Melbourne Enterprise Review

THE UNIVERSITY OF MELBOURNE

2025

Disclaimer

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Note

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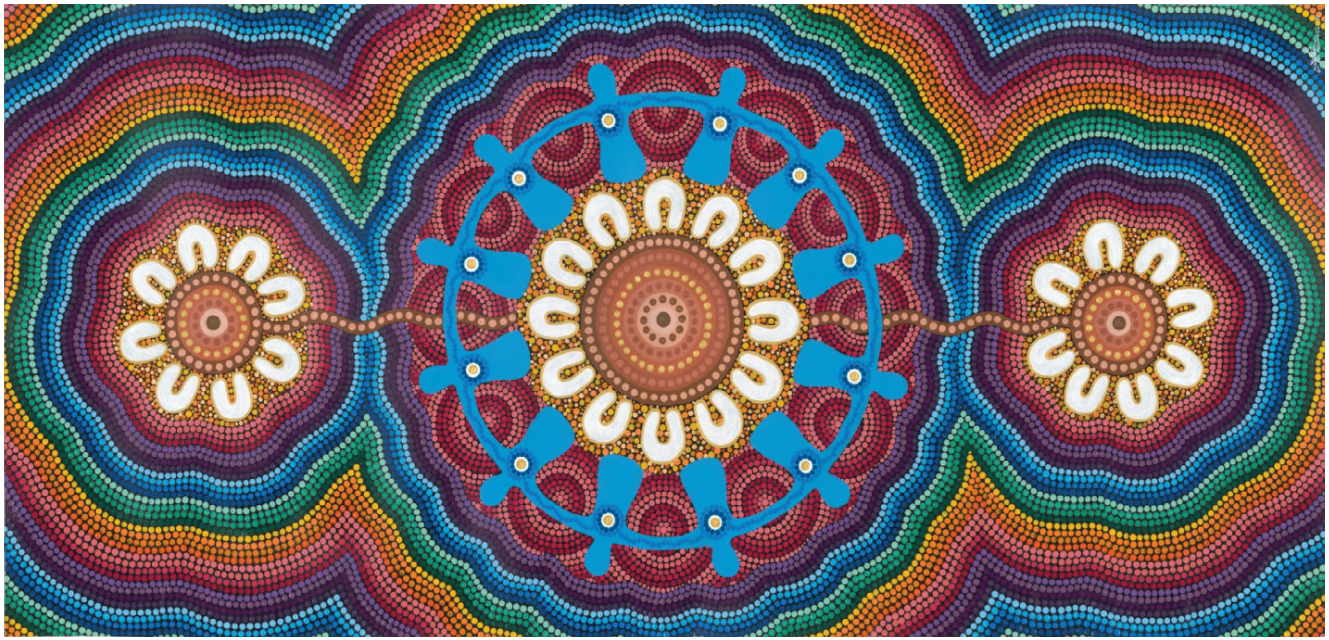
Contents

Acknowledgement of Country



The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff, and students we are privileged to work and learn every day with Indigenous colleagues and partners.

In making this Acknowledgement of Country we commit to respectful and responsible conduct towards all others according to the Traditional lores of this land, particularly at times of formal ceremony.

Artwork:
Guiding our future by Aaron Eastment
Acrylic on canvas
Aboriginal/Torres Strait Islander
Wiradjuri and Mabuiag, Erub Islands

“

This work is symbolic of the ripple effect of research discoveries, and how a dynamic ecosystem is needed to help these ideas grow so that they can serve the community. The researchers are seen at the centre of the circles in brown, their ideas in yellow and our community at the University in blue, who, when united with partners, can help these innovations flow into wider society, with the intention of creating a better world.”

— Aaron Eastment

Foreword

Amid global uncertainty, technological transformation and societal change, the University of Melbourne's mission is steadfast – to benefit society through transformational research and exceptional education.

The University's research strategy, launched in 2025, *Advancing Research 2030: Excellence for Impact*, states our intention to deepen our relationships with research institutes, communities, companies, investors, alumni and government and to be recognised as a globally leading force in innovation, entrepreneurship and commercialisation.

We can't do this on our own. Collaborations ensure our research remains relevant and impactful, sparking creative solutions and enabling a greater contribution to solving national and global social, economic and environmental challenges.

In recent months the University has announced major partnerships with Amazon Web Services, NTT Data and the Commonwealth Bank of Australia; the potential impact of these partnerships is immense.

The University's submission to the Australian Government's Strategic Examination of Research and Development (SERD) advocated for greater collaboration across sectors, funding at every stage of research translation and a place-based/ precinct innovation strategy.

We were delighted to see our recommendations included in *Ambitious Australia: SERD Final Report* and we support the Australian Government in adopting them.

We strongly support an inspiring national vision and narrative that persistently demonstrates the benefits of research and innovation to the community here and abroad, driving investment and opportunity, empowering and inspiring Australian innovators.

The University's ecosystem continues to build momentum, providing a supportive environment to foster innovation, interdisciplinary connection and support for our community, precinct and partners. *Melbourne Enterprise Review 2025* showcases these outcomes and the incredible global impact emerging.

We invite you to join us on this journey as we transform research and student innovation into ongoing prosperity for Australia's future.

Professor Mark Cassidy AM
Deputy Vice-Chancellor (Research)

Ken Jefferd
Vice-President, Melbourne Enterprise
Managing Director, UMC Pty Ltd

Ken Jefferd (left) and Professor Mark Cassidy AM

01

University of Melbourne innovation ecosystem

Building a thriving innovation ecosystem

2025 Highlights

2025 Metrics

Portfolio update

Spotlight on the Melbourne Entrepreneurial Centre (MEC)


Melbourne
Peer Mentor
Program

Building a thriving innovation ecosystem

We know it takes time, resources and the right mix of people, research and capital to translate a good idea into lasting impact.

The University of Melbourne is embedded within a dynamic innovation ecosystem offering world-class precincts, specialist expertise, entrepreneurial programs, early-stage funding, and strong connections to a vibrant community of partners and collaborators.

