



REVIEW: ART DESIGN & ARCHITECTURE RESEARCH ISSUE NUMBER 01 2021

INSIDE Discover how Monash Art, Design and Architecture researchers are confronting our climate emergency

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.

Monash Art, Design and Architecture's research strives to enrich the human experience through transformational design and visual practice. Creative and critical research empowers us to reimagine the needs, challenges and aspirations of cities and drive meaningful change. Working with diverse communities and cultures, and across constructed and ecological environments, our research helps to propel us all towards greater sustainability, understanding and equity.

Welcome

Welcome to the first issue of R:ADAR. Through this digital publication we intend to make visible the excellent, high impact research undertaken in Art, Design and Architecture, and connect our researchers to a community of collaborators. Each issue will concentrate on a particular theme driving our research. Our first issue focuses on a particularly urgent challenge: Climate Action.

Climate Action demands the kind of collective effort and creativity in which our researchers excel. Through our creative expertise and collaborations with other disciplines, government, industry and the community, our researchers show how to deliver wide-reaching impact - environmentally, economically and socially.

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MADA Themes

The complexity of contemporary societal and environmental challenges means that integrative, interdisciplinary and creative approaches are in increasing demand. Strategic focus, mutual support and collaboration are essential for effective responses to these challenges.

Reimagining cities

Our research transforms cities, in all of their complexity.

Creative and critical research empower us to reimagine the needs, challenges and aspirations that enliven cities. Working with diverse communities and cultures, and across constructed and ecological environments, our research helps to propel us all towards greater sustainability, understanding and equity.



For examples of the research undertaken by MADA tap the icon, left

Health and human experience

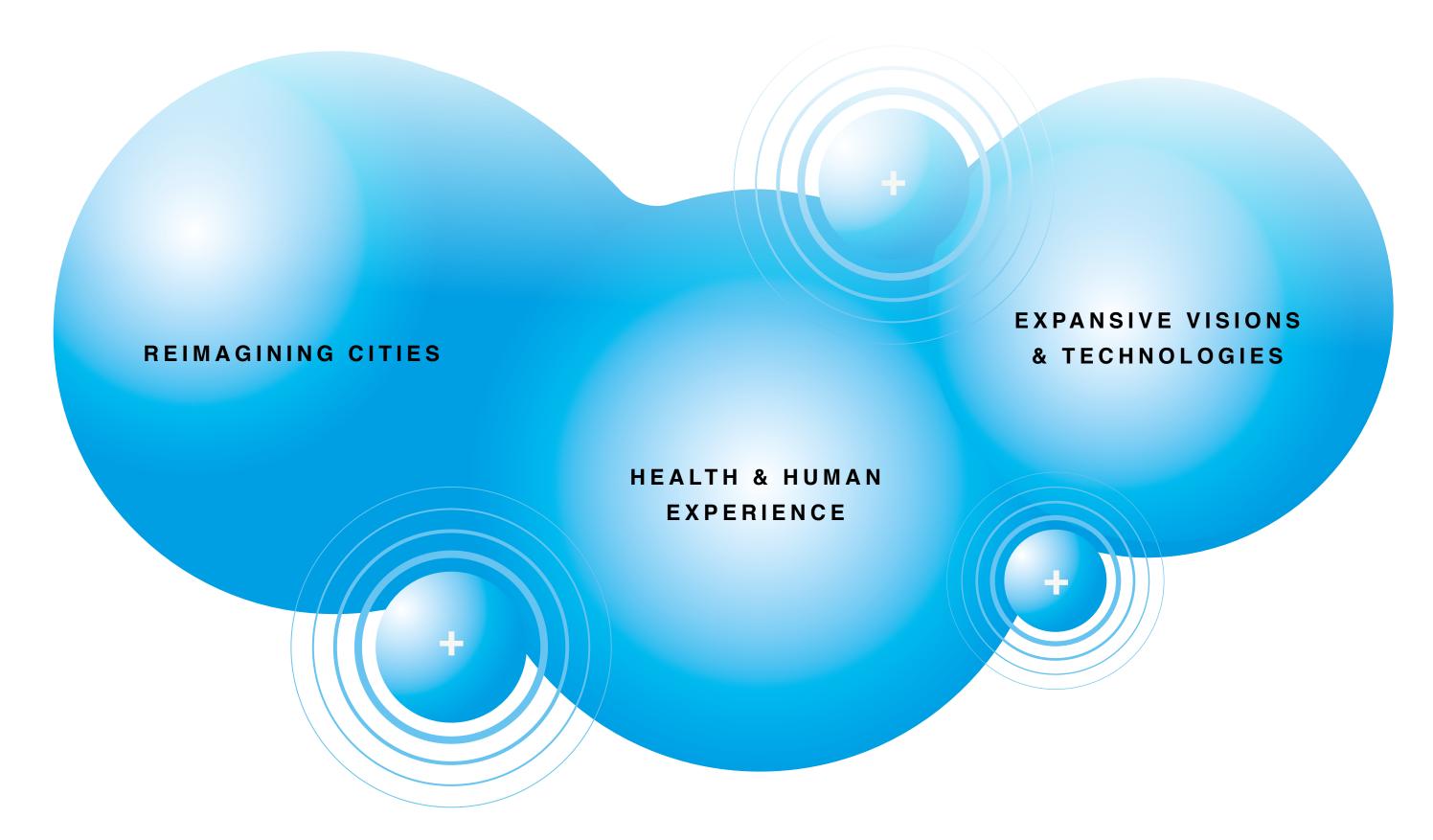
Our research helps to create safer, healthier communities and to transform the way medical treatment is experienced.

Creative practice research involves investigating how health practices and environments affect people's thoughts, feelings and behaviours, and asking how things might be done differently. Taking an integrated approach to human health, we work closely with stakeholders to create safer, more efficient and more comfortable environments and health systems.

Expansive visions and technologies

We create visionary and speculative research that considers not only what technologies can do, but what they make possible.

We go beyond predictive statements about how new technologies will impact society and individuals. Our experimental research explores how people will use technologies in our future cities, cultural practices, work, and homes, and advances a more equitable, responsible and sustainable future.



