidson Plum. Attendees were so enthusiastic about the presentation of the beautiful dishes that EFI will continue this initiative into the future.

**“Reconciliation is part of RMIT’s DNA.”**

## Looking forward

Despite our best efforts to feature more First Nation Australian voices in our panels and sessions, scheduling conflicts limited our ability to deliver this. In 2020, we will continue to grow speaker diversity, as reconciliation is part of RMIT’s DNA. In line with RMIT’s commitment to learn, build and grow in order to create an equitable future for Australia, keep an eye out for RMIT’s *Dhumbah Goorowa* reconciliation plan for 2019–2020.

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## Bush flavours

Lemon myrtle, rosella, wattleseed, bush tomato, finger lime, macadamia, sandalwood nuts, quandong, rosella, pepperberry and kakadu plum.

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## *Dhumbah Goorowa:* **‘a commitment to share’**

On February 20th, RMIT’s Reconciliation Community of Practice came together to kick-off reconciliation for the year. Martin Bean CBE (Vice-Chancellor and President), Stacey Campton (Director of Indigenous Policy and Impact), and Mark McMillan (Deputy Pro-Vice Chancellor, Indigenous Education and Engagement) spoke to the group about our accomplishments so far and the journey ahead that will guide us toward a shared future.

It is the work of our Community of Practice that propels reconciliation actions forward and we are excited for all the transformative changes that will come with *Dhumbah Goorowa*, our second reconciliation plan. Attendees were recognised for their efforts and reminded by the Vice-Chancellor that the journey ahead requires a commitment and action as we move forward to transforming the culture of RMIT.

As hosts of the kick-off, Ngarara Willim Centre staff would like to thank the Indigenous owned and operated catering company, Mabu Mabu, and recognise that this event took place on the traditional country of the Woi wurrung and Boon wurrung language groups. They acknowledge Elders, past, present, and emerging, as well as the traditional custodians of the land where we work and conduct our reconciliation journey.



# Empowering Health

Rapid advances in medical technology, big data, disease prevention and smarter systems offer exciting opportunities to put future healthcare into the hands of the people.

## Fast facts about health

- Pollution kills at least 9 million people globally each year.
- One in three Australians aged 65 years and over come from diverse cultural and linguistic backgrounds.
- In Australia, there are 5.5 million Baby Boomers heading towards retirement or already retired.
- By 2020, chronic inflammatory diseases are expected to contribute to 73% of all deaths globally.
- Of the 4.1 million unvaccinated Australians, 92% were adults.
- Climate change will be responsible for 250,000 deaths in the next decade.
- Our aged care system does not accommodate diverse linguistic, cultural, ethnic, sexual and gender-diverse identities.

Empowering Health was an exploration of innovative health care and a deep-dive into the problems plaguing Australia's health industry and research. Joining our Chair, Professor Peter Coloe, Professor Sarah Rowland-Jones, Lee-Ann Breger, Dr Bianca Brijnath and Professor Katie Flanagan discussed the pressing and complex issues health industries and researchers are striving to solve.

Sarah Rowland-Jones argued that we cannot ignore the devastating effects climate change is having on ecosystems, nor can we disregard the intrinsic connection between our health and the health of our planet. From world food shortages to the spike in diseases caused by natural disasters, she stated that climate change will be responsible for a quarter of a million deaths in the next decade. Combating this will take a unified, multi-disciplinary, government and cross-industry effort to both prevent climate change and create contingency plans for health disasters.

**"Climate change will cause a quarter of a million deaths in the next decade."**

In light of the recent increase of measles cases in Australia, Katie Flanagan called for more involved intervention on people who refuse vaccinations based on misinformation. The rise in the anti-vaccinators is slowly unravelling the greatest health innovation and threatening the lives of children, the elderly and the chronically ill. This concerning flare in preventable diseases is also a matter of accessibility to vaccinations. Researchers have been able to create vaccines with less adverse side-effects and develop easier, less invasive inoculation methods such as inhalation. However, getting the ball rolling will require dedicated co-design. Vaccinations can take up to a decade to be ready for distribution – by igniting political will to speed up the development we can wipe out more diseases like polio.

As the Royal Commission into Aged Care Quality and Safety brings the failings to humanely care for our aging population to light, Bianca Brijnath highlighted that our current institutions and health systems are not equipped to care for the increasing number of people entering retirement



# Empowering Health Sessions

Experts from industry and the academy examined the exciting opportunities and advances in the future of healthcare across these key sessions.



## Designing for ageing well

How do we age well in a technology-driven world? As societies grapple with ageing populations that are living longer, the challenge of ageing well has become central. To find lasting solutions, we need human-centred and interdisciplinary approaches in technology design.

This is what we explored with the future at the Designing for Ageing Well Challenge. We discovered the creative and innovative work of finalist teams as they unveiled their ideas – solutions that lie at the intersection of digital health and ageing well. Presented in collaboration with Telstra.

## Gender lensing and sticky floors

This panel examined career progression and promotion, self-promotion and gender differences from economic, social and cultural perspectives. The accounts, presented by different researchers, focus on the particular behaviour imposed on (or adapted by) working females that lead to situations that impede their professional growth and constrain opportunities for progression and promotion. This session presented insights and expectations for institution and leadership teams to deal with the increasing issue of sticky floors, and developed frameworks to counter the growing issues related to gender inequality. Findings were used by managers and industry leaders to design and implement effective policies and strategies to deal with the issue of increasing gender gap and led to new research partnerships.

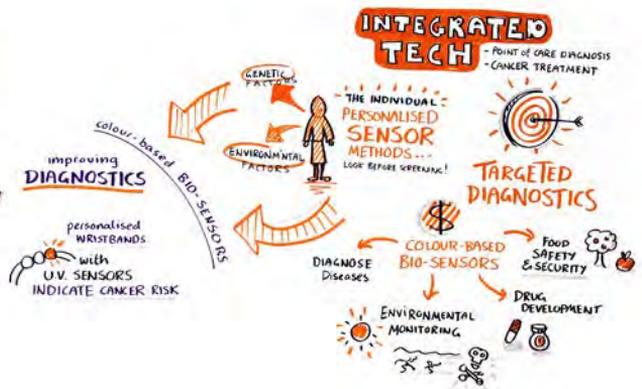
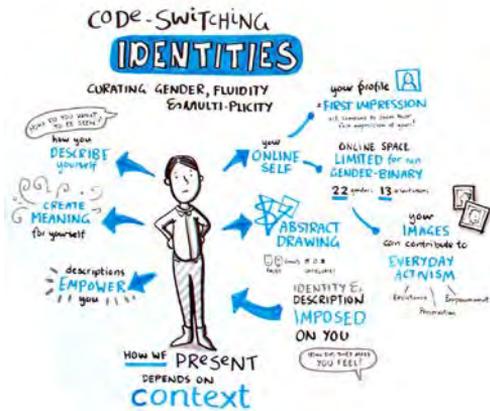
## Biomed Fast Pitches

This quick fire session showcased the diversity of impactful external engagement activities by RMIT researchers supported by the Biomedical and Health Innovation Enabling Capability Platform.

