

FOSTERING INDUSTRY INNOVATION



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Drive Organisational Success with Creative and Practical Practice

In today's fiercely competitive market, staying ahead of the curve requires more than just know-how—it demands innovative insights and transformative solutions. In this information age, the organisation with access to the latest insights and analysis will dictate innovation in its industry.

Innovation doesn't just happen; it's developed through continuous feedback loops, consultations, and engagement. This isn't always in reach for an organisation – limited information and resources may generate short-term and isolated views. But what if an organisation could assess some of its challenges over a longer period, allowing it to look further forward and leap ahead of its competitors?

At Monash Art, Design and Architecture, we are shaping and redefining the future through strategic collaboration with industry leaders. We know that if you're not generating new knowledge, all you can do is follow. Our proven track record of driving innovation and delivering tangible results offers unparalleled opportunities to use our experience and resources to drive an organisation's success.

Why Monash

Monash University is more than a hub of academic excellence—it's a catalyst for industry innovation. As a member of Australia's prestigious Group of Eight (GO8) and consistently ranked among the top one per cent of universities globally, Monash provides a dynamic ecosystem where industry partners can thrive.

Our Impact 2030 Strategic Plan identifies the key challenges of climate change, geopolitical security and thriving communities, which directly affect many businesses and industries.

By partnering with Monash, industry leaders can access cutting-edge research, top-tier talent, and a collaborative network that drives innovation.

Why Monash Art, Design and Architecture

At Monash Art, Design and Architecture, we understand that innovation knows no boundaries. As Australia's leading faculty combining art, design, and architecture, we're uniquely positioned to address the multifaceted challenges facing industries today.

Our interdisciplinary approach breaks down silos and fosters creative collaboration, resulting in groundbreaking solutions that drive business growth. With state-of-the-art facilities and a culture of innovation, we empower industry partners to unlock new opportunities, differentiate their offerings, and stay ahead of the competition.