This integrated network of advisors, founders, investors, and alumni provides the mentoring, infrastructure and capabilities needed to support commercial ventures and industry partnerships. Working together, we are bringing pioneering research and discoveries to market – creating transformative impact at scale for the benefit of society.

Vision and culture

We're creating a culture that recognises and rewards innovation and enterprise.

TO FOSTER THIS VISION WE HAVE:

- Established a growing global community of alumni founders, industry partners, Enterprise Fellows and entrepreneurship experts
- Made research translation and commercialisation a core pillar of our new research strategy, *Advancing Research 2030: Excellence for Impact*
- Refreshed the academic promotion framework to recognise commercialisation and entrepreneurial activities
- Standardised licensing processes
- Committed to an ambitious five-year growth strategy to support more innovators and build more ventures via the Melbourne Entrepreneurial Centre (MEC).

Precincts

We operate across a growing network of state-of-the-art innovation hubs and spaces that collectively house 210+ organisations including collaborative partners and co-located research centres, industry partners and startups.

10,000+

researchers across

40+

organisations in the Melbourne Biomedical Precinct

- Melbourne Connect
- Bio21 Molecular Science and Biotechnology Institute
- Melbourne Arts Precinct
- Jumar Bioincubator at CSL
- Aikenhead Centre for Medical Discovery (ACMD)
- Australian Institute for Infectious Disease (AIID) – under construction
- Cremorne Digital Hub

Expertise

We have specialist startup and commercialisation experts at the University to help innovators translate their ideas into new products, services and companies.

- Knowledge and technology transfer
- Business development
- Venture creation
- Industry partnerships
- Entrepreneurial education
- Founders in Residence
- Enterprise Fellows

Programs

We support innovation by growing the entrepreneurial skills and knowledge of our staff, students, founders and academics through the delivery of industry-leading programs.

- Melbourne Entrepreneurial Centre (MEC) programs:
  - Explore programs
  - Accelerator programs: MAP (Melbourne Accelerator Program) and TRAM (Translating Research at Melbourne)
  - Venture Studio
- Innovation by Design
- Faculty of Engineering and Information Technology (FEIT) Innovation Practice Program (Spark, Ignite, Catalyse)
- VC Catalyst Program (Wade Institute of Entrepreneurship/LaunchVic)
- Research internship and industry-engaged PhD programs
- Master of Entrepreneurship (Wade Institute of Entrepreneurship)
- MBA Innovation Bootcamp (Melbourne Business School)

Funding

We work with investment, industry and government partners to provide early-stage funding and support.

$15M

University of Melbourne Genesis Pre-Seed Fund (with Breakthrough Victoria)

$125M

Tin Alley Ventures Fund (with Tanarra Capital)

- University of Melbourne Proof-of-Concept Fund
- BioCurate venture catalyst (with Monash University and the Victorian Government)
- Uniseed venture fund (with 10 partner organisations)
- Investment partners
- Commercialisation grants

Community

We engage with diverse partners and talent so we can have the strongest possible impact in our local and global communities.

- Alumni: entrepreneurs, venture capitalists, business and industry specialists and commercialisation experts
- Staff, students and graduate researchers
- Industry partners, from global corporations to small and medium enterprises and startups
- Research institutes and hospitals
- Government
- University and ecosystem partners

2025 highlights

JANUARY

Startup

Startup Cell Bauhaus receives $3M grant from the Gates Foundation

Funding

22 University research projects awarded $8.5M commercialisation funding through Australia's Economic Accelerator (AEA) Ignite program – #1 in Australia for total funding awarded

Event

Better. Food. Future. Forum explores innovative approaches to building a resilient Australian Food and Beverage industry

Partnership

University of Melbourne signs strategic Memorandum of Understanding with Thermo Fisher Scientific

Startup

Startup Navi Medical Technologies takes out Cooperative Research Australia's Research Commercialisation Award

Startup

Startup Porous Lane recognised as one of *The Australian Financial Review's* 2025 Sustainability Leaders

Funding

Three University research-based technologies awarded $4.4M commercialisation funding from Australia's Economic Accelerator (AEA) Innovate program

Strategy

Launch of the University's new research strategy: *Advancing Research 2030: Excellence for Impact*

Program

11 startups selected from 120 applicants showcase their 5-month accelerator journey at MAP Demo Day

People

Michael Poisel appointed new Executive Director of the Melbourne Entrepreneurial Centre (MEC)

Startup

Startup Mirugen secures up to $4.5M in seed funding from the Genesis Pre-Seed Fund (GPSF), Tin Alley Ventures (TAV) and Brandon Capital

Startup

Startup Kali Healthcare wins the Australian Information Industry Association (AIIA)'s Chief Judge Innovation Award

Event

1650+ participants attend 40 events at Melbourne Connect during Innovation Week

Event

Sustainable Finance Futures Forum explores new approaches to unlocking capital and accelerating the transition to a low-carbon economy

People

Anita Zanchetta appointed new Executive Director, Innovation and Enterprise

Program

Social Ventures Exchange program awarded Best HASS Initiative of the Year at the Knowledge Commercialisation Australasia Awards

Startup

Clinical-stage pharmaceutical company ENA Respiratory raises US$22.4M

Strategy

Melbourne Entrepreneurial Centre (MEC) launches its 2030 strategy at the Started@Melbourne showcase

Precinct

Aikenhead Centre for Medical Discovery (ACMD), Australia's newest collaborative biomedical engineering hub, opens

Startup

Airwallex raises US$330M in Series G funding, bringing the company's valuation to US$8B

Investment

Tin Alley Ventures announces $12.9M of investment into eight startups

DECEMBER

Partnership

University of Melbourne signs strategic Memorandum of Understanding with ABC TV to support knowledge exchange in virtual production at the Faculty of Fine Arts and Music

Startup

University spinout and co-located partner Apromore announces its acquisition by tech giant Salesforce

Event

Computational Drug Discovery Forum explores how advances in AI are reshaping drug design and discovery

Startup

AI research startup i14 raises $4M in seed funding round backed by Tin Alley Ventures (TAV), Genesis Pre-Seed Fund (GPSF), and IP Group Australia

Startup

Brain-Computer Interface pioneer Synchron raises $308M in a Series D funding round

Startup

Medtech company Epiminder lists on the Australian Securities Exchange (ASX) with a market capitalisation of A$325M following FDA approval of its Minder device earlier in the year

Investment

University of Melbourne Genesis Pre-Seed Fund approves its 21st investment in 32 months of operations

2025 Metrics

Activating the ecosystem

Activating ecosystem activity to accelerate research translation

Melbourne Entrepreneurial Centre (MEC)

2025	Since 2020
Program participants	
1257	4363
Startups and research projects supported	
77	576

Research contracts

2025

3042
active research contracts with

1381
partner organisations*

Proof-of-Concept Fund

2025	Since 2020
Number of grants awarded	
29	121
Total funding awarded	
$1.4M	$8.7M

* Excluding competitive grants.

