



MONASH  
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ART  
DESIGN &  
ARCHITECTURE

# R:ADAR

REVIEW: ART DESIGN & ARCHITECTURE RESEARCH ISSUE NUMBER 03 2022



**Nicholas Mangan**  
*Core-coralations (A)* (2021),  
Coral, aragonite, gypsum,  
steel. Courtesy of the artist  
Sutton Gallery Melbourne  
and LABOR Mexico DF.

STORY PAGE 8

Photographer: Andrew Curtis

THE HEALTH & WELLBEING ISSUE

We acknowledge  
and pay respect  
to the Traditional  
Owners and Elders —  
past, present and  
emerging — of the  
lands on which  
Monash University  
operates.

We acknowledge  
Aboriginal connection  
to material and  
creative practice on  
these lands for more  
than 60,000 years.

MADA  
Research  
Themes



Reimagining  
cities

THIS ISSUE

Health and  
human  
experience

Expansive  
visions and  
technologies

## Welcome

Creative and critical practices are essential for creating positive impact on health and wellbeing. This issue of **R:ADAR** provides an introduction to some of the many art, design and architecture projects that are helping to create safer, healthier communities. Our projects investigate how health practices and environments affect people's thoughts, feelings, experiences and behaviours, and ask how things might be done differently. Taking an integrated approach to human health, we work closely with healthcare professionals, governments, technology providers, patients and carers to create better outcomes for individuals, communities and the planet.

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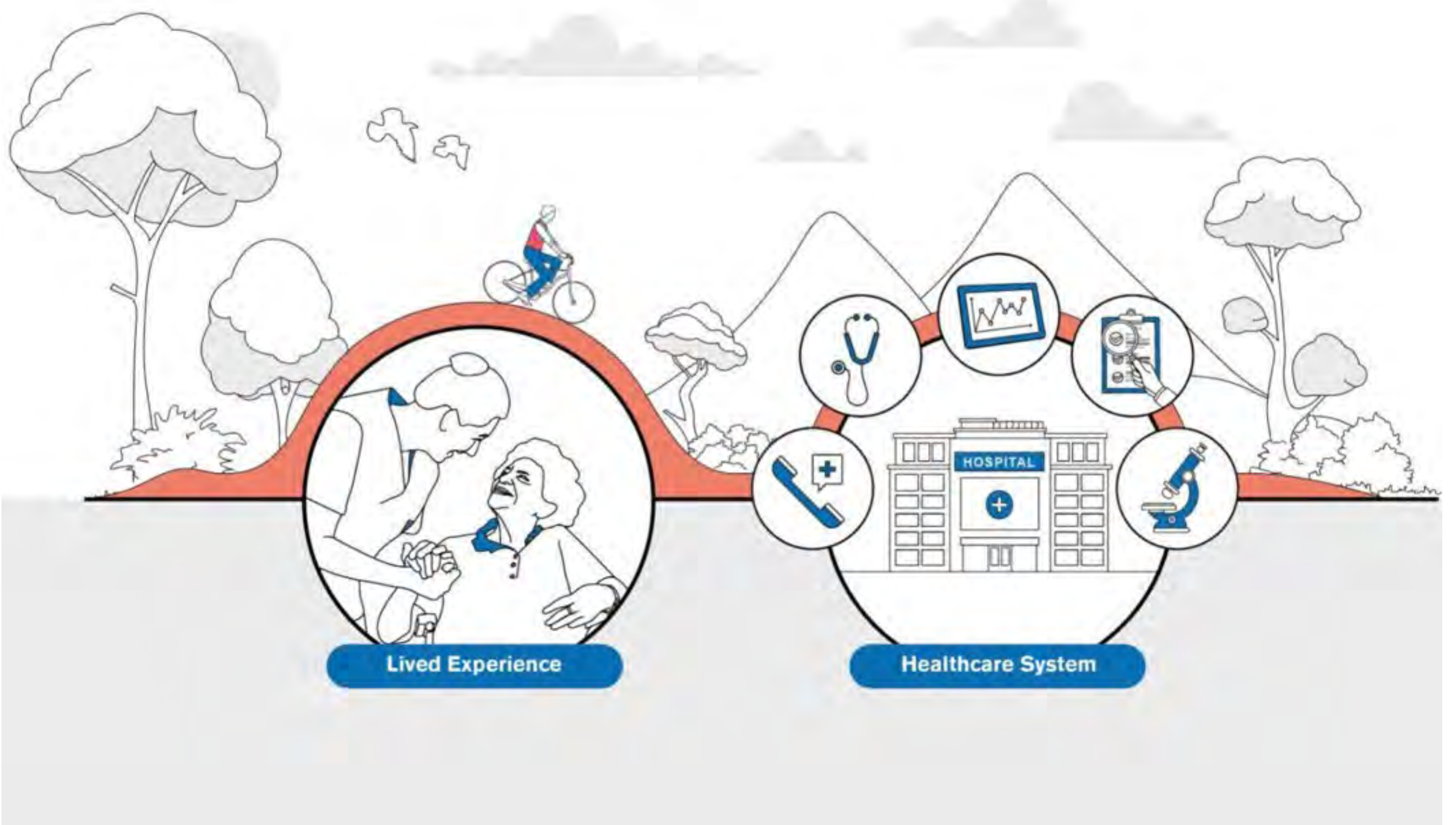