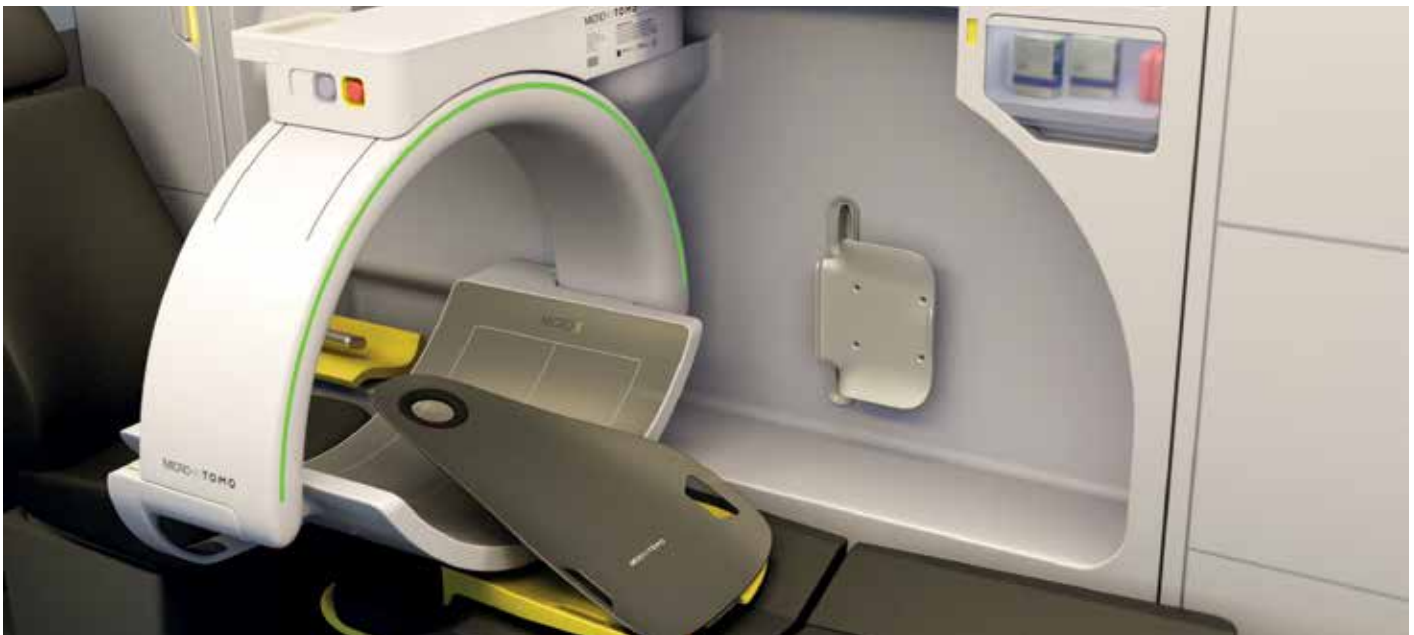
Innovate with Rigorous Research

Collaborating with us allows you to delve deeper into critical issues and explore innovative solutions. Our dedicated expertise, resources, and interdisciplinary approach ensure that research outcomes are robust and directly applicable to organisational contexts.

These actionable insights come from prioritising original thought, creative exploration, and prototype development. We conduct the majority of our research within a 'living lab' environment, which allows for real-time testing and refinement of ideas in a controlled yet dynamic setting. Our iterative processes support innovative methodologies and foster continuous improvement, ensuring solutions adapt to evolving research trajectories, business needs, and market dynamics.

Combining academic research capabilities with industry insights and resources allows us to bridge theoretical advancements with practical applications and foster innovation. This collaborative effort harnesses the collective expertise of academic researchers and industry practitioners to confront complex and urgent technological and societal challenges.

Together, our efforts can leverage diverse perspectives, skill sets, and resources using a synergistic approach that promises transformative advancements through mutual expertise and cooperation.



Micro-X — Revolutionising CT Technology with Compact Ingenuity

Micro-X and our Design Health Collab have formed a dynamic and enduring partnership. Our researchers and PhD candidates have collaborated on multiple transformative projects across healthcare and airport security. Our collaboration commenced with the development of the Mobile Stroke Imager, a groundbreaking advancement in healthcare technology.

Micro-X, the global leader in commercialising carbon nanotube emitter technology (CNT) for x-ray imaging, lacked a device to realise the technology’s full potential. Leveraging design research methods and a deep understanding of user needs, our researchers optimised its functionality. Working closely with Micro-X, we co-developed a miniaturised Computed Tomography (CT) scanner suitable for deployment in standard ambulances, revolutionising stroke care by enabling early intervention and improving patient outcomes.

Following this successful project, Micro-X collaborated with us again to create an innovative airport security system, including

a Self-Service Security Checkpoint and a Miniature Baggage Scanner. Extensive research and development efforts prioritised user-friendly design and efficiency, resulting in a comprehensive system that enhances safety and passenger experience. By integrating a Miniature Baggage Scanner and Micro-X’s revolutionary CT technology, the team could streamline security screening within existing airport infrastructure, revolutionising airport security with improved efficiency and passenger empowerment.

Based on the earlier success of our collaboration, Monash Design Health Collab’s existing partnership with Micro-X has extended into funding a practice-based design research PhD program. This research is focused on designing deployable medical imaging equipment for field hospitals in austere health environments such as combat operations, disaster relief and humanitarian aid settings. The design outcomes from this research will develop CT equipment that can diagnose casualties and guide surgical treatment, focusing on mission-customisable and scalable solutions.

An Opportunity to Shape the Future

Many organisations aspire to be true leaders by shaping the future of their industries. One way they can do this is through focused engagement with the next generation of industry leaders.