Growing research impact

Accelerating growth of licences, industry partnerships and new ventures

Invention disclosures received*

2025	Since 2020
172	846

Patents*

2025	Since 2020
Patent applications filed for new technologies 36	208
Active patents 331 (at 31 Dec 2025)	

Licences, options or assignments (LOAs)*

2025	Since 2020
New LOAs 52	237
Active LOAs 291 (at 31 Dec 2025)	
New University of Melbourne startups# 13	39

University of Melbourne venture investment performance**

2025

Companies added to portfolio

18

Companies in portfolio

64

(at 31 Dec 2025)

Capital raised by portfolio***

$350M+

Since 2020: $1.2B+

* 2025 SCOPR figures yet to be released at time of publication.

Companies based on University of Melbourne IP, in which the University may or may not hold equity.

** Comprises companies in which the University has a direct or indirect interest, including companies based on University IP and/or that have received investment from the University of Melbourne and its affiliated commercialisation vehicle (University of Melbourne Commercialisation Pty Ltd) or from University of Melbourne-affiliated funds including Genesis Pre-Seed Fund, Tin Alley Ventures, Uniseed and BioCurate.

***Aggregate figures are historical and provided for general information only. They do not imply future outcomes and do not constitute financial product advice.

Portfolio update

With our partners, we've established a vibrant and dynamic ecosystem which supports research-led innovation, developing ideas into new products, services and companies that create jobs, contribute to the economy and actively improve people's lives.

The infographic opposite shows the growing pipeline of spinout and startup companies based on University research IP, as well as companies that have received direct or indirect investment from: the University of Melbourne; its affiliated commercialisation vehicle, University of Melbourne Commercialisation Pty Ltd (UMC); or University of Melbourne-affiliated funds including Genesis Pre-Seed Fund, Tin Alley Ventures, Uniseed and BioCurate. The startups are active in a range of sectors, including MedTech, EnviroTech, AI and therapeutics.

Growing pipeline of spinout and startup companies

Spotlight on the Melbourne Entrepreneurial Centre (MEC)

As Australia confronts a growing need for greater economic complexity and commercial deep tech success, the Melbourne Entrepreneurial Centre (MEC) is uniquely placed to lead the charge. As the University of Melbourne's front door to entrepreneurship, the Centre bridges the critical gap between world-class research and real-world impact.

Established in 2018, MEC has served as a launchpad for aspiring and established entrepreneurs across the University's ecosystem, including academics, students, staff, alumni and industry professionals.

In 2025 MEC entered a new era with the launch of its *MEC 2030* strategy and the appointment of a new Executive Director Michael Poisel, from the University of Pennsylvania. A global innovation leader, Michael established and led the Penn Centre for Innovation Ventures (PCIV), launching more than 280 spinout companies that collectively raised over US$900 million in funding.

The *MEC 2030* strategy articulates its mission – to grow global impact through entrepreneurship over the next five years – by turning more ideas, research and technologies into companies and providing the next generation of leaders with more entrepreneurial training and pathways.

"The reason we want and need to commercialise the University's research is because by doing this we are contributing to changing the world, to improving people's lives and having a positive impact. Never has that felt more important and urgent than right now," Mr Poisel said.

To realise MEC's ambition, the strategy focuses on: creating new early-stage MEC programs to support more innovators all year round, refreshing and expanding delivery of later-stage MEC accelerator programs to help more startups grow, and building more investment-ready companies through the new MEC Venture Studio. Expanding and nurturing the MEC community is also key to MEC's success with an engaged community network providing more opportunities for mentoring, funding and support for all MEC innovators, founders and ventures.

By 2030 MEC will have supported 24,000 innovators, built 250 new ventures and grown its community by 30 per cent.

MEC's team of entrepreneurial educators and experienced commercial professionals come from diverse backgrounds in academia, business, strategy and innovation. With a strong track record in delivering high-impact programs and growing early-stage ideas, the team will accelerate MEC's reach, scale successful ventures, and further embed entrepreneurial thinking across the University and beyond.

Find out more on the MEC website: unimelb.edu.au/mec

> "MEC is moving beyond educating people in entrepreneurial thinking. We are now turning them into actual entrepreneurs."
>
> — Michael Poisel, Director, Melbourne Entrepreneurial Centre

Key pillars of the MEC 2030 strategy

MEC organises its activity around complementary streams designed to meet innovators and founders where they are at.

Engage

Connecting entrepreneurs and building an entrepreneurial culture.

Bringing together the MEC community and celebrating entrepreneurship through events, activations, spaces, systems, networking and storytelling.

Explore

Awakening entrepreneurial mindsets.

Helping people explore entrepreneurial ambitions, skills, insights and experiences; enabling them to discover and develop their own pathways to impact.

Accelerate

Scaling startups through cohort programs.

Providing structured accelerator programs and a cohort experience supporting founders who have started a company and are ready to grow.

Venture

Connecting entrepreneurs and building companies.

Delivering tailored venture building services to create and grow startups and spinouts via a venture studio model.