Bold, ambitious and creative research comes in many forms, and unconventional thinking is critical to anticipate as yet unimagined futures. Creativity and coherence accordingly form a mutually supportive partnership at MADA helping us to realise change-making, excellent research.



SDG focus

Monash Art, Design and Architecture Climate Action Taskforce



Monash Art Design, and Architecture Climate Action Taskforce is committed to making a fundamental and critical contribution to an ethical, equitable, healthy, biodiverse, fair and prosperous future for life on our planet. We believe that climate-aware design and delivery will contribute to improved planetary health and we strive to excel in this area. Framed by Indigenous Ways of Knowing and the UN Sustainable Development Goals, we aim to transform our ways of working through a paradigm shift in our emphasis of knowledge and actions. This will involve building new kinds of understanding, practices, structures and partnerships within MADA, MUMA and Monash, as well as with other universities and our communities, professions, industries and governments.

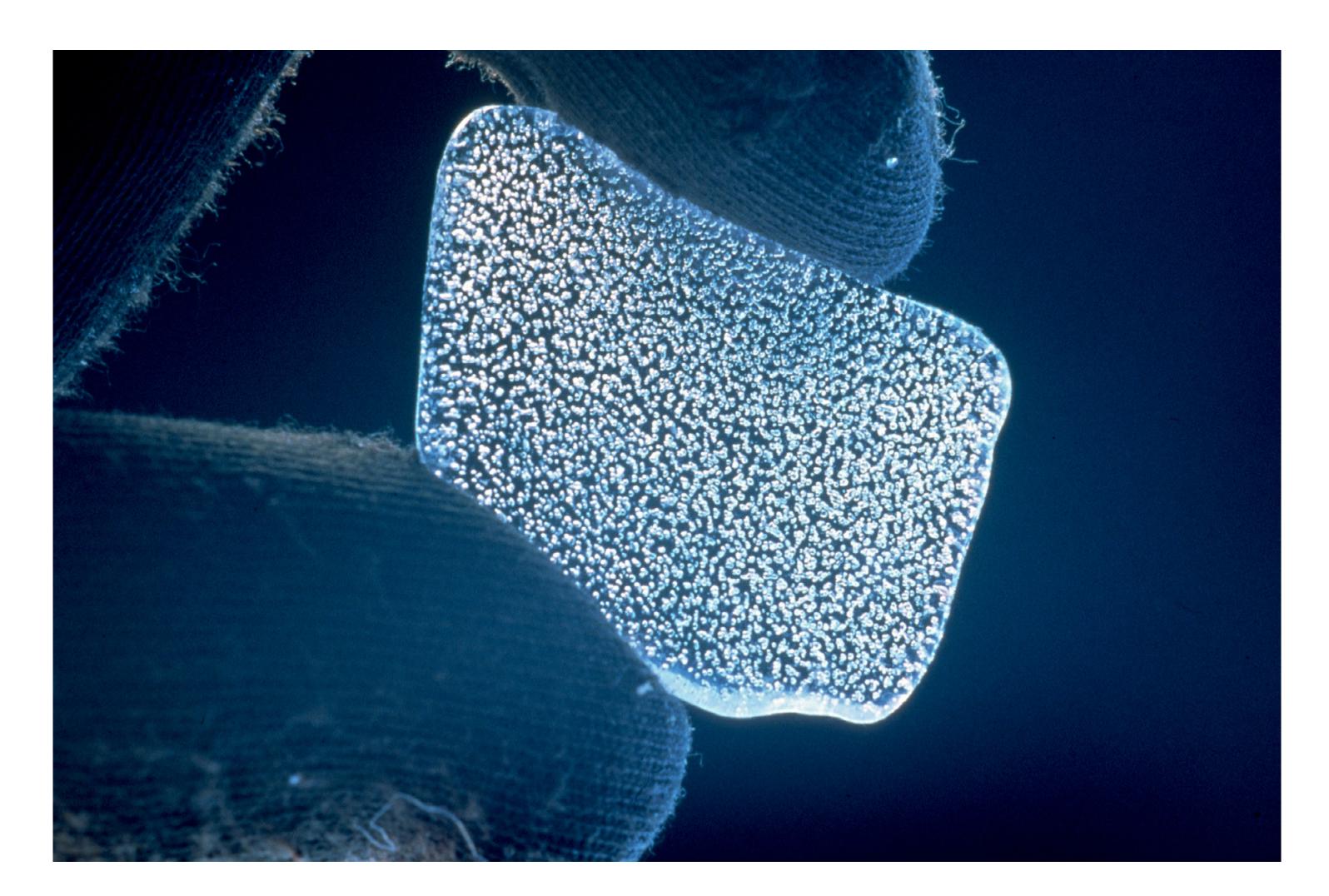
Below: Emerging Technologies Research Lab