Including local collaborations to enhance Aboriginal athlete health, cross-disciplinary research at the interphase of understanding brain development, engineering implantable brain scaffolds, international engagement with our colleagues in complementary medicine and novel drug discovery in China. Attendees helped celebrate success and shaped our Biomedical and Health Innovation future!

## Code-switching identities: curating gender, fluidity and multiplicity online

Despite gender-diverse stories becoming increasingly visible in mainstream media and culture, many people remain confused about non-binary gender and pronouns and are afraid of asking questions that may cause offence. Meanwhile, non-binary gender issues still pose difficulties for the provision of education, health services and citizenship. Employers are increasingly expected to guarantee safe work-spaces and policies for gender-diverse staff and clients, while responding to the moral backlash against political correctness. This issue provides an opportunity to gain greater insight into both gender-diversity and the ways we all manage multiple self-representations for different audiences and contexts.



## Blockbuster drug of the century: engaging your patients in their own health care

Patient engagement in health care is considered 'a blockbuster drug' of this century. Among other benefits, involving patients in the development of their management plans contributes to better health outcomes and reduced cost to the system. Attendees gained a clear understanding of the scope of patient engagement, they were among the first to see a draft framework to enable research work in this space, and had their say in the future with the opportunity to contribute to the framework before its finalisation and distribution to stakeholders.

## Biomolecules for biomedical applications

Biomolecules are a source of choice for the design of biomedical materials, as they are intrinsically well-tolerated by the body. This session provided an overview of the latest works in this domain, with a focus on both the fundamental aspects of these materials as well as their translation to commercialisation.

## Integrated technologies for point of care diagnosis and personalised treatment of cancer

We invited attendees to be a part of our vision for a new multidisciplinary approach to the diagnosis and rapid and effective personalised treatment of cancers. We introduced the benchmark in cancer diagnosis and treatment, as well as identified major challenges and proposed a selection of multidisciplinary RMIT capabilities that could be harnessed to solve these problems. Through an interactive discussion with attendees, we then explored how we can partner to further develop and translate our solution to continue meeting the needs for future care.



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# Sustainability at EFI

RMIT and EFI are strongly committed to the UN's Sustainable Development Goals through learning, teaching and research.



The Sustainable Development Goals inform the research, strategy and aims of the Enabling Capability Platforms, and this was seen throughout our sessions and keynote panels. We also designed the EFI 2019 experience to reflect this priority. Minimising our carbon footprint and reducing the waste created were driving forces behind our decisions around catering, communications, registration and the attendee experience.

We want to thank the EFI community for their help in reaching our goal of a low-waste event. Reusable water bottles and coffee cups were seen throughout the event, and we were impressed with how savvy our attendees were when sorting recyclables and rubbish.

## No single use plastics

At EFI 2019 we proudly managed to eliminate all single-use plastics from our catering, event signage and communications. Working alongside our wonderful caterers, CNK, we provided washable crockery and cutlery, with paper lunch bags for eating on the go. Drinks were provided in cans, glasses or ceramic mugs, and we strongly encouraged the use of reusable coffee cups and drink bottles by providing refill stations around the event.

The best way to be sustainable is to reduce waste production in the first place, so we made a conscious decision to use date-agnostic signage which can then be used in the future. We were similarly motivated when choosing table and stage decorations to plan for a longer life for anything we purchased. The beautiful table arrangements of native florals and bush food seedlings (with no florist foam) by Little Floral Soul were eagerly repurposed!

## Recycling

We made every effort to add in extra sorting bins to properly separate our rubbish, with clearly signed bins provided for recycling and waste. Crew were on hand to help with sorting, and again CNK were committed to following our recycling procedures.

## Local and seasonal food

Our caterers, CNK, are passionate about creating food that leaves an impression, and know the key to great food is local, seasonal and fresh ingredients. CNK always use local ingredients from small to medium scale Victorian producers, and only source sustainable seafood. They were also happy to incorporate 'bush tucker' flavours into the menu they created for us, in recognition of the Wurundjeri people of the Kulin Nations, our first practitioners of sustainable land management.

## Speaker gifts

At last year's event we began the tradition of making donations on behalf of speakers in lieu of thank-you gifts. In 2019, we surveyed the delegates in the lead up to EFI, and were able to determine which charitable organisation struck a chord with the EFI community. We offered attendees a shortlist of organisations who were just getting started or lacked other sources of revenue so that our contribution would have maximum impact.

As a result, Sleepbus, the Australian Conservation Fund, Friends for Good and the Indigenous Literacy Foundation each received a donation on behalf of our speakers.



### **Banned the bag**

While our previous year's event bags and refillable drink bottles were sturdy enough to be genuinely reusable, this year we made the move to do away with them altogether. Having never done a branded stress ball or pen we reinvested the funds allocated for merchandise into a better app and improving the overall event experience.

### **Future ready**

A core part of our event design principles for EFI 2019 was to utilise digital platforms wherever possible. Not only is digital communication sustainable, it allowed us to be flexible, up-to-date and responsive to the needs of speakers and attendees alike both before the event and once it was underway. Our EFI website with the full program and registration portal was live 100 days earlier than the previous year, and updated with news and changes throughout the event.

The EFI app was central to our communications and to attendee experience. It offered a full program and the ability to create and manage a personal itinerary, as well as information on all speakers and attendees. Through the app, we made event check-in paper-free, and managed bookings for keynote sessions and wait-lists similarly. To make networking as seamless as possible, the app enabled the creation of personal profiles with keywords and preferences that could be searched and matched. Meetings in our dedicated meet-up space could be reserved via the app. Contact exchange was as simple as scanning a code – no more business cards or scrap paper to lose or forget!

## **Did you know ... ?**

- Pedestrians account for 89% of travel through Melbourne's CBD, yet only 24% of the space is dedicated to them.
- In the City of Melbourne each week, 300,000 wheelie bins worth of recyclable household materials are mistakenly carted off to landfill.
- In Australia, 20 trees and 90,000 litres of water are required to produce one tonne of printer paper.
- Victorians generate 12.9 million tonnes of waste each year, with a third going to landfill.

## **But the good news ...**

- 69% of central city workers arrive by public transport.
- Three quarters of Victorians bring their own bags for food shopping.
- Since 2001, the amount of recyclable material diverted from landfill has increased by 64%.
- In Victoria, a legislative ban on lightweight, single-use plastic bags will begin from the end of 2019.
- Some local councils in Victoria are planning to eliminate plastic bags, balloons, straws and packaging for all business areas including events and activities. The Sydney Mardi Gras has even begun phasing out plastic glitter!



# Ethical Innovation & Industry Transformation

Doing something better is not always the same as doing the right thing. Where does ethics sit in the race for innovation?