02

Transforming health futures

Melbourne's braintech revolution

Five startups reshaping approaches to neurological conditions

Startup

Mirugen

Gene therapy to ‘switch on sight’

Startup

PredicTx Health

Reducing chemotherapy side-effects through AI-powered dosing

Startup

Proteomics International and the Royal Women’s Hospital

Developing a new blood test for endometriosis diagnosis

Partnership

FeBI Technologies

Transforming iron disorder diagnosis through quantum sensing

Startup


NeuroGen

Melbourne's braintech revolution

Five startups reshaping approaches to neurological conditions

Startup

From paralysis to epilepsy to Parkinson's disease, University of Melbourne-affiliated startups are pioneering minimally invasive implants that are transforming approaches to neurological conditions – attracting global investment, setting new standards in the field and changing what's possible for patients worldwide.

Over the past decade, five University of Melbourne-affiliated startups have led the way in advancing world-first technologies for the diagnosis, management, and treatment of a range of neurological conditions. Rather than relying on open-skull surgery, they're developing minimally invasive implants to monitor and decode neural signals or restore brain function. Together, they are redefining our approach to neurological disorders, giving millions of people living with conditions such as paralysis, epilepsy, speech impairment and Alzheimer's new hope for independence and improved quality of life.

Pioneering the endovascular approach: Synchron and Ultra Bionics

Founded in 2012 by Professor Nicholas Opie, Professor Thomas Oxley and Dr Rahul Sharma, Synchron began with a key insight: instead of drilling through the skull, why not use the body's existing highway – blood vessels – to reach the brain? The Stentrode, a stent-like device inserted through the jugular vein, records neural signals and allows people with severe paralysis to control computers and smartphones with their thoughts.

By November 2025, Synchron had raised US$345 million globally, with backing from top-tier venture investors along with Australia's National Reconstruction Fund Corporation (NRFC). The company was the first to integrate its brain-computer interface (BCI) with Apple's ecosystem, allowing users to control devices such as iPads or iPhones with their thoughts, and is also collaborating with Nvidia, Amazon, and OpenAI to harness artificial intelligence and machine learning capabilities. The team has placed the Stentrode device in 10 patients across clinical trials in Australia and the US, establishing the safety profile needed to advance toward a larger trial and ultimately broader clinical adoption.

Synchron's success created something incredibly valuable: a blueprint and a talent pipeline for the next generation of Melbourne braintech entrepreneurs. Professor Opie has since founded Ultra Bionics, which is taking neurotechnology in a new direction. Rather than recording brain signals, the company is developing ultrasound technology to stimulate the brain and alleviate symptoms of conditions like Parkinson's, epilepsy, PTSD, and addiction.

The approach promises to be safer and more precise than conventional deep-brain stimulation, which requires invasive surgery and can cause irreversible damage to brain tissue. Founded in August 2024, Ultra Bionics has since secured $1.75 million in seed funding, including support from the University's Genesis Pre-Seed Fund, and is now in discussions with Series A investors.

Detecting and monitoring seizures: Epiminder

Meanwhile, Epiminder – founded in 2018 by Professor Mark Cook as a research collaboration between the University, the Bionics Institute, St Vincent's Hospital Melbourne and Cochlear – has taken a different technological path. Inspired by a conversation with Laureate Professor Graeme Clark AC, inventor of the cochlear implant, Professor Cook adapted the bionic ear technology for epilepsy monitoring. The resulting device, called Minder, sits just beneath the scalp and records brain activity continuously to detect and eventually predict epileptic seizures.

> Innovation thrives when institutions work together. The collaboration between the University, the Bionics Institute, St Vincent's, and Cochlear was fundamental to Epiminder's success."
>
> — Professor Mark Cook, Founder and Chief Medical Officer, Epiminder

> The University of Melbourne didn't just provide funding and lab space – it created an environment where bold ideas could be tested, refined and scaled. That's what allowed us to move from concept to company."
>
> — Professor Nicholas Opie, Co-Founder, Synchron, and Founder and CEO, Ultra Bionics

Clinical trials have shown that Minder can identify clinically relevant findings in 88 per cent of patients with drug-resistant epilepsy, with the system achieving a world record five-year continuous electroencephalogram (EEG) recording. The company has raised over $150 million to date. In December 2025, Epiminder achieved a major milestone by listing on the Australian Securities Exchange with a market capitalisation of $325 million. The Minder system received approval from the Food and Drug Administration (FDA) in April 2025 and is launching its commercialisation plan for the US in 2026.

Emerging innovators: Fluent and Neurogen

Emerging more recently from the Melbourne Entrepreneurial Centre's TRAM (Translating Research at Melbourne) Air program, Fluent is a promising new startup developing a minimally invasive brain-computer interface that translates thought into text.