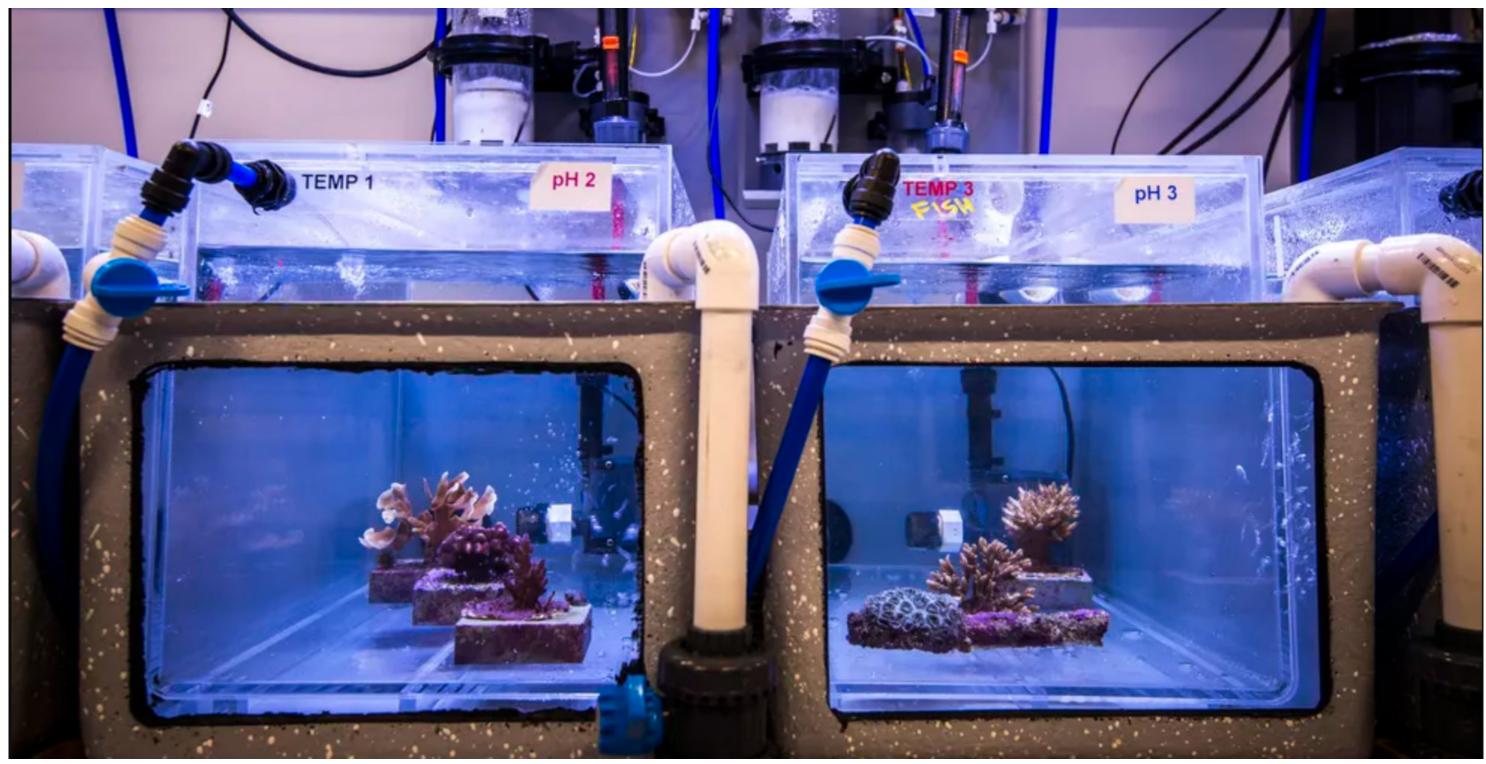
The E-waste Futures project is aimed at critically exploring the ways in which design can play a role in transforming past and current technologies that are becoming waste, into futures of revaluation. This includes design practices of repair, reuse and redesign.



Researcher

Nicholas Profile | Mangan





Nicholas Mangan's research responds to the global climate crisis by investigating the systems and narratives that produce ecological, political, economic, social and climatic instability. One of the two projects Nick is developing for his current Australia Council Fellowship, Core Correlations, focuses on Antarctic ice bubbles and bleached coral samples from far north Queensland to consider the effects of global climate change on ecological health. As well as mapping the correlations between these materials, the project explores the correlations between larger circulatory ocean systems and artificial heating and cooling systems, both of which condition air through thermal currents. Nick will produce an ambitious series of new sculptures, 2D kinetic works, and filmic elements for two exhibitions in 2021: a group exhibition at ACCA 'A Biography of Daphne' curated by Mihnea Mircan and a solo exhibition at Sutton Gallery.

Top: A sliver of Antarctic ice revealing the myriad enclosed tiny bubbles of air. Air bubbles trapped in ice hundreds or even thousands of years ago are providing vital information about past levels of greenhouse gases in the Earth's atmosphere. (CSIRO)

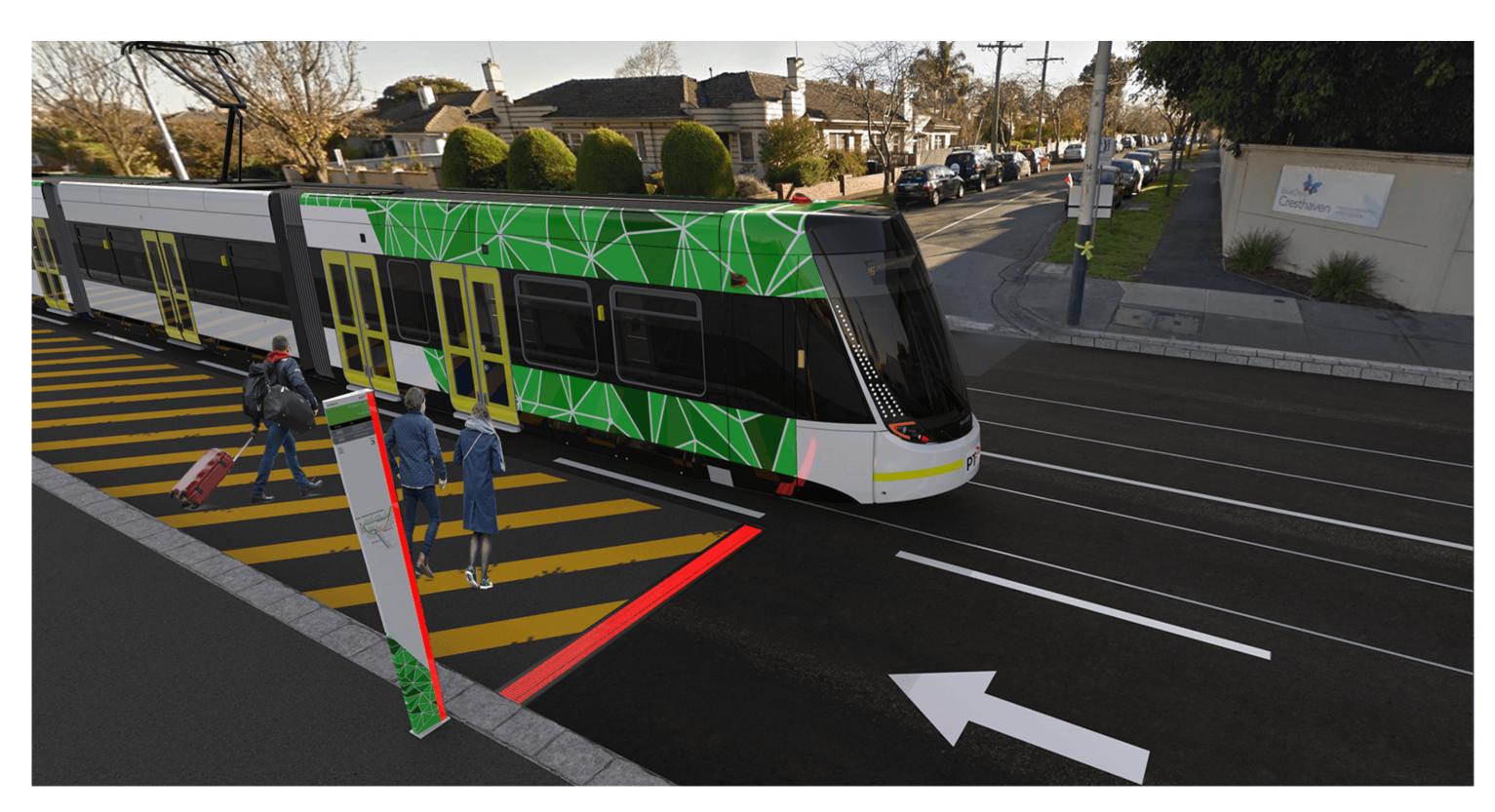
Above: Seasim (Image: Christian Miller/Australian Institute of Marine Science)