Partnering with Monash Art, Design and Architecture allows an organisation to access a pool of exceptional talent, strengthen the talent pipeline, and foster innovation within its organisation. We provide mentorship, networking opportunities, and access to state-of-the-art resources and facilities, ensuring that candidates receive holistic support to thrive in their academic and professional endeavours.

One example of how this partnership can work is our Research Internship Program. PhD students, alongside two academic supervisors, collaborate with industry partners on projects tackling identified global challenges relevant to art, design, or architecture. These internships typically last at least three months and consist of at least 60 working days or full-time equivalent.

With a history of successful collaborations, our faculty has established itself as a trusted platform for industry leaders to invest in top talent and conduct cost-effective research founded on deep engagement. Industry partners can also enhance their brand visibility and demonstrate their commitment to investing in their industry's future.



"Dwelling on the Platform", Dr Jacqui Alexander, images by Tobias Titz



James Cox PhD Scholarship in Architecture

The James Cox PhD Scholarship in Architecture was established in 2008 by one of our industry partners in honour of James Cox, a highly regarded architect in Melbourne, to support candidates for the duration of their candidature. It has since supported three candidates through to completion, with the fourth one currently undertaking their candidature.

The scholarship has enabled a range of research projects that wouldn't have been possible without this incredible support. These projects include:

- *Development of typologies along tramway corridors and new medium-density housing typologies.*
- *Urban design and planning strategies that prioritise understanding and subsequently designing conditions that drive specific outcomes in development and construction processes.*
- *A novel tree-centric urban design model enabling simultaneous visual and functional assessment of tree-scape designs.*
- *Improved timber housing enabled by advanced manufacturing.*

Volgren — Driving Innovation

Volgren's work with us began in 2007 with the establishment of the Volgren PhD Scholarship, aimed at cultivating expertise in public transport design, and continued with a second scholarship in 2011.

A parallel research collaboration was formed with our Mobility Design Lab to develop the Optimus bus. Our PhD candidates engaged with a diverse array of stakeholders, ranging from depot mechanics and engineers to passengers, to understand their needs. They then integrated this comprehensive understanding into a solution that applied mass customisation principles and standardised, enhanced designs. The team also developed a distinctive visual language for the new generation vehicle, which was innovative enough to make people notice the change but remained consistent with Volgren's vehicle identity, which is at the centre of their brand DNA.

This design evolution progressed to the electric Optimus bus, now a centrepiece of locally manufactured buses contributing to the Victorian Government's zero-emission bus initiative. Volgren's Optimus bus is Australia's best-selling route bus and is regarded as the industry standard.

Building on our collaborative journey, Volgren and Monash Art, Design, and Architecture are actively involved in Project SPARK, a venture to pilot battery-electric buses in Melbourne's Southeast using the EV Optimus buses.



Develop your talent through Embedded PhD Research

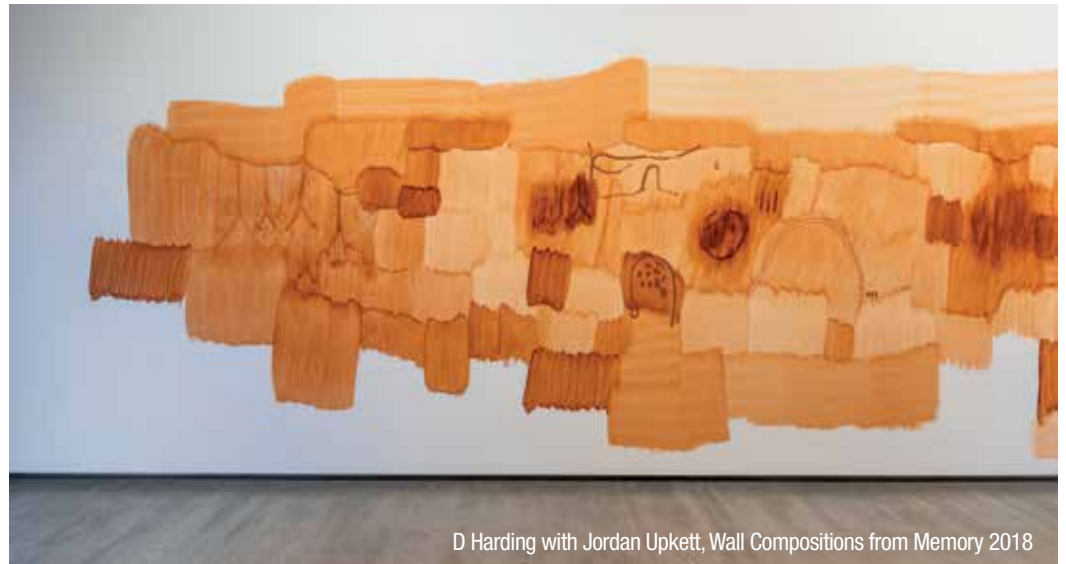
For organisations eager to empower their top talent with advanced academic pursuits, the Industry Researcher PhD offers a compelling opportunity. By participating in this program, you, as the employer, retain the Industry Researcher PhD candidate as a valuable employee.