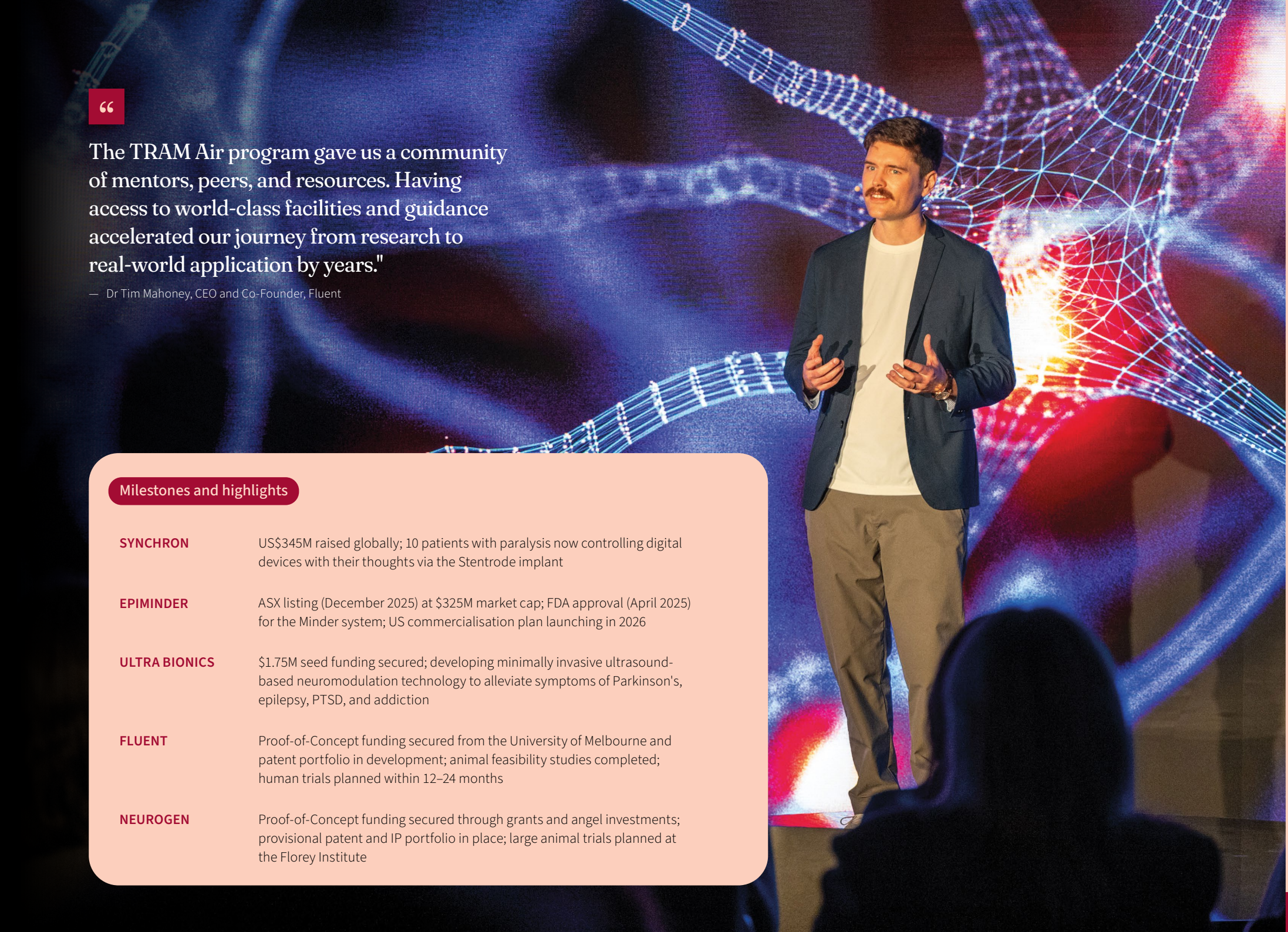
The company's initial focus is on people with communication impairments, paralysis, or neurological conditions that make speaking difficult or impossible. Co-Founders Dr Dean Freestone and Dr Tim Mahoney assembled a team from the University's Biomedical Engineering Department and brought on industry-leading mentors – including Synchron CEO Thomas Oxley – to guide their development.

Fluent has already filed provisional patents, secured Proof-of-Concept funding from the University, and completed animal feasibility studies. An investment from the Genesis Pre-Seed Fund has been approved (pending completion of the current financing round), and human clinical trials are planned for the next 12 to 24 months.

Rounding out the cohort is Neurogen, an early-stage biotech startup developing cell-based brain implants to treat conditions such as Alzheimer's, Parkinson's and traumatic brain injuries.

Founded by Dr Ruwini Cooray – a 2025 MedTech Actuator Accelerator graduate – Neurogen is taking a regenerative approach. The company's microtissue implants, derived from stem cells and arranged to resemble native brain tissue, aim to repair and restore lost brain function rather than simply manage symptoms. Professor Opie serves as an adviser, and the company is collaborating with the University of Melbourne, the Florey Institute, and St Vincent's Hospital Melbourne on large animal validation – a crucial step towards first-in-human trials.

This cluster of world-leading neurotechnology companies, all born out of the University's innovation ecosystem within a few kilometres of one another, represents an incredible convergence of talent, resources and ambition. Together, they are solving different pieces of the same puzzle: how to diagnose, manage, and treat a range of neurological disorders safely, effectively, and accessibly. For the millions of people living with epilepsy, paralysis, Parkinson's, Alzheimer's and other conditions, this could soon mean the difference between a life constrained by illness and one restored to more independence and possibility.



> The TRAM Air program gave us a community of mentors, peers, and resources. Having access to world-class facilities and guidance accelerated our journey from research to real-world application by years."
>
> — Dr Tim Mahoney, CEO and Co-Founder, Fluent

Milestones and highlights

SYNCHRON	US$345M raised globally; 10 patients with paralysis now controlling digital devices with their thoughts via the Stentrode implant
EPIMINDER	ASX listing (December 2025) at $325M market cap; FDA approval (April 2025) for the Minder system; US commercialisation plan launching in 2026
ULTRA BIONICS	$1.75M seed funding secured; developing minimally invasive ultrasound-based neuromodulation technology to alleviate symptoms of Parkinson's, epilepsy, PTSD, and addiction
FLUENT	Proof-of-Concept funding secured from the University of Melbourne and patent portfolio in development; animal feasibility studies completed; human trials planned within 12–24 months
NEUROGEN	Proof-of-Concept funding secured through grants and angel investments; provisional patent and IP portfolio in place; large animal trials planned at the Florey Institute

Mirugen

Gene therapy to ‘switch on sight’

Startup

Mirugen is developing a gene therapy that harnesses the regenerative power of the retina's own stem cells to restore vision, offering new hope for millions living with currently untreatable blindness.

For more than 190 million people worldwide, retinal degenerative diseases such as retinitis pigmentosa, age-related macular degeneration and Stargardt's disease can lead to progressive and irreversible blindness. Few effective treatments currently exist to reverse this damage and restore lost sight.

Mirugen, a Centre for Eye Research Australia (CERA) and University of Melbourne spinout, uses cellular reprogramming to regenerate light-sensing photoreceptors lost to disease.

The approach builds on Nobel Prize–winning technology, using gene therapy delivered directly into the eye, eliminating the need for cell transplantation.

The therapy uses precisely identified transcription factors – genetic instructions that reprogram Müller glial cells to become photoreceptors – a technique refined by Professor Raymond Wong and colleagues through years of research at CERA and the University of Melbourne.