Connect to additional stories and research using this icon



## Special project

# Reimagining the Future of Healthcare



**Above:**  
The recent Monash 'Future Healthcare' research bootcamp.

**Illustration:**  
Hatoun Ibrahim, Design Health Collab

Researchers in art, design and architecture are envisaging new futures for healthcare. Building new transdisciplinary collectives, they are working closely with government, industry, community stakeholders and research experts across STEM and HASS to consider how the major challenges in healthcare can be addressed if its technologies, systems and physical spaces are better integrated.

The power of design lies in its ability to operate across different scales and systems of care. Our human-centred approach understands the lived experiences of people receiving and giving care as critical for successful service integration and equity. This approach helps to ensure that systems work better for patients, clinicians, providers and planet, leading to better uptake and compliance, improved patient outcomes, cost savings and reduced waste.

**Contacts:**  
Leah Heiss and Daphne Flynn



## SDG focus

## Special Project: Fire to Flourish

11 SUSTAINABLE CITIES  
AND COMMUNITIES



**Fire to Flourish (F2F)** is a five-year transdisciplinary program working at the intersection of disaster resilience and community wellbeing. The program was developed in response to the 2019-2020 bushfires, recognising that climate change will increase the frequency and severity of such catastrophic events.

F2F starts with the premise that communities are experts in their own lived experience. In partnership with four bushfire-affected communities across New South Wales and Victoria, F2F is co-creating the foundations for long-term community wellbeing by supporting communities to lead their own recovery, reduce future disaster risk, strengthen their resilience and disrupt cycles of entrenched disadvantage.

Monash Art, Design and Architecture is contributing expertise in co-design for placemaking, leading Indigenous research and providing strategic advice on the development of Indigenous engagement frameworks to ensure F2F foregrounds Indigenous knowledges in all activities and decisions.

+

+

Glenreagh

Image by Stuart Murphy





## Research Lab Profile

## Design Health Collab



**The Design Health Collab** co-designs medical devices, processes and services to meet the needs of those delivering and receiving care. Outcomes are achieved through collaborations with experts and stakeholders including patients, healthcare and allied health workers, management, engineers, device manufacturers, IT experts and more.

One recent project is aiming to improve stroke outcomes. Stroke is a leading cause of death and long-term disability in Australia and worldwide. Together with Micro-X, a leader in ultra-lightweight, mobile x-ray imaging systems, Design Health Collab is creating a miniaturised stroke imager designed to fit in standard road or air-borne ambulances. This will bring imaging to the patient, reducing time-to-treatment and improving prognosis.