Research Lab Profile

Mobility Design Lab

The Mobility Design Lab (MDL) focuses on two strategic challenges: decarbonising our transport system and addressing mobility needs in densely populated cities. From personal to public transport, bikes to buses, MDL researchers are experts at designing sustainable, safe and efficient ways to move from place to place. The 'Live, Drive, Ride like a local' campaign is improving the safety of bicycle riders in The Alpine Shire by encouraging better road sharing. In partnership with Yarra Trams, the Institute of Rail Technology and other Monash partners, the Lab is also developing innovative tram stop construction methods to increase accessibility and lower cost.





Above: Working with Yarra Trams, the Institute of Rail Technology and MUARC, Mobility Design Lab are modelling improvements to tram boarding and alighting to address the significant safety issues for passengers.

Left: A still from the 'Live, Drive, Ride like a local' campaign launched in 2021 with the Amy Gillett Foundation. Tap the image to see the campaign on YouTube.

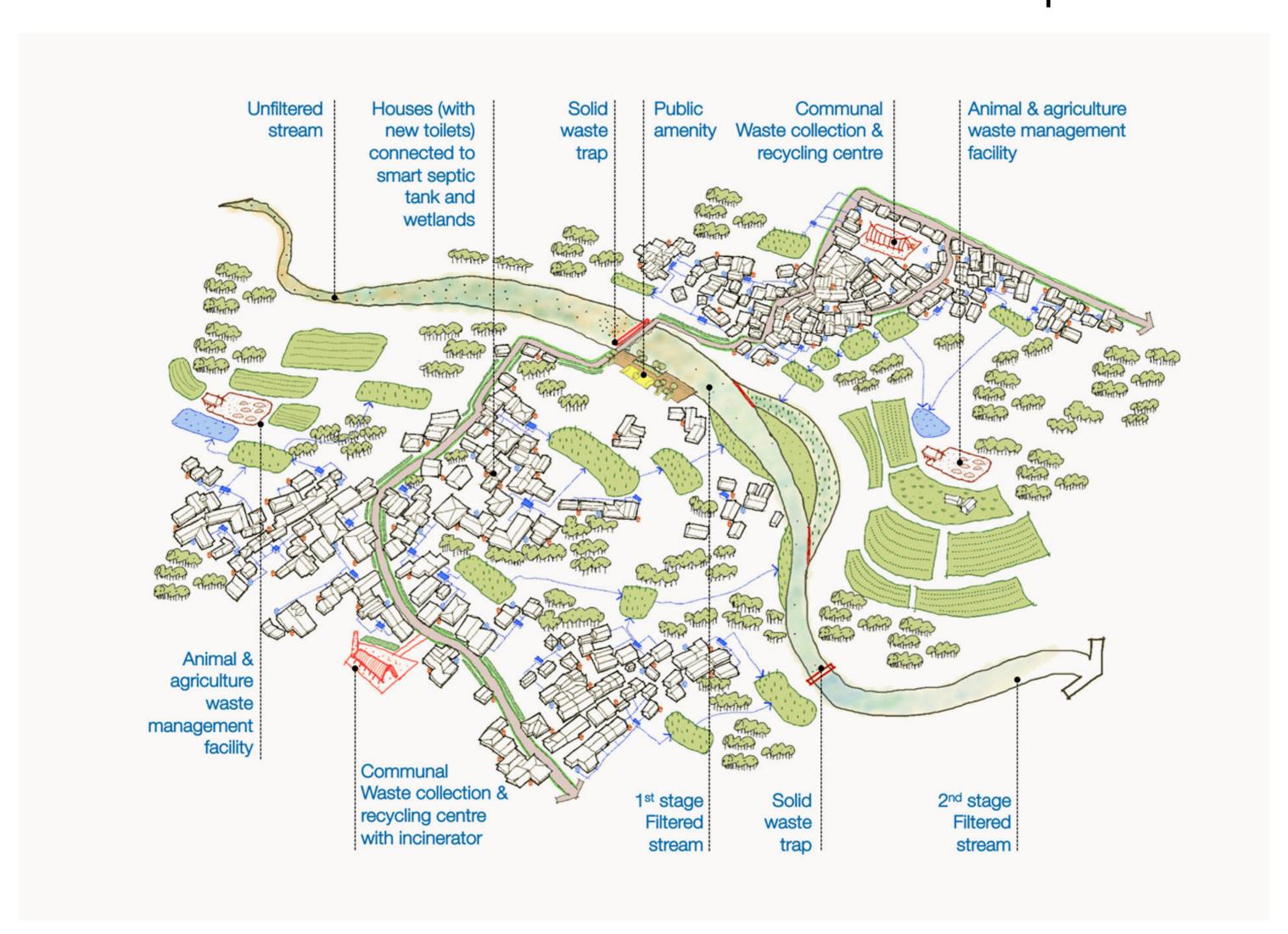




Research Lab Profile

Informal Cities Laboratory

Informal settlements, or slums, are forecast to grow from one billion people today, to two by 2030. In an urbanising planet, informal settlements are the most vulnerable to the adverse effects of the biodiversity and climate emergency we face as a global community. Supporting and planning for these environments is one of the grand challenges of our time. The Informal Cities Laboratory (ICL) undertakes design-based, implementation research into and within the conditions of informality in developing cities. With a focus on the Asia-Pacific region, the Lab works collaboratively with interdisciplinary teams and international development stakeholders at the intersection of academic research and urban development.