The team progressed from discovery to commercialisation with support from the University's TRAM entrepreneurial program, which provided translational mentorship and business development expertise.

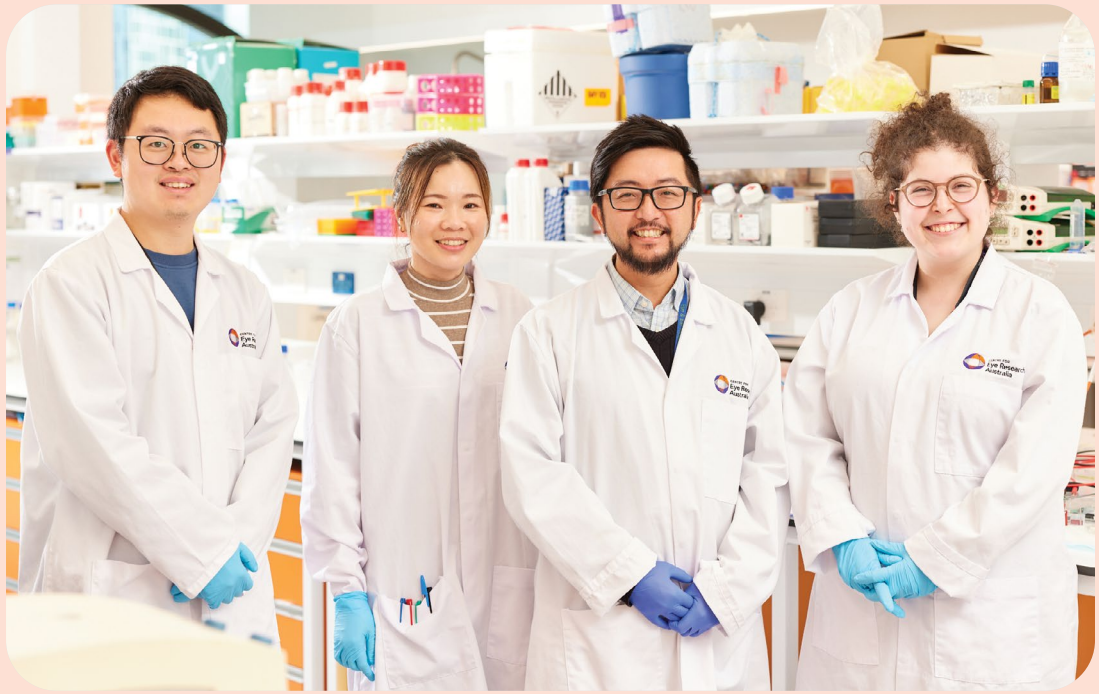
To date, Mirugen has raised around $7M, including a $4.5M seed round supported by Brandon Capital, Tin Alley Ventures and the University of Melbourne Genesis Pre-Seed Fund, building on non-dilutive funding from the MRFF CUREator biotech incubator.

Preclinical studies have shown promising results, and the team is now pursuing follow-up studies towards human clinical trials while building partnerships to bring the therapy closer to patients.

> “Our ultimate aim is to get our treatment to patients and create a brighter future for people living with incurable blindness.”
>
> — Professor Raymond Wong, Mirugen Co-Founder and Head of Cellular Reprogramming Research at CERA

Key facts

FACULTY	Faculty of Medicine, Dentistry and Health Sciences
PARTNER	Centre for Eye Research Australia (CERA)
SECTOR	Ophthalmic gene therapy
YEAR FOUNDED	2022
STAGE	Preclinical development
PEOPLE	**Professor Raymond Wong** Co-Founder and Chief Scientific Officer **Professor Keith Martin** Co-Founder and Medical Director **Charlotte Casebourne Stock** Executive Chair and Acting CEO
ECOSYSTEM SUPPORT	• Translating Research at Melbourne (TRAM) support • CUREator+ funding • CUREator funding • University of Melbourne Genesis Pre-Seed Fund investment • Tin Alley Ventures investment
SUSTAINABLE DEVELOPMENT GOALS ADDRESSED	• Good Health and Well-Being • Reduced Inequalities
WEBSITE	mirugen.com



Milestones and highlights

$500K

CUREator grant from the Medical Research Future Fund (2022)

$1.92M

CUREator+ grant from the Medical Research Future Fund (2024)

$4.5M

Seed investment round (2025) led by Brandon Capital, Tin Alley Ventures and the University of Melbourne Genesis Pre-Seed Fund

PredicTx

Reducing chemotherapy side-effects through AI-powered dosing

Startup

Around 60 per cent of colorectal cancer patients are either overdosed or underdosed with chemotherapy, causing severe side-effects that lead many to stop treatment early.

PredicTx Health, a startup founded by Professor Justin Yeung, has developed an AI algorithm that uses routine CT scans to determine body composition and patient genomics to calculate personalised chemotherapy doses. Early validation achieved 84 per cent accuracy – a significant improvement over the current height-and-weight-based method.

The startup has secured $950,000 in pre-seed funding, including from the University of Melbourne Genesis Pre-Seed Fund, as well as $500,000 from the Australia's Economic Accelerator program, and is now awaiting regulatory approval. While initially focused on colorectal cancer, the technology has potential to transform chemotherapy dosing across multiple cancer types.

Image: iStock.com/ruizluquepaz

Key facts

FACULTY
Faculty of Medicine, Dentistry and Health Sciences

SECTOR
MedTech; Oncology

YEAR FOUNDED
2025

STAGE
Clinical validation

ECOSYSTEM SUPPORT

- $950K pre-seed funding from the Genesis Pre-Seed Fund and angel investors
- $500K Australia's Economic Accelerator Ignite grant
- $150K Victorian Government Women's Health Research Catalyst grant
- Collaborative partnership with Western Health

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Good Health and Well-Being; Reduced Inequalities

WEBSITE
predictx.health

Proteomics International and the Royal Women's Hospital

Developing a new blood test for endometriosis diagnosis

Partnership

Endometriosis is a chronic, often debilitating condition affecting one in nine women and girls of reproductive age – yet diagnosis takes an average of seven years, requiring complex imaging (TVUS ± MRI) and sometimes surgery to confirm disease.