**Below:**  
Visualisation of  
the Micro-X Stroke  
Imager deployed  
in an ambulance by  
Dr Nyein Aung





## Research Lab Profile

## Emerging Technologies Research Lab



**Below:** Poster and still featuring Beryl. From “Smart Homes for Seniors”, 2021.

**Producer:** Citt Williams.  
**Director:** Sarah Pink.  
**Film development team:** Melisa Duque, Yolande Strengers.



### The Emerging Technologies Research Lab

is an international interdisciplinary research and knowledge community. Its research leaders rethink technology futures by foregrounding people and planet and creating ethical, responsible and inclusive human and environmental futures. The Lab’s social scientists, designers and documentary filmmakers generate impact by collaborating with a wide range of industry, government and stakeholders. The Lab and its researchers are located across Monash Art, Design and Architecture and the Faculty of Information Technology.

The recent ‘Smart Homes for Seniors’ project, in partnership with McClean Care, addresses the research and knowledge gaps relating to older people’s use of smart home technologies. It evaluates the potential of such technologies to support wellbeing and independence in regional and rural communities. The project culminated in the award-winning Smart Homes for Seniors documentary, which has been screened at numerous film festivals globally.





## Research Lab Profile

## XYX LAB



**XYX Lab** operates at the intersection of gender, identity, urban space and advocacy. The team of architects, urban designers, and visual communication and digital engagement specialists build equity into urban life by developing and promoting co-design strategies and projects that address the needs of women, LGBTIQ+ people and other minority groups.

‘Keep Running’, responds to the Australian Centre for Contemporary Art’s provocation Who’s Afraid of Public Space? Keep Running is a series of dynamic graphic interventions across greater Melbourne that provoke dialogue around women and gender-diverse people’s right to access public space. Through posters and billboards, Keep Running articulates a call to action for communities to develop an understanding of safety and risk in the city, and creates an opportunity for audiences to consider their own lived experience while developing understanding and empathy.



**Above:** Four campaign posters and an example of their deployment in Melbourne. The project has recently been shortlisted in the Design Institute of Australia (DIA) Designers Australia Awards in the ‘Interact’ category.

**Photograph:** Brett Brown



## Researcher Profile

## Leah Heiss



**Eva and Marc Besen International Research Chair in Design Leah Heiss** works at the nexus of design, health and technology. Her work has been recognised with six Australian Good Design Awards including the 2018 Australian Good Design Award of the Year. Leah brings humanity-

centred design to developing health technologies and services in collaboration with experts in nanotechnology, manufacturing, healthcare and more.

Her Tactile Tools co-design method draws on human-centred design research to enable diverse stakeholders to address complex challenges iteratively and collaboratively. The method has been used by over 450 professionals from healthcare, engineering, education and government and in such contexts as cancer care, voluntary assisted dying and acquired brain injury. Leah is currently working with partners from across the health and aged care sectors to co-design new models of care with clinicians, consumers, carers and lived experience advocates.

**Above:** A Tactile Tools workshop with Primary Healthcare Network North Western Melbourne on understanding the experience of families with low birthweight babies.

**Photograph:** Adam R Thomas





## Ecologies of Care

## Contemporary Art and Curatorial Practice

In our late capitalist society, caregiving is undervalued, the natural environment faces degradation, and wellbeing suffers. Art and Curatorship have a central role to play in highlighting the interconnectedness of the current crises in the economy, public health, and the environment, and in remedying them.

**Curatorial PhD candidate Madeleine Collie's** research, for example, explores how museums can expand their care-giving responsibilities from object collection to the regeneration of the natural environment in which they are situated.

**Nicholas Mangan's** 'Core-correlations' uses bleached coral from the Great Barrier Reef (the so-called lungs of the ocean) to visualise the impacts of human civilization, through climate change, on the environment and the body. In its colour-drained, brittle state, the sculpture underscores how human and ocean health are co-dependent, requiring reciprocal care.



### Left:

Farmers and artists exploring the agroecology of the Amazon — an influence on Madeleine Collie's curatorial research. Jorge Menna Barreto, Restauero, research image, 32 Biennial of São Paulo, 2016.