## Principles of Ethical Innovation

UNICEF's Office of Innovation developed these principles through their work with governments and the private sector in applying technology for community development.

- Design with the user
- Build for sustainability
- Reuse and improve
- Understand the existing ecosystem
- Be data driven
- Do no harm
- Design for scale
- Use open source
- Be collaborative

As the world demands more sophisticated AI technology and more efficient business practices, the implications and future outcomes of ethical decision making and the need to empower citizens has never been more critical. Tackling these issues head on, Professor Anne-Laure Mention led a panel on the limits of ethical innovation and the structures, policies and routines that shape ethical boundaries.

Diving into the speed of technological innovation, Cathie Armour examined research, policy and practice mobilisation that helps manage industrial transformation. The Commissioner of ASIC praised the vast benefits of a digital revolution, and encouraged us to act efficiently, fairly and with transparency; to collaborate and find opportunities to work with researchers.

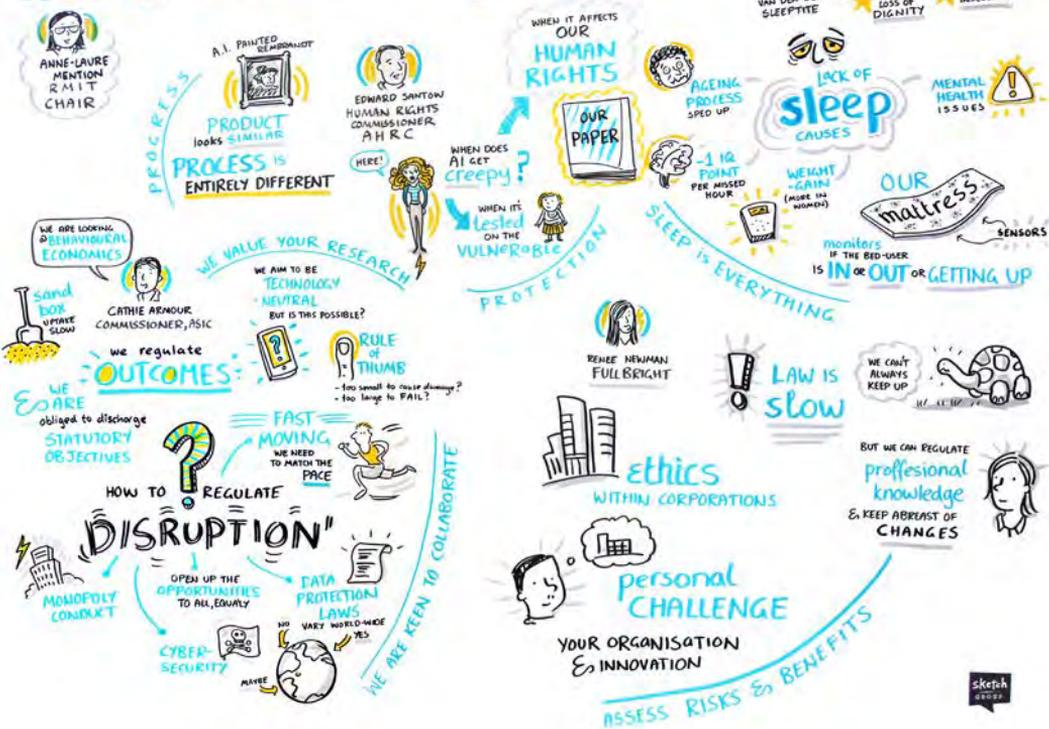
**"Personal information is the fuel of AI ... We need to protect human rights in new ways."**

An eye-opening presentation from Australian Human Rights Commissioner Edward Santow analysed the pace of updating technology and the ethical questions this rapid evolution poses. The accelerated development of autonomous vehicles and personal assistants, such as Google Home and Amazon Alexa, results in increasingly pervasive intrusions on our lives as AI requires personal information to be effective. "Personal information is the fuel of AI," Edward said. Technology is rapidly growing, collecting sensitive information that has implications for human rights far beyond issues of privacy. Using Mattel's latest doll 'Hello Barbie' as an example – a WiFi enabled toy with speech recognition technology – he expressed major concern that companies are beta testing on some of society's most vulnerable groups, including children. "We cannot ignore the threats and risks of innovation and AI," he implored, "we need to protect human rights in new ways."

Cameron van den Dungen, CEO of SleepTite, enlightened the audience on the innovation involved in a good night's rest. Citing research that suggests that a lack of sleep can suppress the immune system and speed up the ageing process, he asserted that "the total cost of inadequate

# ETHICAL INNOVATION & INDUSTRY TRANSFORMATION

keynote #2



sleep to the health system is estimated at \$1.8 billion.” In children, disruptive sleep patterns have proven links to mental health issues later in life.

Cameron explained how he founded Sleepite in 2016 following a growing interest in biometric data monitoring and other innovative technologies and their potential for the bedding industry. Sleepite aims to improve the health and wellbeing of all ageing Australians by developing non-invasive, medical-grade proximity sensors that monitor the heart rate, breathing and position of residents in aged care. This work demonstrated Sleepite’s commitment to collaborate, develop and implement technology, putting dignity and respect back into the lives of senior citizens.

**“The total cost of inadequate sleep to the health system is estimated at \$1.8 billion.”**

Professor Renee Knake, who recently arrived at RMIT to undertake a fellowship as the Fulbright Distinguished Chair in Entrepreneurship and Innovation, challenged the audience with questions of perspective, accountability and practical solutions in ethical decision making. “If innovation is happening around us, who has control?” Renee stated that lawyers should be aware of change – particularly the benefits and risks associated with transformative modernisation – and continue to be ethical in the race to innovation.

## Keynote Speakers

**Cathie Armour**  
Commissioner, Australian Securities and Investments Commission

**Cameron van den Dungen**  
CEO, Sleepite

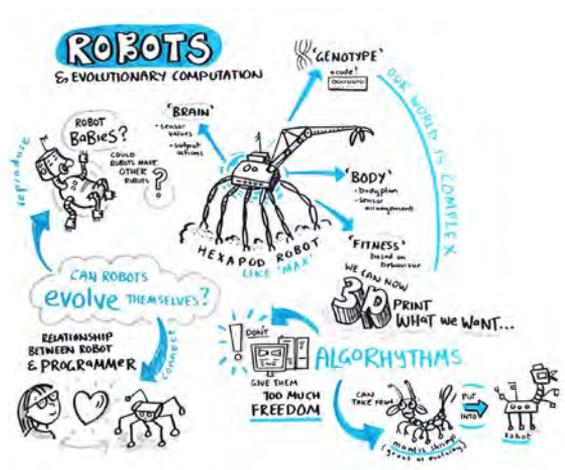
**Prof Renee Knake**  
Doherty Chair in Legal Ethics, University of Houston Law Center

**Edward Santow**  
Human Rights Commissioner, Australian Human Rights Commission

**Prof Anne-Laure Mention**  
Director, Global Business Innovation, Enabling Capability Platform

# Ethical Innovation & Industry Transformation Sessions

Experts from industry and the academy examined the question of where ethics sits in the race for innovation.