RiverCAT: Transitions towards Circular River Economies



The Citarum River, Indonesia, is one of the planet's most polluted. Each day, 20,000 tons of solid waste and 340,000 tons of wastewater are disposed directly into the river. Of the 19 million people who live in the Citarum River catchment, only 30% have access to centralised municipal water and waste networks. Innovation is needed to create sustainable, affordable and decentralised waste and sanitation services for poor communities. Our vision is to activate community-scale innovation to build inclusive and circular economic opportunities that create economic value out of water and waste, and restore healthy living environments. The River Co-design And Transitions toolkit (RiverCAT), is a social innovation that bridges this shortfall by enabling people-led co-design of bespoke, decentralised, integrated and affordable nature-based solutions to transform wastewater and solid waste into valuable products and services, and create new sustainable livelihoods.

Research Lab Profile

Wominjeka Djeembana Indigenous Research Lab

Wominjeka Djeembana are Boon Wurrung words translating as come here to learn, listen at a place of knowledge and sharing. Wominjeka means welcome, but it is welcome with obligation, ritualised practice and learning. Wominjeka Djeembana explores the synergies between Indigenous ways of knowing and practice led research in art, design and architecture (and beyond). Since launching in 2019, it has created a thriving research environment for First Nations and Indigenous-led research, international connectivity, and a culturally safe space in which First Nations masters and PhD students can thrive.

More than a guulany (tree): Aboriginal knowledge systems.

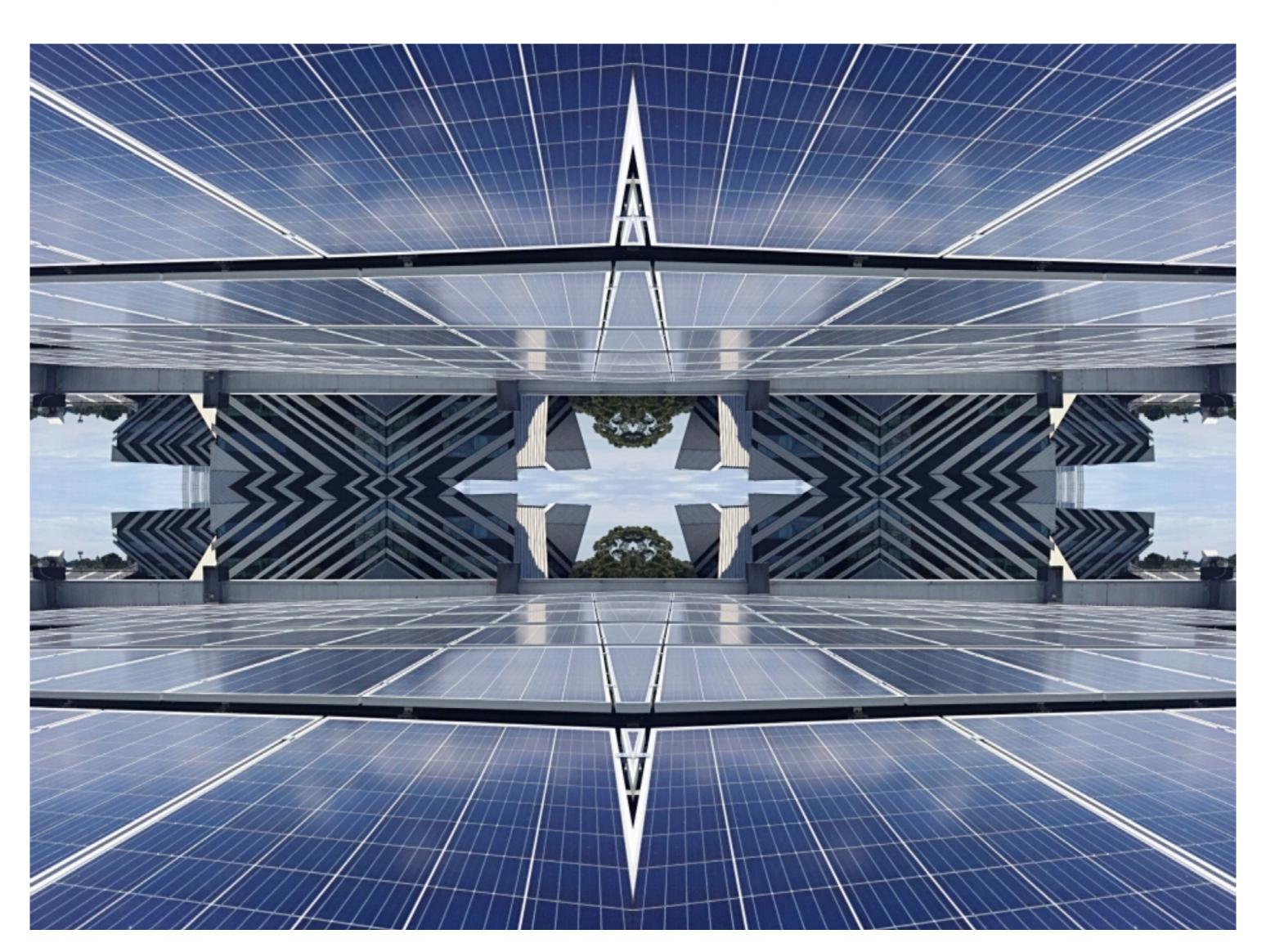
This major Indigenousled project is reconfiguring cultural heritage in terms of its critical connections to the natural world. Brian Martin and Brook Garru Andrew, together with their PhD students, are examining the significance of trees in southeast Australian Aboriginal cultures. Through Indigenous research methodologies and creative practice, the project is creating better recognition of the complexities of southeast Australian Aboriginal cultures, improved access for Aboriginal communities to cultural materials in institutional collections, and new insights and resources for arts, heritage and museum professionals to engage appropriately with Indigenous cultural heritage. The project will result in a multiform exhibition, in partnership with museums and libraries, Indigenous communities and emerging Indigenous artists.