**Photographer:**  
Jorge Menna Barreto

### Above:

Nicholas Mangan, *Core-correlations (A)* (2021), Coral, aragonite, gypsum, steel, 108 × 63.5 × 43 cm. Courtesy of the artist Sutton Gallery Melbourne and LABOR Mexico DF.

**Photographer:**  
Andrew Curtis



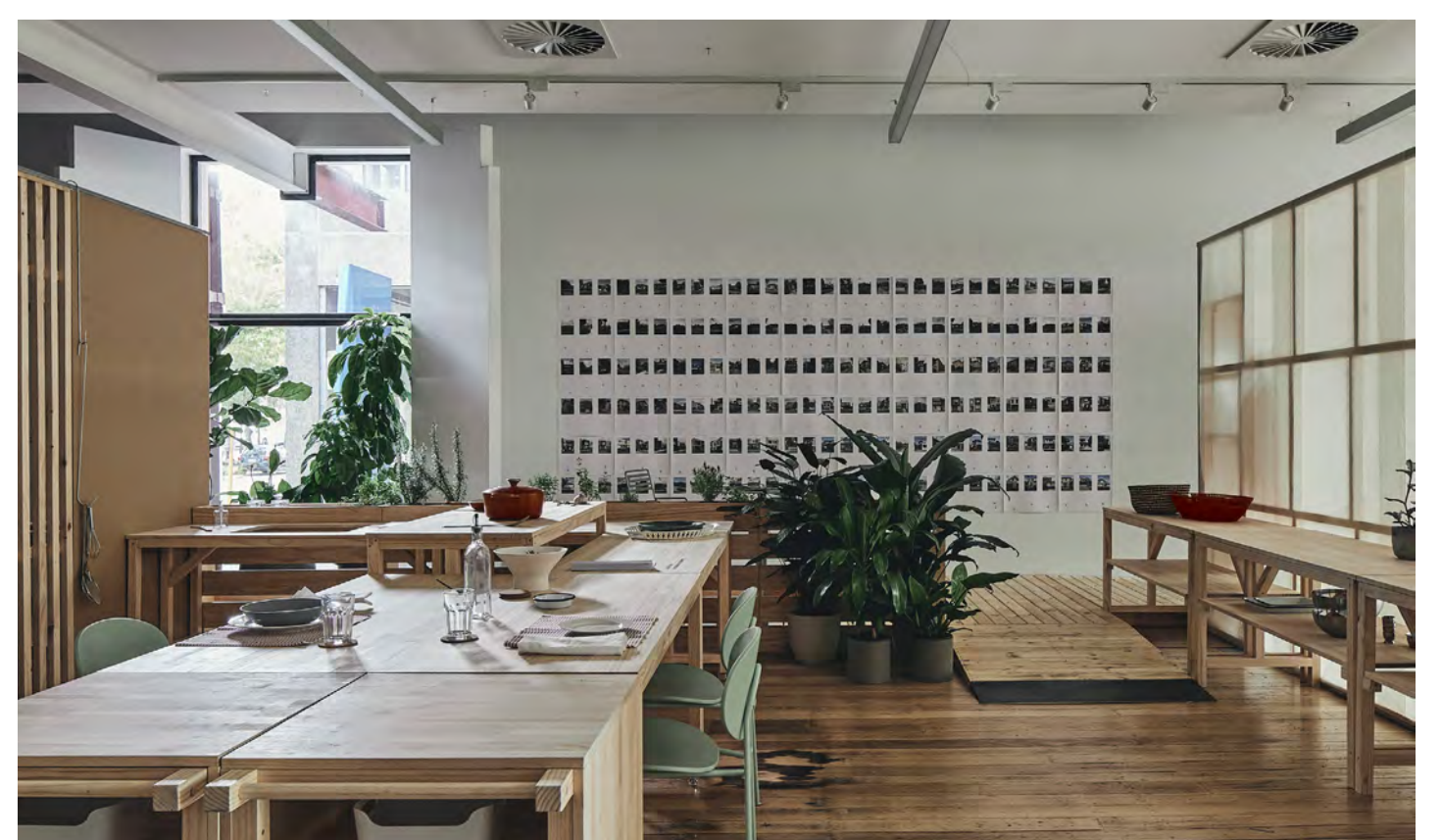
## Research led teaching

## RetroFit Kit: Adaptable and accessible housing

**An estimated 5.75 million Australians will have a mobility limitation by 2060, but most housing in Australia is not designed to support accessibility nor to flexibly adapt to the changing needs of residents.**

‘RetroFit Kit’ demonstrates a pathway for the systematic modification of common Australian housing types to achieve seamless and dignified home environments for people with disability, their families and carers, and future occupants.