## Duty to care: an interactive presentation

The rise of digital technology has deeply affected how we engage in every aspect of society, and not just through digital platforms. This change brings with it deep ethical challenges that we are only beginning to understand. Researchers and industry explored both the positive opportunities of digital and social innovation and the risks and shortcomings. In conversation they raised questions about what ethics actually means, and how ethics are applied and practised in a variety of digital and analog contexts.

## Advancing Australia's space and spatial capability

Australia's space and spatial industries are undergoing rapid change and growth. These changes cover rockets, satellites and sensors, through to the specialists who derive insights from space-based information such as location data and satellite imagery. These diverse technologies are having more impact than ever across Australia's economy.

The 2026 Spatial Industry Transformation and Growth Agenda has identified the need to provide Australia with a national space and spatial capability, to ensure continued and sustainable access to national critical infrastructure, including global positioning systems and satellite earth observation data, for which Australia is currently dependent on foreign states and corporations.

Attendees heard about Australia's plan for the future of space and spatial from a panel of experts directly involved in making this change happen.



## Can robots and evolutionary computation help us survive and thrive? Technical and ethical challenges

Industry guests and a Data61 team outlined basic principles in machine learning and neuro-evolution for an exciting panel discussion. The team used small robots to conduct 'thought experiments' demonstrating the principles of robot reproduction, and discussed the ethics of self-generating robotics systems in relation to long-term autonomy and task-based robotic design. Dr Justine Lacey from CSIRO also weighed-in on the ethical, social and legal consequences of such disruptive science and technologies. We asked participants to synthesise their learnings and pitch some project ideas of their own.

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# EFI Partners



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# UniBank

Engaging for Impact and UniBank were a perfect pairing. UniBank was one of only four banks included in the list of World's Most Ethical Companies by Ethisphere, and has been named on that list for three consecutive years, proving that corporate social responsibility is at the core of who they are. Working hard to keep that gold standard, UniBank ensures that they are accountable for their actions, benchmarking themselves against world leaders in sustainability.

In 2019, UniBank strengthened their position as a sustainable business leader while achieving strong financial growth, demonstrating to other institutions that ethics and profitability need not be mutually exclusive. Putting

sustainability at the forefront of business and integrating it throughout operations, systems and relationships, UniBank strives to create a better future for their members and community through investing in ethical and sustainable business practices.

As part of their collaboration with EFI 2019, UniBank's own Corin Millais (Manager, Ethical Banking) ran a free workshop titled 'Ethical Finance and the Consumer', exploring the ethical issues that the finance sector faces. Taking a deep-dive into the intersection where finance and ethics collide, Corin discussed the megatrend of responsible investment – which reached \$866 million in 2018 – and evaluated the choices available to the consumer.

UniBank has also created the UniBank Women in Physics Prize to encourage women in STEM, a traditionally male-dominated area of study. RMIT and Engaging For Impact would like to thank UniBank for their collaboration and continued support of the 2019 event.



EFI and Allegis Group Company are all about forging innovative and productive collaborations. For 35 years Allegis has been connecting remarkable, talented professionals and employers. Their talent solution services have 500 locations across the globe and they are also

dedicated to upholding corporate social responsibility through supporting an inclusive work environment and supporting not-for-profits.

Allegis is helping EFI create a space for talented industry professionals, ground-breaking academics and bright up-and-coming students to come together to create, problem-solve and create a bright future.

In addition to this partnership, Allegis has contributed to RMIT's mission to restore the Capitol Theatre, a 93-year-old Chicago-gothic style, iconic and long-neglected Melbourne landmark, back to its former glory.

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## Research & Innovation Showcase

Hosted by Professor Swee Mak, the Research & Innovation Showcase highlighted eight successful research translation and impact case studies, presented by a diverse group of outstanding research teams. The projects, supported by RMIT's Innovation Seed Fund, the ECP Opportunity Fund, Venture Mentoring Service and the IP Commercialisation team, ranged from medical science and dementia treatment to improved office layout for productivity and a roadmap for meaningful research engagement with Indigenous communities.

Dr Jianzhen Ou explained the idea behind a low-cost cancer biopsy technique involving a simple blood test that could make screening and diagnosis a simultaneous – and much cheaper – process. Dr Sam Tavassoli's ECP funded project investigates the barriers to adoption of 'disruptive' technologies like the 3D orthopaedic implant printer, and is working to produce a decision-making tool for companies interested in pursuing this pathway.

The ECP Opportunity Fund that supported Dr Tavassoli's work aims to speed up the translation of research, and broaden its reach and scale. This focus on the impact of research is the fundamental aim of both RMIT and the Enabling Capability Platforms. "The Opportunity Fund aims to strengthen the global competitiveness of nascent research," Swee explained.

### "Innovation is the necessary step to turn research into value creation and impact."

Dr Darrin Verhagen delighted the audience with a visual demonstration of his Audiokinetic Jukebox in action. The D-BOX 4D cinema chair combined music with movement to produce an emotional experience with the potential to enhance memory and wellbeing in an ageing population. Supported by RMIT's Innovation Seed Fund and the Venture Mentoring Service, Darrin and his project partner Dr Jenny Robinson are currently field-testing their creation in aged care facilities.

Other Showcase contributors included Professor James Macnae, Dr Leah Heiss, Dr Christine Phillips, Dr Jo Zimpel and Associate Professor Flora Salim. Swee Mak declared the event the "highlight of the day", and warmly congratulated all researchers on their outstanding work. "Research has many aims. It can lead to discoveries, insights, new methods and new knowledge," Swee said. "Innovation is the necessary step to turn that into value creation and impact."

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### Speed Mentoring

A valuable development opportunity for early career researchers and staff.

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## Speed Mentoring

This industry-led career development experience offered an informal facilitated networking opportunity to engage with professionals, sharpen career skills and exchange sage advice. Mentors had the chance to meet the brightest emerging talent and strengthen their leadership abilities, while mentees were given access a wealth of knowledge from a diverse range of experts ready to share their journeys.

Launching with a LinkedIn masterclass run by EFI 2019 partner Allegis Group, the session had a great turnout from beginners needing to gauge the basics, to experienced professional looking for those vital advanced tips. Attendees (both research students and professional), used the session to ask about the dos and don'ts of LinkedIn etiquette and were introduced to a profile assessment tool to optimise their engagement and visibility. HDR students were provided a transformative experience to help them graduate ready for life and work, and professional staff gained valuable perspectives on developing their careers.

### Once the sharing had begun it was hard to stop!

From the moment they connected, both mentors and mentees were absorbed in conversation, eager to impart their wisdom and compare experiences. Once the sharing had begun it was hard to get anyone to stop!