As part of this initiative, the PhD candidate will spend up to 50 per cent of their work hours at Monash Art, Design and Architecture, immersing themselves in cutting-edge research and innovation. This arrangement ensures that your employee can seamlessly integrate their academic endeavours with their professional responsibilities, creating a valuable synergy between theory and practice. With a flexible timeframe of up to four years, the program accommodates the unique needs and obligations of both the employer and the candidate, fostering an environment conducive to groundbreaking research and collaborative problem-solving.

Ultimately, this initiative drives individual growth and strengthens the bond between academia and industry, fuelling progress and addressing real-world challenges head-on.



Sanné Mestrom, Hush, Hush 2018



D Harding with Jordan Upkett, Wall Compositions from Memory 2018

Engaging Originality through Curatorial Practice

The TarraWarra Museum of Art, renowned for its nationally significant collection of modern and contemporary Australian Art, has actively partnered with Monash Art, Design and Architecture PhD candidates since 2016.

The Museum recognises that our PhD candidates' unique understanding of and response to the site and its location supports TarraWarra's active engagement in art, place, and ideas. Throughout the partnership, TarraWarra has valued these curators' distinctive, cutting-edge, global perspectives and the opportunity to exchange original ideas about curatorial practice.

Our PhD students have curated several of TarraWarra's Biennials. This flagship program provides an opportunity to be nuanced and experimental, respond to place, and tap into alternative networks, not within TarraWarra. The resulting exhibitions have brought unique and independent perspectives

to the Biennial and allowed visitors to experience the interplay between a dedicated curatorial practice, the artists' creations, and TarraWarra's beautiful site.

These experiences have been enhanced by the First Nations knowledge, culture and Indigenous protocols that some of our PhD candidates have shared with TarraWarra staff. These insights have allowed them to further their existing knowledge, adding value to the strength and depth of the curatorial practice at TarraWarra.

Monash Art, Design and Architecture's Curatorial PhD program is experiential and open, pushing the candidate to think about values and ideas, ethics, knowledge, and the application of knowledge. This approach is an ideal match for TarraWarra, which is always seeking to curate unique exhibitions that respond to the significance of its site and contemporary ideas.



Connect with Monash Art, Design and Architecture

Ready to embark on a journey of innovation and collaboration?

Send us an email and let's explore how we can work together to drive groundbreaking research, nurture future industry leaders, and catalyse success in your field. Let's shape the future together.

Contact us now to start the conversation:

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COLLABORATE WITH MONASH ART, DESIGN AND ARCHITECTURE FOR:

- RESEARCH USING AN INTERDISCIPLINARY APPROACH
- FRESH PERSPECTIVES WITH SPECIALISED KNOWLEDGE
- ACCESS TO LEADING RESOURCES
- DEEPER COMMITMENT TO INNOVATION