Working in research-led education units, the project took a typological approach to the problem and focused on common building types across Melbourne. This research generated an exhibition as part of Melbourne Design Week that simulated a home environment at 1:1 scale to demonstrate principles of accessibility through design strategies that enhance the home environment. ‘Retrofit Kit’ is part of a research collaboration between Monash Architecture and the Australian Human Rights Commission that is making explicit the strategic potential of architectural design for making homes more equitable and accessible to all.



**Above:** The *RetroFit Kit* exhibition. The project has recently been shortlisted in the Design Institute of Australia (DIA) Designers Australia Awards in the ‘Place’ category.

**Photographer:** Peter Bennetts



## Postgraduate researchers

**Bradley Webb** /Fine Art  
**Samantha Donnelly** /Architecture  
**Ilianna Ginnis** /Design



BRADLEY WEBB

Bradley's research interrogates how colonial frameworks of media production perpetuate ongoing trans-generational trauma and oppression. His project examines the potential and limitations of the (re)presentation of Aboriginal people and narratives across the corporate, government and creative practice sectors for improving Aboriginal wellbeing and redressing the oppression of Aboriginal peoples and culture.



**Above:** Bradley Webb, *We Are Flora & Fauna*, Oils and digital imaging print on canvas, 2019.



SAMANTHA DONNELLY

Samantha's research uses architectural design to inform the creation of safe, well-designed, affordable housing for women and children leaving domestic violence and for women over 45 at risk of homelessness. Access to safe and secure housing is essential to women's health and wellbeing, and contributes to a positive outlook, a sense of belonging and the ability to thrive.



ILIANNA GINNIS

In life and through research, Ilianna advocates for the inclusion of neurodiverse people. Her PhD project pioneers the facilitation of co-designing interior architectural spaces together with individuals with non-verbal learning disabilities, enabling the creation of spaces that meet the individual needs and preferences of people like her non-verbal sister, Michelle.



**Left:** Samantha Donnelly, Kitchen illustration, from *A Design Guide for Older Women's Housing*, 2022

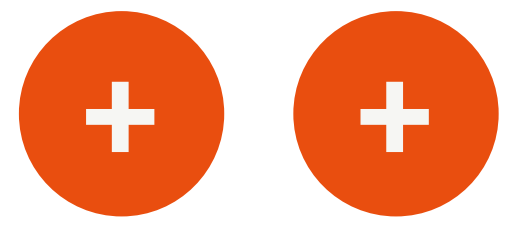
**Above:** Ilianna Ginnis and non verbal communicator at MPavillion, 2022.

photographer: Lee-Marie Nayer



## ECR Profiles

## Rowan Page and Michaela Prescott



Rowan (top) and Michaela (above) are supporting their ECR colleagues to achieve their goals; helping to create a healthier ECR research environment.

**Introducing Monash Art, Design and Architecture’s new Early Career Researcher (ECR) coordinator and deputy, Rowan Page and Michaela Prescott.**

**Rowan** is an industrial designer specialising in the design of wearable devices, particularly those with medical applications. His PhD contributed to the redesign of external devices for Cochlear Implant systems. With improvements verified through usability tests, the redesigned device is now used by tens of thousands of Cochlear Implant users. Rowan continues research in smart wearables through projects with Blundstone, Cabrini, and Circadian Health Innovations.