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## Research Awards Celebration

The RMIT Research Award Celebration is one of the year's most significant staff recognition events. It acknowledges and celebrates excellence achieved by individual researchers, research teams, research leaders, supervisors and HDR candidates.

It is through these research outcomes that RMIT is able to continue to bridge the gap between research and impact, benefiting those in the academic community and beyond.

EFI 2019 was proud to acknowledge RMIT's outstanding academic accomplishments and the remarkable value of the recipients' research over three categories of awards and prizes:

- The RMIT Awards for Research Excellence
- The RMIT Awards for Research Impact
- The Malcolm Moore Industry Research Awards

Recipients included Associate Professor Lauren Rickards, for her work in global environmental change, Associate Professor Anastasia Powell for her significant research and policy impact in the area of digital and image-based violence against women, and Associate Professor Flora Salim, for work in digital data, intelligent infrastructure and data analytics.



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## RMIT Tours

EFI 2019 offered attendees the unique opportunity to explore some of RMIT's amazing research facilities, and to learn more about the campus and our efforts to reach goals of environmental sustainability.

### MicroNano Research Facility

The MicroNano Research Facility is a heritage building re-imagined to catalyse cutting-edge semiconductor research. Home to nine laboratories, this 1000 square metre facility is dedicated to bringing together high-quality multidisciplinary micro and nano technology research into a single hub. The facility enables comprehensive research into the design, modelling, fabrication, packaging and characterisation of micro and nano scale devices.

### Virtual Experience Lab

The Virtual Experience Lab (VXLab) is a space where industry and students can access advanced technology and expertise. For all things virtual and simulated, the VXLab allows users to explore collaborative experimental design, operation and testing of global cyber-physical systems. Those who took this exciting tour saw the results of student capstone programming projects in the School of Science involving Red, the VXLab's collaborative robot.

### Uncovering Sustainability on Campus

For those interested in learning more about social and environmental sustainability, the Uncovering Sustainability on Campus tour gave attendees an in-depth understanding of the Indigenous significance of place and culture on campus, and the chance to explore new RMIT buildings boasting state of the art sustainability features.

### Fielding Sounds for Human Wellbeing

Conference attendees looking for a change of pace enjoyed the tour of the creative and unique installation Fielding Sounds for Human Wellbeing. This quirky art-science crossover explored how sound and urban greening can work together to help improve the wellbeing of people, animals and plants in the urban environment. The installation was made up of a series of interconnected triangles that housed a variety of native plants from the Melbourne region.

### TIMeR: Augmented Reality Audio-walk Tour

Participants of this tour were transformed into wayfarers as they moved across the RMIT campus, hearing stories of land, river and sky with Boon wurrung elder N'arweet Carolyn Briggs. This tour allowed participants to explore the multiple, multisensorial and contested modes of making place. It was developed in collaboration with the Ngarara Wilim Centre, Elders in Residence.



# Collaborative Shared Futures

Shared futures mean sharing the journey. How do we want to start?

Melissa Sweetland, Deputy Vice-Chancellor Industry Engagement at RMIT, opened the discussion by touching on the need to accelerate collaborative work and genuinely engage researchers with industry. Melissa guided the panel with thought-provoking concepts, such as the idea that change is easier when there's a burning platform and that sometimes it is the most unlikely of partners that come together to generate the most profound inspiration.

**“We aim to produce breakthrough environmental solutions that protect and nurture our planet.”**

Well versed in collaboration, Professor Jeffrey Koseff from the Stanford Woods Institute spoke highly of the creation and importance of interdisciplinary teamwork. The Institute, which brings together researchers from seven schools, has a bold mission to “produce breakthrough environmental solutions that protect and nurture our planet to meet the vital needs of people today and for generations to come.” Jeffrey utilised this example as proof that interdisciplinary cohesion is the way forward, insisting that we must break from the comfort of traditional systems to readily address the problems we face. He also stressed the power of



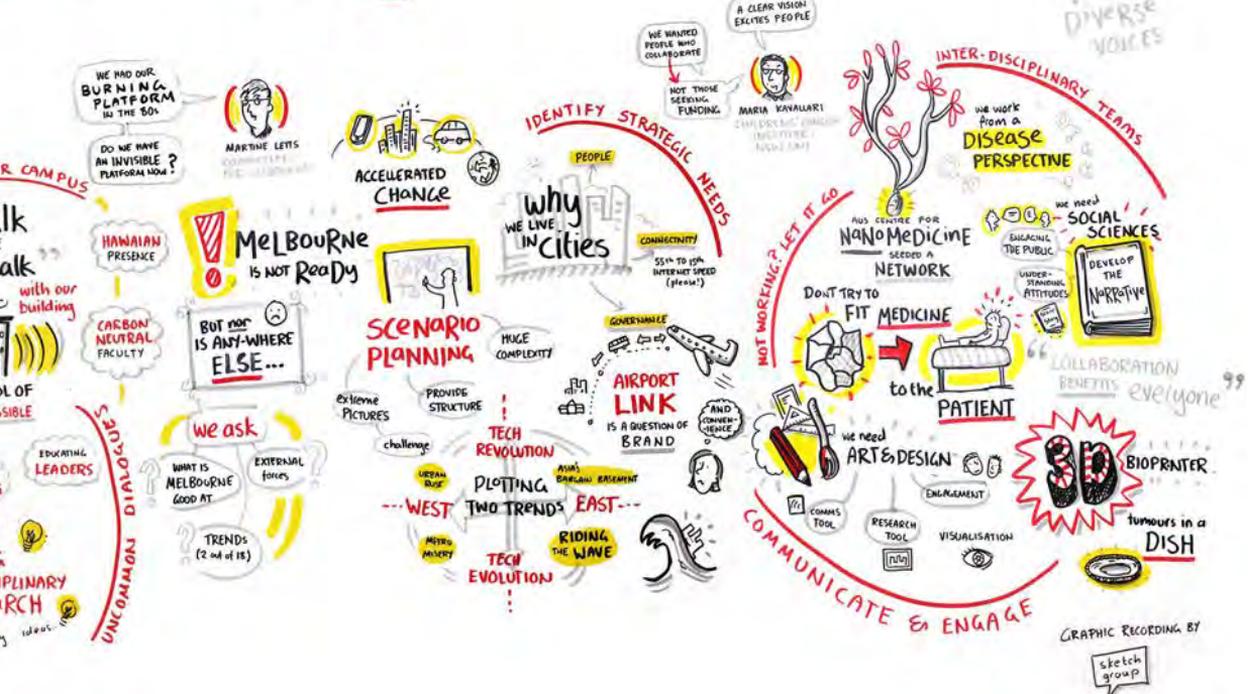
“uncommon dialogues”, controversial ideas, and differing opinions, which can be antagonistic in nature but also encourage productive discussions to find common ground between disciplines and move forward in impactful ways.