Special project

Net Zero Precincts: an interdisciplinary approach to decarbonising cities





In an exciting interdisciplinary collaboration, Rob Raven, Sarah Pink, Geoffrey Webb, Megan Farrelly, Ariel Liebman, Selby Coxon, Peter Graham and Darren Sharp are helping cities reach net zero emissions. Drawing on transition management and design anthropology, the team will test its approach in an action-oriented case study in the Monash Technology Precinct through three Living Lab experiments across energy, mobility and buildings. Peter Graham (Architecture) will lead the Net Zero buildings living lab experiment, Selby Coxon (Design) will lead the mobility experiment and Sarah Pink (Design and IT) will lead the Design Anthropology capability of the project. As well as enhancing the experiences of local businesses, government, knowledge institutes and communities by improving the livability and prosperity of cities, the project will enable industry and government to standardise, commercialise and scale project outcomes to other precincts. Key partners in this project are Engie Services, Monash City Council, Local Governments for Sustainability - Oceania, the CSIRO, Energy Efficiency Council, City of Greater Dandenong and Swinburne University.

International Impact

Policy Strategy for Decarbonizing the Buildings Sector in Asia

As a Global Expert Partner of the Global Buildings Performance Network, Monash Architecture researchers, professional staff and research students – Peter Graham, Craig Burton, Jeswynn Yogaratnam, Kate McFarlaine and Medhi Taheri – are developing a new residential building energy code and an adoption plan with metropolitan and national government authorities in Indonesia. The project is also helping to integrate energy efficiency and thermal comfort standards in affordable housing in India and offering professional education in low-carbon building design and policy.



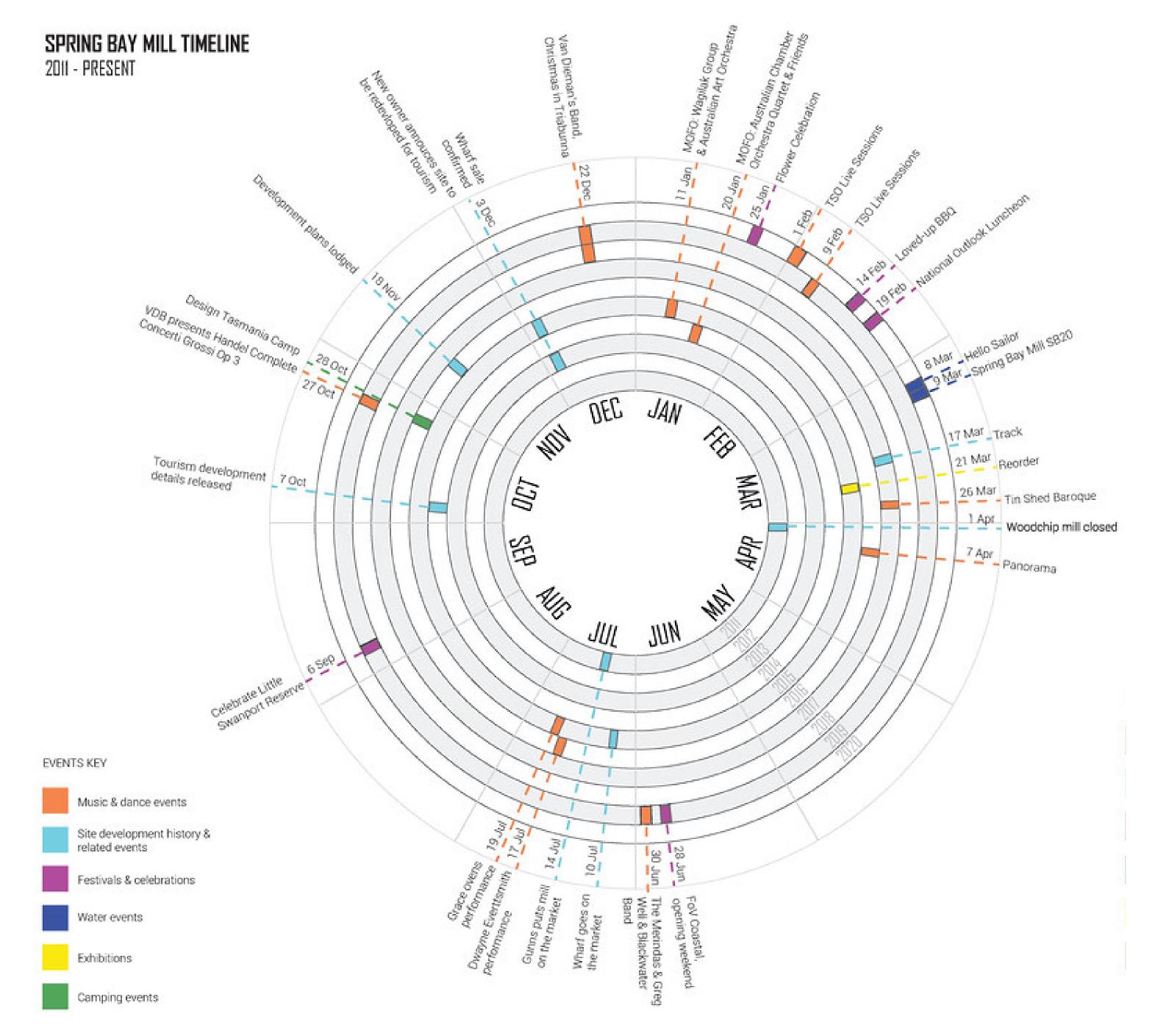
The city of Jakarta (Image: Gene Bawden)

Research led teaching

Regenerating Studio Ross Brewin/ Architecture



The 'Regenerating' Studio closely observed a 43 hectare site on the East Coast of Tasmania, near a small town called Triabunna. The site is on the traditional lands of the people of the Oyster Bay Nation. Following decades of pastoral use since colonisation, the site was most recently used as one of the largest wood chipping mills in the Southern hemisphere. These post colonial land uses have left behind considerable environmental damage. Currently, the site is occupied and being repaired by Spring Bay Mill, a culture and environment focused regeneration project.