**Michaela** is a landscape architect. Her research on urbanising water and river systems emphasises co-design as a pathway to project sustainability. Her contribution to a DFAT-funded ‘Water for Women’ project resulted in a toolkit foregrounding participatory design as an enabler of gender equality, social inclusion, and improved health and wellbeing outcomes within urban water and sanitation infrastructure projects. She continues this approach in the RISE and Citarum projects.



**Rowan Page:** *MiEye* Wearable Light Sensor developed with SensiLab for Circadian Health Innovations. The project has recently been shortlisted in the Design Institute of Australia (DIA) Designers Australia Awards in the ‘Use’ category.



**Michaela Prescott:** Mapping and implementing water and sanitation infrastructure with community (RISE program)



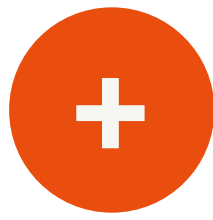
## International Impact

### Child protection and social distancing: Improving the capacity of social workers to keep children safe during the COVID-19 pandemic

‘Child protection and social distancing’ explored in real-time the impacts of the acute phase of the COVID-19 pandemic on child protection practice, vulnerable children and families in the UK.

Prior to the pandemic, getting close to children, especially on home visits, was crucial for social workers. Pandemic-induced social distancing required new strategies to keep social workers and vulnerable children safe, and to help families at a time of increased stress and elevated risk of harm.

Sarah Pink of the Emerging Technologies Lab brought design anthropological expertise to this ESRC-funded project, conducted through the University of Birmingham with Professor Harry Ferguson and Dr Laura Kelly. The project identified risk mitigation strategies and lessons, including around the potential for digital case-work to form part of an ongoing hybrid practice in non-pandemic contexts.



**Below:**

Still from “Social Work and Child Protection in the COVID-19 Pandemic”, 2022.

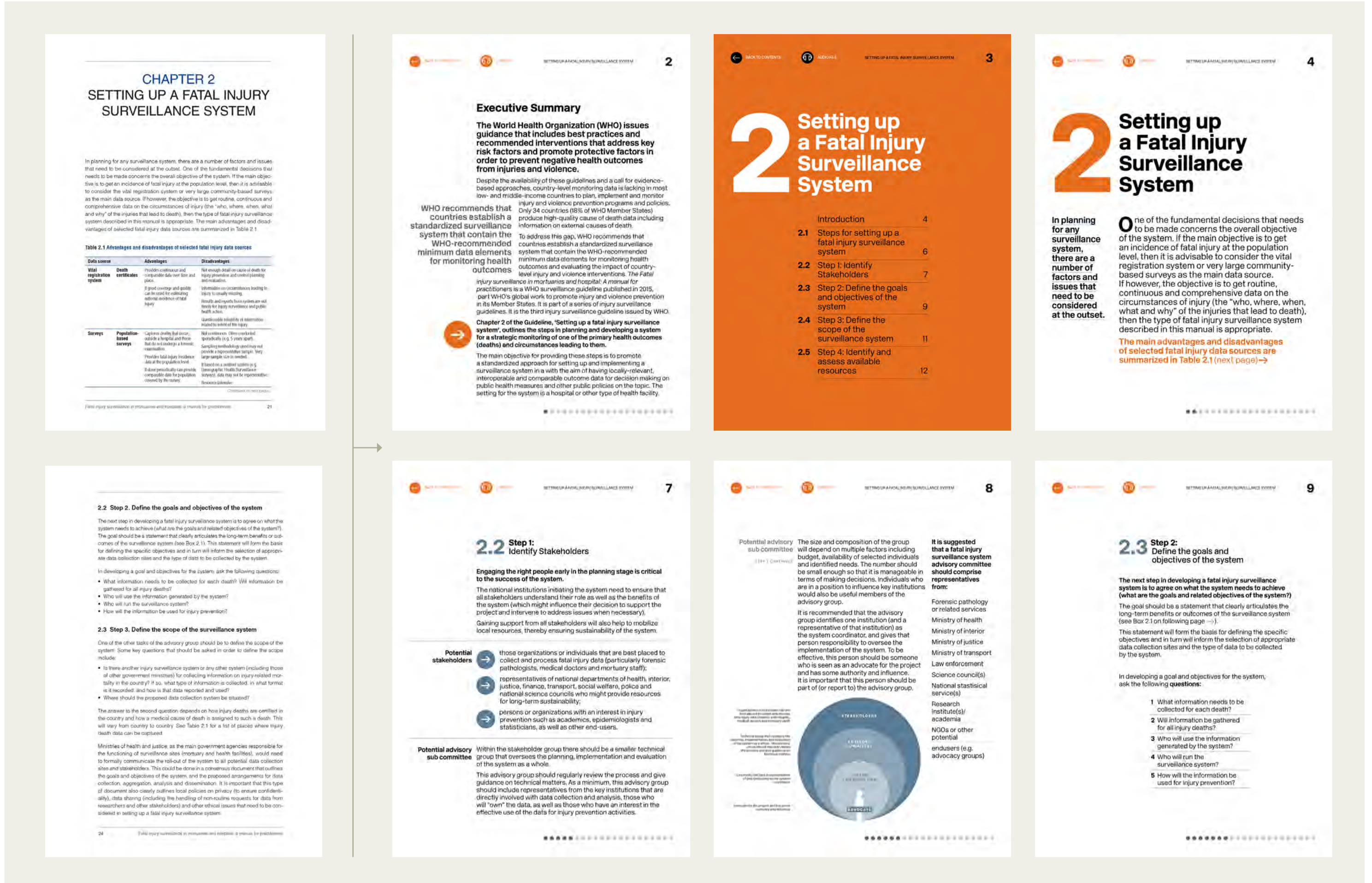
**Produced, directed and edited by** Paul Morgans. **Researchers:** Harry Ferguson, Laura Kelly and Sarah Pink. **Funded by** the ESRC.