Coming from a biomedical context, Professor Maria Kavallaris AM emphasised the same need for engagement across various sectors and industries. While working at the Children’s Cancer Institute at the University of NSW, Maria helped shape the Institute’s vision of a Centre of Excellence that approached nanomedicine research and application from the disease perspective. They found that in order to achieve this, they needed to combine chemistry, physics, engineering, biomedical research and medicine, engaging experts across a range of fields. “It took us two years to understand each other’s language,” she explained.

The Australian Centre for NanoMedicine was launched in 2011 and accomplished the goal of cross-disciplinarity by bringing together the State Government with researcher, clinical and industry engagement through seed funding. The construction of a custom built 3D bioprinter which prints tumours into a dish was a successful outcome of their new holistic approach. These tumour ‘organoids’ are an improved model for studying cancer biology, and help to identify the most effective therapy for individualised treatment. Complex research of this kind requires the input

...ative, SHARED...

# FUTURE



of the broad network of people that the Australian Centre for NanoMedicine has brought together.

Likewise, Committee for Melbourne CEO Martine Letts spoke on the need to link government, research and communities to make Melbourne a better place to live and work. Journeying through Australia's industrial revolutions, she made particular mention of the 4th revolution and the cyber-physical systems we will need to manage now and into the future.

**“We must collaborate across academic, government and business sectors.”**

Echoing statements made earlier at EFI, Martine boldly stated that Melbourne may have been voted the 'world's most liveable city,' but below the surface there were many challenges we still face and a lot of room for improvement (Australia ranks at 55 on the global internet speed ranking, lower than Kazakhstan). In her view, no single sector can tackle Melbourne's challenges alone; we must collaborate across government, business and academic sectors to co-create and share knowledge to plan for the future – “business as usual” won't cut it.

## Keynote Speakers

Prof Maria Kavallaris AM

Head of Tumour Biology and Targeting Program, UNSW

Prof Jeff Koseff

Professor, Civil and Environmental Engineering, and co-director of the Stanford Woods Institute for the Environment

Martine Letts

CEO, Committee for Melbourne

Melissa Sweetland

Deputy Vice-Chancellor, Engagement and Vice-President, RMIT

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# Collaborative Shared Futures Sessions

Experts from industry and the academy came together to develop and deliver collaborative solutions for global challenges.

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## Professoriate Series: Developing a culture of engaged leadership

The media landscape is changing. With more people consuming their news from non-traditional news channels and the era of 'fake news', there is a rapidly growing need for balanced input from credible sources. Academics are sought out by the public and the media as a vital and trusted source of news, and can help shape the public discourse. This calls for a better understanding of how to build and deliver media messages for use across different audiences and channels, and the impact that these messages can have.

This discussion was designed to inspire senior academics about how they might engage with the media and to convey their knowledge and contribute positively to public debate.

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## Growth mindset: tension between speed and quality

Industry can achieve faster user feedback loops through service design and human-centred research. We explored the conflict between the need for speed against the need for direction and quality – sometimes it is just as important to create an environment that breeds ideas. Attendees walked away with rigorous truths, difficult questions and practical resources to apply immediately in your own work. The seminar also looked at how adopting a growth mindset creates momentum. RMIT staff extended the learning from this workshop through developME.



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## More than cash: why and how to work with end users/ industry

We know that active engagement and collaboration between research and industry delivers better outcomes. Researchers who truly understand industry needs are able to ask the right research questions, design effective projects and provide relevant findings. But researchers, policy makers and practitioners still tend to operate in silos, resulting in continuing gaps between policy and practice needs and research evidence.

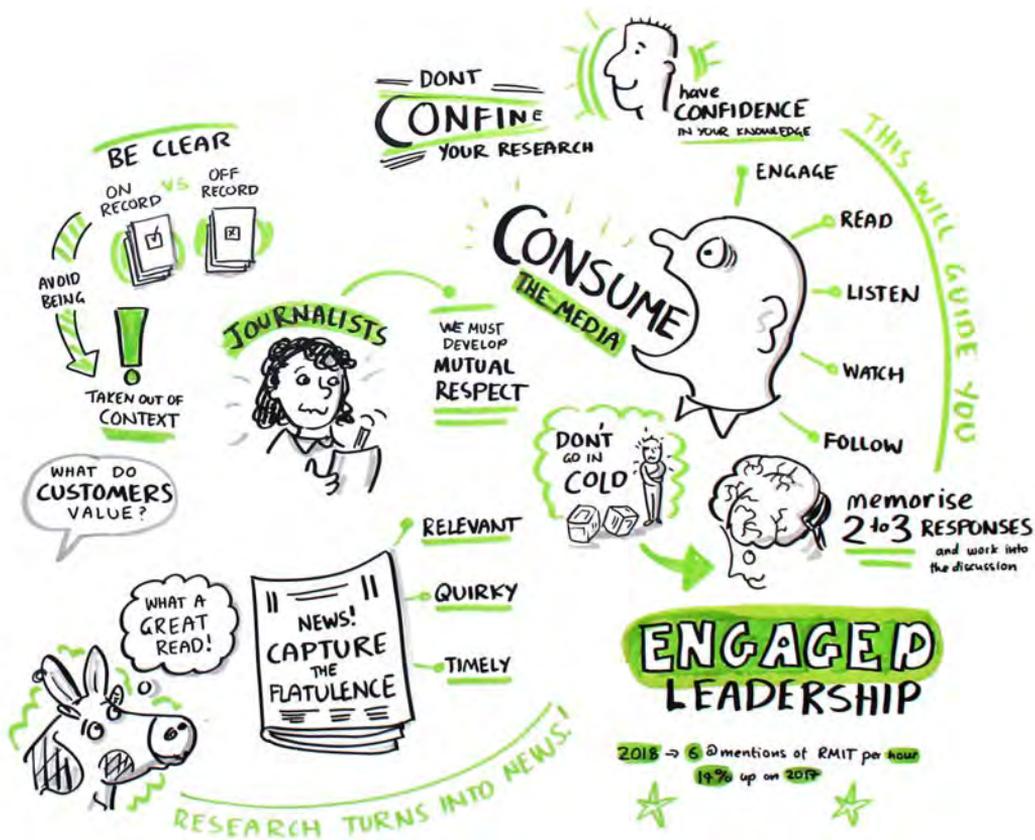
So how do you create and maintain successful research-industry partnerships? A panel of researchers and industry shared case studies of successful collaborations, explored the shared benefits and outlined pathways to real-world impact.

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## Future of research translation:

### 1. Building a collaborative future in digital manufacturing

Digitisation of design and manufacturing is transforming how we build our world. We heard from three research teams as they presented future visions and technology needs for industry 4.0 from technical and human resources perspectives, and in virtual design and testing of airframes. The session offered deep insights, generated from discourse within the university and with our industry partners through exploring how we can collaboratively shape our future.



## 2. Nano-Micrometre materials and their fabrication

How can we harness and realise the immense opportunities of working at the nano and micro scale? Three teams presented their visions and directions for research in this rapidly developing area, drawn from close consultation with external partners.