Postgraduate researchers

Nnenna Okore/ Fine Art Erich Wolff/ Architecture Julian O'Shea/ Design





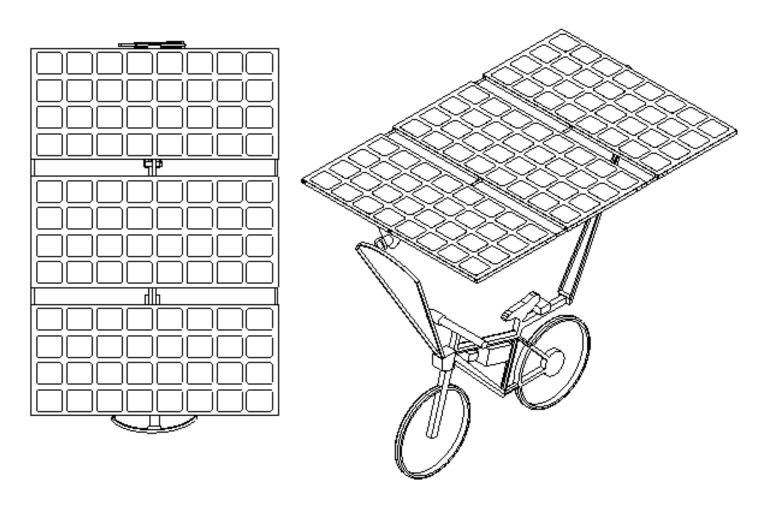
Nnenna Okore/ Fine Art

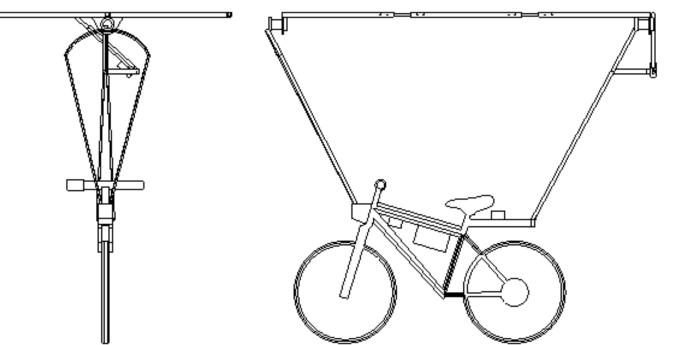
My PhD research responds to the ecological dilemma of waste. Through a backand-forth engagement with bioplastic and an engaged audience, the research rethinks how bio-materials can be activated to generate ecological awareness, artistic experience, and learning.

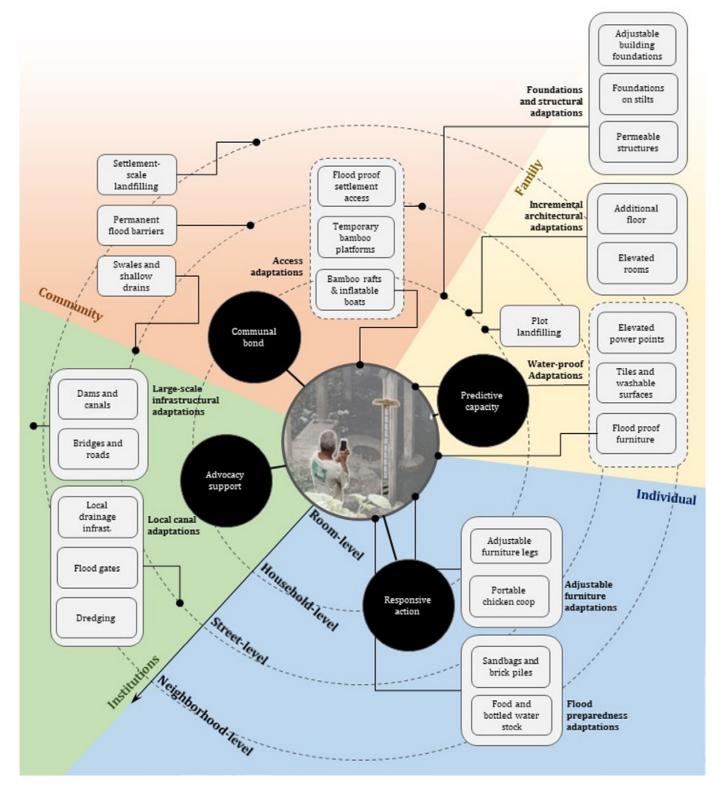


Julian O'Shea/ Design

Through the Vehicle for Change project, Julian's PhD explores how sustainable vehicles can help communicate issues to a wide audience through attention-grabbing vehicles and the design of related outreach programs. The team is building a bike that can operate purely on solar power, without the need for batteries or even pedalling.