# Special project

# World Health Organization partnership with Design



**3 Activity Instructions • 15 min.**  
**Responding to the redesign of chapter 2**

**A |** What do you think Dr. George's initial thoughts might be when he downloads and opens the redesigned document?

- Seems much easier to find things back again...that matter
- Every guide follows the same structure
- Looks pretty!
- separated in different columns
- More accessible: adapted for different formats
- different color code which is good
- easy to read
- more modern look

**B |** Do you think Dr. George might engage differently with this redesigned document?

- He may use different apps: translation/reading (because its text based)
- Re-designing a document like this needs special skills
- Design shouldn't compromise accessibility needs

**C |** What barriers still exist? What issues still need to be addressed?

- Inclusion of summary page could help to share to non-specialist audience
- Guidelines don't translate to country need necessarily
- Challenge of translating digital to print
- Maybe WHO guidelines need a more detailed implementation guide
- more info graphics
- re-design of the good step, but it is clear that there are lots

**Participants:** Gene Bawden on Kulin Nations Land, Hans Linn - WHO Project Team, Ian Collart, Dr. Solara Sinno (WHO - Lebanon), Nongnuch\_Thailand\_MOPH\_DDC, Interpreter Korblarp.

**Logos:** Tacfile Tools, Monash University, World Health Organization.

MADA's design researchers are working with the World Health Organization (WHO) Product Design and Impact Group to improve the uptake and impact of WHO's health advisory directives. Challenges in accessing and navigating the health advisory directives have significantly hampered

**Top:** An example of a WHO health advisory directive, positioned against a redesigned prototype ready for stakeholder feedback. The prototype was used as an 'artefact' to prompt an online co-design process and data-gathering exercise across multiple nations, to generate knowledge that will inform a toolkit for authors of WHO guidelines (above).

their efficacy, particularly in low- and middle-income countries. Together with WHO, MADA researchers Leah Heiss, Gene Bawden, Myra Thiessen and Troy McGee are developing co-design processes that foreground the lived experience of end-users from a wider range of countries and cultures, and improve the access and relevance of the directives. Their insights are informing communication strategies and a design toolkit for authors of WHO guidelines. The shared aim is to empower public health program managers, policy makers, researchers, scientists, clinicians and NGOs by enhancing their access to WHO's evidence-based recommendations and helping them to make informed decisions about local health interventions.