Attendees learned about the current status, future technological needs and potential of materials on the nano-micrometre scale, from the integration of photonics and microfluidics for better point of care diagnostics, to 3D printed biomaterials and the technological application of advanced optical materials. It was a chance to discover where we are now – and shape where we head in the future.

## 3. Transforming industry: Energy and Construction

In a carbon-constrained economy, the way we use, store and generate energy and the way we construct our infrastructure has to change. Three research teams showcased their visions for the transformation of these two critical industries – energy and construction – developed from structured discourse between university and our partners.

In the energy context, the focus is on portable power and catalytic processes, while for infrastructure the emphasis is on off-site manufacturing and information-driven assembly. They discussed positive change and guided the future of research and collaboration in these major sectors.

## Influencing policy through your research

How can research inform and influence government? Attendees gained insights into how academic research is engaged and used by government in this panel session for researchers seeking to achieve policy impact.

A panel of policy practitioners discussed challenges and opportunities in engaging with university-generated research, including how researchers might best engage with policy makers to provide knowledge relevant to policy and able to have an impact.

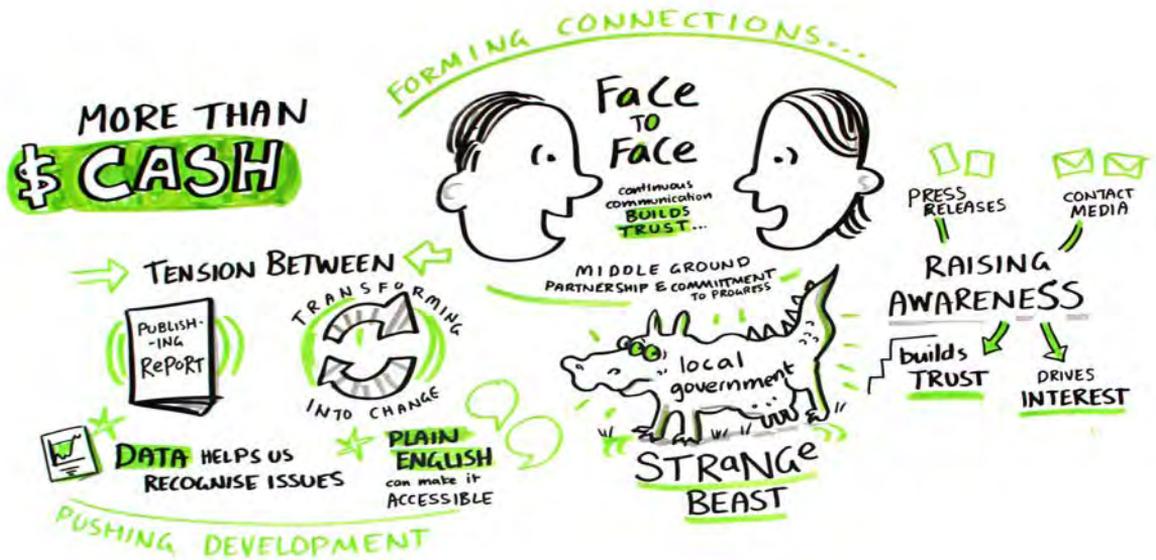
Following presentations from the panel, there was a facilitated Q&A session in which the audience had the opportunity to explore with policy practitioners the ways in which research can better inform policy.

## Protect, publish, engage: research commercialisation fundamentals

Commercialising a great idea, innovation or piece of research can be a complex process that raises many questions. This informative session helped attendees understand the basics, from the benefits of commercialisation, to knowing when to publish, understanding who owns your idea and how to protect it, to how to find industry partners.

This introduction to research commercialisation was essential for early career researchers and those new to the process of commercialisation and equipped participants with the essential knowledge to begin the next phase of their research journey!

# Collaborative Shared Futures Sessions



## Of care and ageing: towards a humane and relevant future

As our life spans increase, causing our ageing population to expand, conversations about how to age well are more important than ever before.

We used multiple lenses to explore complex biological, environmental and social aspects of an ageing population living with chronic conditions such as dementia.

How can a human-centred and interdisciplinary approach allow us to design and provide future care for an ageing population? How does medical science inform us, technology provide the tools and design drive more human(e) and relevant care?

## Recent advances in research integrity

Research integrity – trustworthy, ethical and honest research – underpins the positive impact of research. Research without integrity can't be trusted and may result in negative research impact. As a global human endeavour, what can we share and learn from others to support research integrity? How can institutions and industry partners work in concert to foster cultures of research integrity and ensure positive impact?

This discussion was informed by presentations from experts including Prof In Jae Lee, Director of Korea's Center for Research Ethics, which has implemented novel approaches to influence a rapid 'ethical modernisation'.

## Dense and green cities? Towards social and cultural resilience

Making cities denser seems universally accepted as the way to increase infrastructural efficiency in the urban age. Yet density can also cause mental and physical stress. It is therefore important to explore urban greening approaches that support environmental, social and cultural resilience.

It is also valuable to look at current strategies and leading examples from experts in the field to see what's already working. This started important conversations between industry representatives and academic researchers that needed to take place.

## The accounting ethics revolution

Training for business and professional ethics is challenging because we overestimate our own ethicality and objectivity and we are removed from the context which influences us. At work, we find that we often behave against our own values. So how do we provide opportunities for professionals to develop and practise ethics? The School of Accounting, RMIT University developed a serious game on the code of ethics for the global accounting profession. Launched in November 2018 at the World Congress of Accountants, this serious game provided a three-hour CPD offering that immersed learners in context and allows them to improve their moral awareness and safely and realistically experiment and practise ethics.

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## Innovating with purpose to reach the Sustainable Development Goals

The global community has committed to pursuing 17 ambitious Sustainable Development Goals (SDGs). We explored how to implement them, evaluate progress, and develop the capabilities, information, outlook and relationships needed across governments, business and NGOs/civil society.

This session navigated the establishment of a proposed industry-oriented RMIT SDG Innovation Hub to enable collaborative cross-scale, cross-sectoral linkages and social experimentation on SDG implementation. Researchers and industry partners were invited to come and discuss how it could incorporate their interests while pursuing genuine sustainable development.

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## Social futures for art

At a time when funding for the arts is under pressure, this panel discussion explored innovative social futures for art. It investigated how new research dialogues can promote the value of art for a shared future, as well as how community and industry engagement can enable new voices to narrate art's histories and futures.

Highlighting artistic and curatorial practices aimed at democratising art, we showcased RMIT's commitment to socially-engaged artistic research and invited potential new industry partnerships.

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## Living liveable: the lived experiences of life on the urban fringe

Research shows Melbourne's fast-growing outer suburbs lag behind the rest of the city on a range of liveability measures. Home to 1.6 million people, the large area is governed by a coalition of ten municipalities called the Interface Councils.