Proteomics International, the Royal Women's Hospital and the University of Melbourne are working together to advance Promarker®Endo – a first-of-its-kind blood test designed to reduce and alleviate the long diagnostic pathway.

This collaboration leverages the world's largest biobank of endometriosis samples, housed at the Royal Women's Hospital, combined with University research and clinical expertise, and Proteomics International's proprietary biomarker platform technology.

The project aims to validate next-generation diagnostics capable of identifying endometriosis across all disease stages, including early-stage cases that are not detected through imaging and can be missed during surgery.

Key facts

FACULTY
Faculty of Medicine, Dentistry and Health Sciences

SECTOR
Women's Health; Diagnostics

PARTNERSHIP COMMENCED
2021

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Good Health and Well-Being; Gender Equality

FeBI Technologies

Transforming iron disorder diagnosis through quantum sensing

Startup

Iron disorders affect more than two billion people worldwide, yet standard blood tests often overestimate how much iron is actually stored in the body, leading to delayed or incorrect treatment, particularly for women and those with chronic health conditions.

FeBI Technologies is developing a new diagnostic approach using diamond-based quantum sensing to provide a more accurate measure of iron. The sensor has the potential to improve diagnosis and management of iron deficiency, anaemia, and haemochromatosis at scale – ultimately benefiting millions.

The technology emerged from a collaboration between the University of Melbourne and the Florey Institute of Neuroscience and Mental Health, and has received funding from the Department of Industry, Science and Resources' Critical Technologies Challenge Program, Australia's Economic Accelerator fund and the Queensland Government.

It is currently undergoing validation in clinical applications with female athletes and remote First Nations communities.

Key facts

FACULTIES

Faculty of Medicine, Dentistry and Health Sciences

Faculty of Science

SECTOR

Diagnostics; Haematology

YEAR FOUNDED

2023

STAGE

Early-stage spinout

ECOSYSTEM SUPPORT

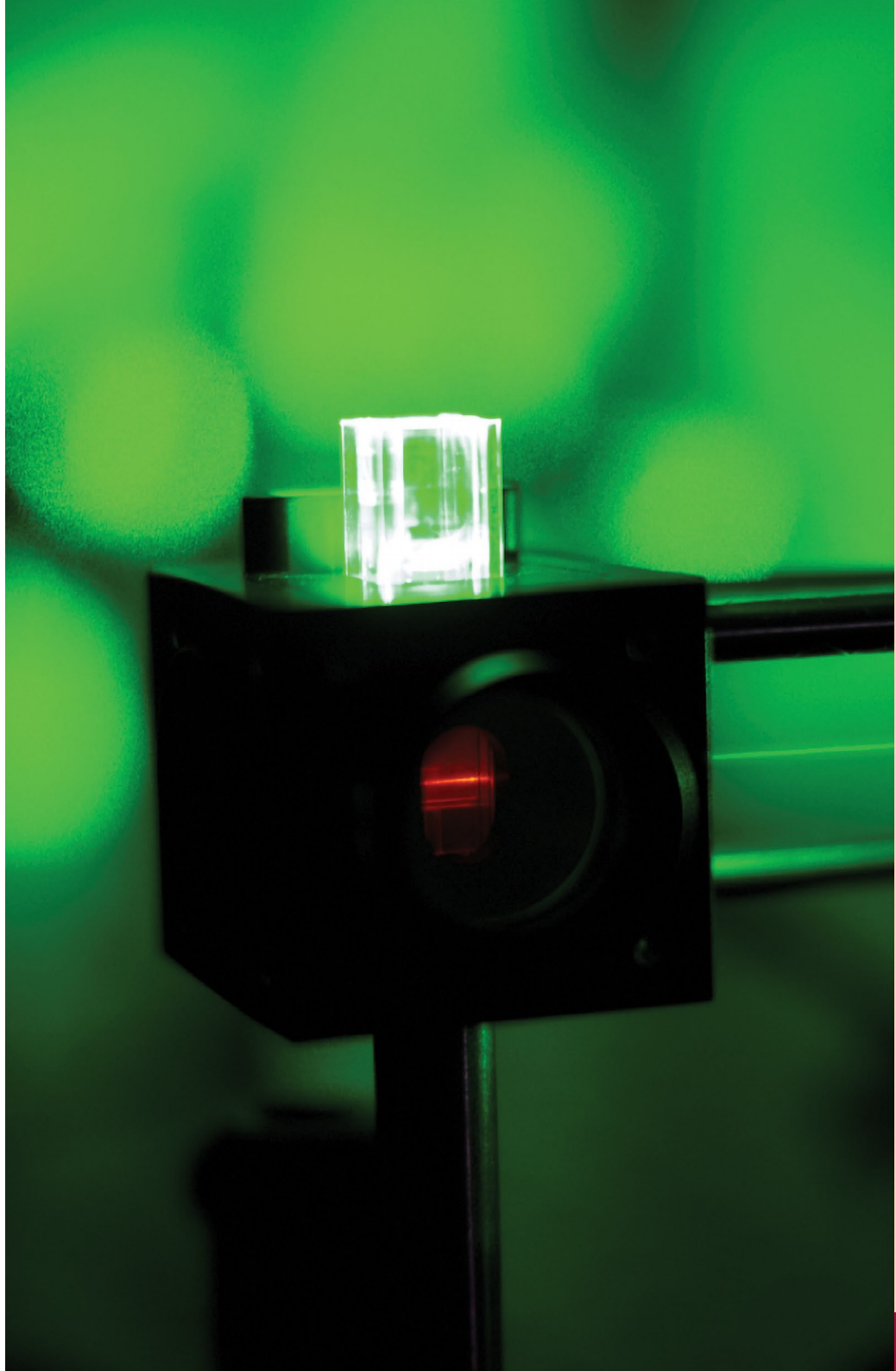
- TRAM (Translating Research at Melbourne) Air
- TRAM Runway

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED

Good Health and Well-Being; Reduced Inequalities

WEBSITE

febitech.com



03

Innovating for a sustainable future

Beyond EPiC

Decarbonising the built environment with intelligent data

Startup

PixaLens

Transforming waste recycling with AI-powered vision and robotics

Startup Licensing

Partnership: Karbonix

Building greener and faster: ultra-low emission modular panels for affordable housing

Partnership Startup

Australian Integrated Multimodal EcoSystem (AIMES)

A collaborative testing ground for smart transport innovation

Partnership


Intelligent transport technology for smart cities
Cohda Wireless

Beyond EPiC

Decarbonising the built environment with intelligent data

Startup

From University of Melbourne research to global data platform, Beyond EPiC provides the architecture, engineering and construction (AEC) industry with trusted intelligence and tools to measure, understand and reduce its impact on the planet.