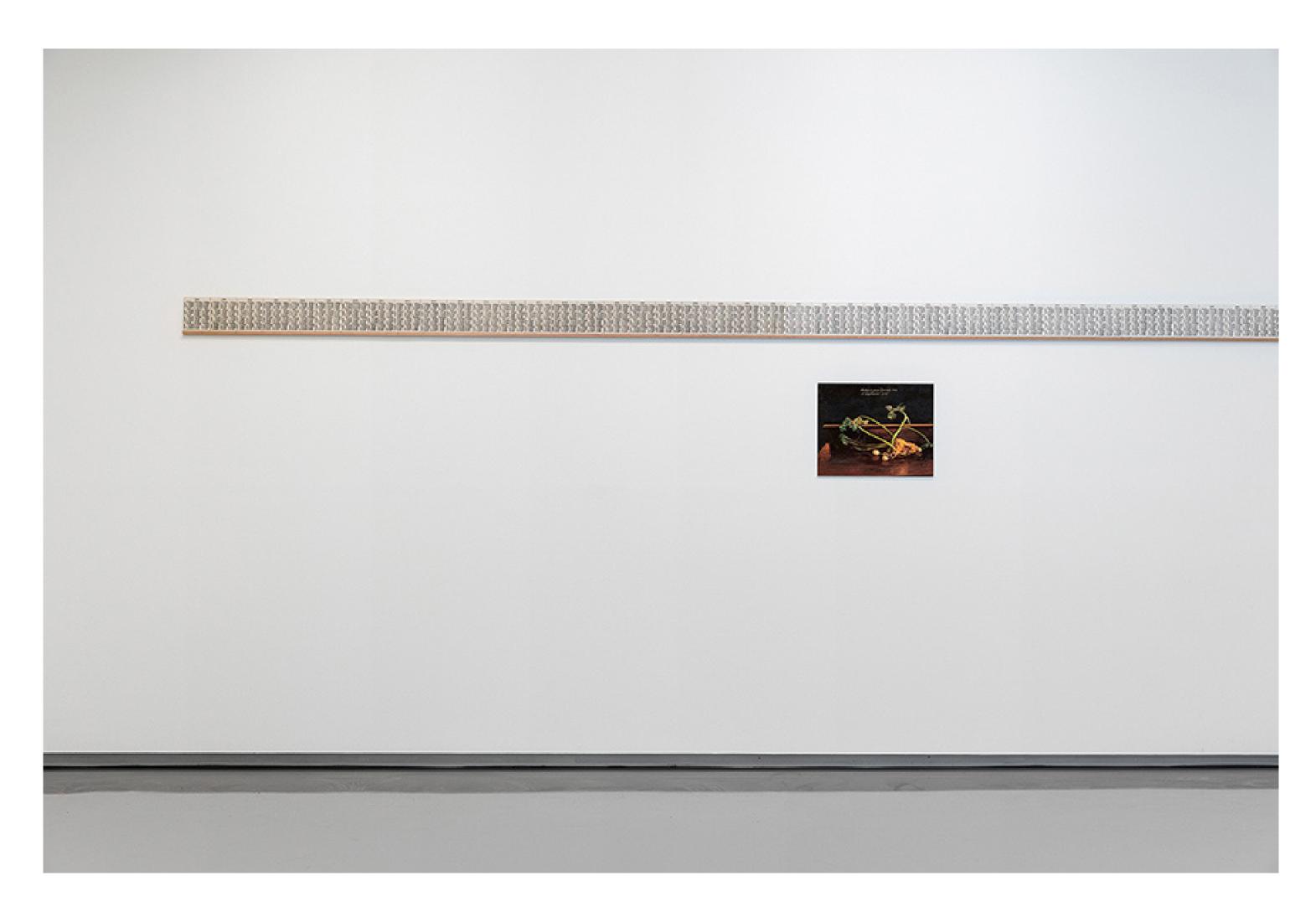


Erich Wolff/ Architecture

Erich Wolff's PhD project investigates floods through a "citizen science" approach to inform the design of nature-based infrastructure systems in the Asia Pacific. His thesis is based on the firsthand experiences of the RISE* program's community-based monitoring project, which documented floods over the last two years in partnership with communities in Indonesia and Fiji.

^{*} Revitalising Informal Settlements and their Environments

ECR Helen Profile Hughes

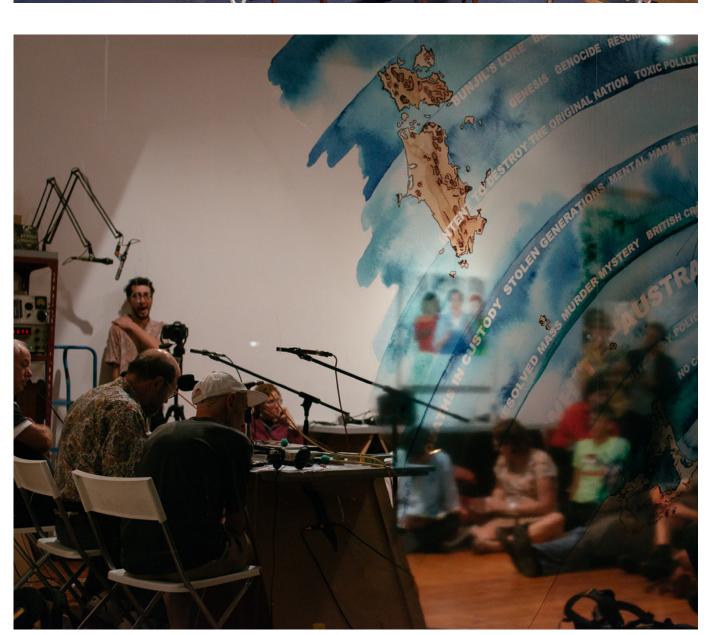




Helen Hughes is a Lecturer in Art History, Theory and **Curatorial Practice** at MADA.

Her recent research has concentrated on Australian convict art of the 18th and 19th centuries, focusing on areas such as convict women's textile art, the relationship between the crime of forgery and fine art, and the convict's relationship to law (whether British common law or localised forms of folk justice). She also researches, writes about and curates exhibitions of contemporary Australian art. As Curator at Gertrude Contemporary in 2014-2015, one of Helen's highlights was a collaboration with 3CR Community Radio titled If People Powered Radio: 40 Years of 3CR; and as Curator of Research at Monash University Museum of Art in 2016-2017, Helen helped develop the exhibition and monograph Mutlu Cerkez: 1988-2065. Currently, Helen is working with the Research Portfolio of MADA's newly established Climate Action Taskforce (see page 5), as well as developing an exhibition series for MADA Gallery with Tara McDowell that centres climate justice and principles of degrowth.





Above:

Mutlu Çerkez, Untitled 36891 (17 September 2065), 1990. Installation view, Mutlu Çerkez: 1988-2065, curated by Charlotte Day, Hannah Mathews, and Helen Hughes, Monash University Museum of Art, Melbourne, 2018. (Photograph: Andrew Curtis)

Left:

Vivienne Binns and Helen Hughes making an oral history recording for the State Library of Queensland in Vivienne's studio, Canberra, 2019.

Below left:

Robbie Thorpe and Megan Cope, Makin' Waves, 2016. Installation view, If People Powered Radio: 40 Years of 3CR, curated by Helen Hughes and Spiros Panigirakis, Gertrude Contemporary, 2016. (Photograph: Keelan O'Hehir).

Next December 2021