We highlighted the issues on Melbourne's fringe and launched 'Living Liveable', a short documentary film showcasing the lived experiences of residents in these outer suburbs. The film was followed by a panel discussion with documentary participants and local government representatives that explored opportunities for research that could support the coalition of Interface Councils in bridging the liveability gaps and inequalities across suburbs.

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## Creative ecologies

What do creative communities across Australia need to thrive? Creativity and critical thinking are often cited as essential for the future of work, while participation in arts and culture is shown to have positive health impacts and play a critical role in building community resilience. So how do we foster these public goods?

We explored the conditions required to build thriving creative communities, and their implementation and evaluation. The outcome contributed to the Creative Ecologies initiative, which is developing a framework and interactive tool for the sector.



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# Overheard at EFI



Filled with pointers for aspiring impact makers and collaborators.



The openness of the event to the broader community was great.



An excellent event and a fantastic opportunity to expand our mindset, knowledge and network!



Overall, a quality professional event, well done to the organisers!



I would like to encourage the team to continue doing this and I am looking forward to attending again in 2020.



I picked up quite a few gems of knowledge this year as well.



# EFI By the Numbers

## Attendance

**1,664**

Registrations in 2019

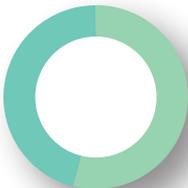
**83%**

Increase of Higher Degree Research students from 2018

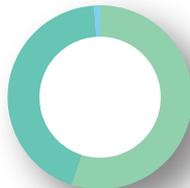
**20%**

Overall increase from 2018

### Gender balance



Male Female  
Attendees



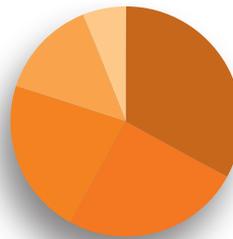
Male Female Non-binary  
Speakers & panellists

### Industry attendees



6% 8% 9% 21% 24% 32%  
Other Public NGO Higher Ed Government Private

## Outcomes



33% - New ideas  
25% - Research/Industry connections  
22% - Awareness of RMIT research support services & programs  
14% - Research in development  
6% - Other

## Observations

**92%**

Interested in learning about EFI 2020

**88%**

Would recommend attending EFI again

**72%**

Used the EFI 2019 app

**68%**

Said session speakers were balanced between academic and industry

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# Remembering Paul Taylor

## 1973–2018



A world-leading expert in research integrity who was recognised internationally for his thoughtful and determined leadership, Dr Paul Taylor will be remembered as an inspiring leader who was generous with his time and wisdom, and a dear friend to many.

Paul was born in Kew, Melbourne in Australia in 1973 and grew up in Bulleen. He attended the University of Melbourne, where he completed a Bachelor of Science (Honours) degree with a Microbiology/Chemistry co-major (1996), followed by a PhD at the Department of Microbiology and Immunology (2003).

Paul held positions at The University of Melbourne from 2002 to 2012 including Honorary Fellow and Lecturer, Department of Microbiology and Immunology; Manager, Gene Technology and Biosafety, and Director, Office for Research Ethics and Integrity. He was Director, Research Integrity, Governance and Systems at RMIT University from 2016 until 2018.

As a member of an expert working committee established by Australia's National Health and Medical Research Council, Australian Research Council and Universities

Australia, Paul profoundly influenced the recently published Australian Code for the Responsible Conduct of Research, a document used by Australian institutions and researchers to foster trustworthy, honest and ethical research and to address potential breaches of research integrity.

Long-standing friend and colleague, Daniel Barr said: "Through his work, Paul developed many friendships and a legacy that will help improve global research.

"He was a keen gardener of Australian native plants, enjoyed music that didn't have guitars in it, held an impressive collection of home lighting (lamps), spoke Italian with feeling, and always found good coffee and the best places to eat whether in Melbourne or while travelling overseas."

Dr Taylor passed away from a sudden brain aneurysm on 20 November 2018 and is survived by his parents John and Pam, his brother Adam and sister-in-law Rita, who said: "Our lives are forever changed but our precious memories will thrive." He was also the "most amazing uncle" to Nikki and Jamie, with whom he shared a deep abiding bond through their love and laughter. Paul was an organ donor.

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# Acknowledgements

## EFI 2019 gratefully acknowledges the following generous supporters.

Sarah Adams • Mark Akrigg • Jana Algra-Cramond • Jackson Barnes • Daniel Barr • Lisa Bates • Amanda Bennett  
Catherine Bevan-Jones • Alice Boland • Leonie Boxtel • Judy Boyce • Daniel Branick • Darren Brown • Chris Buckley  
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Shanila Singh • Petra Siskos • Geoffrey Stokes • Melissa Sweetland • Grace Taylor • Julian Thomas • Laura Thorne  
Monica Trubiano • Francis Vaz • Krissy Visscher • Kylie Warren • Tanya Wick • Frank Yardley

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## Donations

In line with RMIT and EFI's commitment to sustainability, in lieu of gifts for our speakers, we have made donations to four charitable organisations chosen by EFI attendees:



Friends for Good raises awareness of loneliness as a significant issue in the community and works to foster a greater sense of connection and wellbeing for individuals and communities.



The Indigenous Literacy Foundation aims to raise literacy and instil a love of reading in remote Indigenous communities through providing and publishing books and an early literacy program.



Sleepbus is an innovative initiative that converts buses into safe, temporary overnight accommodation for homeless people. One sleepbus provides 8,030 safe sleeps per year.



Australian Conservation Fund speaks out for a world where forests, rivers, people and wildlife thrive. They are proudly independent and funded by donations from the community.

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## Friends



**totemgroup**  
EVERY EVENT COUNTS

**Cnk.**



STATE LIBRARY  
VICTORIA  
What's your story?



**BAD  
SHEPHERD**  
BREWING CO

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# EFI 2020

## We want to hear from you!

Following the success of Engaging For Impact 2019, we are already working toward the next event! If you're looking to be more than an attendee at EFI 2020, or have something impactful to share, now is your chance to get involved.



### Host or present a session:

If you have a thought-provoking concept for a session, or if you are aware of a proposed session that you would like to be a part of, we encourage you to apply and submit your ideas.



### Become an EFI partner:

Helping us to deliver a meaningful event experience in 2020 is a powerful indication of your organisation's commitment to collaboration, innovation and making a positive social impact.



### Share your EFI story:

EFI is about bringing people together to shape research projects, enhance collaboration and drive research with impact. We want to hear how EFI has influenced your project or collaboration.



### Sign up as a mentor:

Take the opportunity to expand your professional growth and strengthen your leadership skills as a mentor. Discover ways to make your work environment more accessible, productive and inventive, and meet emerging talent and craft prospective projects.

Help us maximise our inclusion at the event – register your interest at [www.rमितefi.com.au](http://www.rमितefi.com.au) to receive the EFI Bulletin with all the latest updates.