For decades, the AEC industry – responsible for an estimated 21 per cent of global greenhouse gas emissions – has lacked the robust, consistent data needed to make reliable decisions relating to the sustainability of the built environment. What materials deliver the best performance? How do buildings compare on embodied carbon, energy and water usage? This gap in knowledge has long been a barrier to meaningful reduction in environmental impacts.

Drawing on the Environmental Performance in Construction (EPiC) research initiative at the University of Melbourne's School of Design, Beyond EPiC is a startup developing an ecosystem of data, tools and insights that empowers designers, engineers, planners, and policymakers to embed environmental intelligence at every stage of the construction project life cycle.

At its core lies the EPiC Database, one of the world's most comprehensive inventories of environmental flow coefficients for construction materials. Built on decades of peer-reviewed research, this scientifically validated dataset contains thousands of embodied carbon, energy and water values that can be integrated into life cycle assessment (LCA) workflows, enabling environmental impacts to be quantified early, consistently and transparently.

University of Melbourne Proof-of-Concept funding and Venture Studio support helped translate this research into practical industry value. This led to the launch of EPiC Explorer, a digital platform that provides real-time access to trusted environmental performance data, helping AEC project teams assess embodied impacts, optimise material choices and align decisions with climate goals and regulatory standards.

Already used across 170+ countries and integrated into residential building sustainability regulations in Australia, the Beyond EPiC ecosystem continues to grow. Upcoming tools launching in 2026 will extend environmental intelligence from building systems to entire cities, empowering practitioners worldwide to maintain, renovate, and build within planetary boundaries.

> “With Beyond EPiC, we want to empower all actors of the built environment to make the right decisions for the planet, using an integrated, consistent and transparent ecosystem of comprehensive data, robust tools, and actionable insights.”
>
> — Associate Professor André Stephan, Beyond EPiC Co-Founder and Co-Director

Key facts

FACULTY	Faculty of Architecture, Building and Planning
SECTOR	Built Environment; Environmental Performance
YEAR FOUNDED	2025
STAGE	Pre-Seed
PEOPLE	**Professor Robert Crawford** Co-Founder and Co-Director **Associate Professor André Stephan** Co-Founder and Co-Director **Dr James Helal** Co-Founder and Co-Director
ECOSYSTEM SUPPORT	• University of Melbourne Proof-of-Concept fund and Venture Studio support • Australian Research Council (ARC) funding • Belgian Fund for Scientific Research (F.R.S-FNRS) • Australian Urban Research Infrastructure Network (AURIN) partnership • UNSW partnership
SUSTAINABLE DEVELOPMENT GOALS ADDRESSED	• Sustainable Cities and Communities • Climate Action
WEBSITE	beyondepic.io

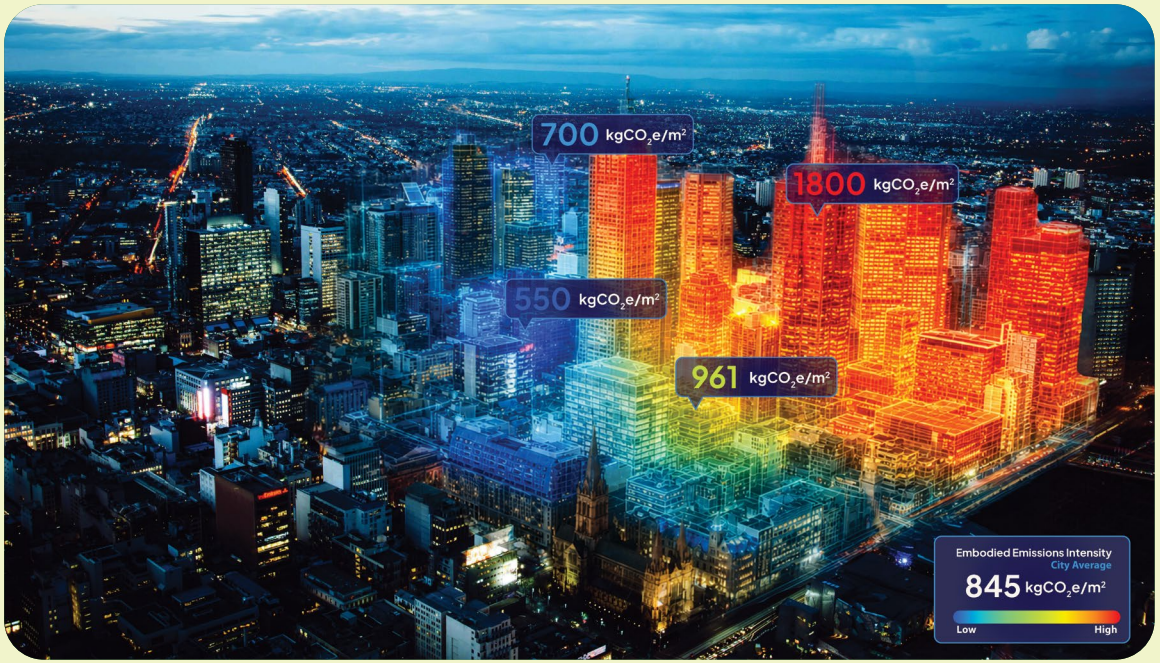


Image: Pexels/Maxime Francis. Edited using ChatGPT

Milestones and highlights

EPiC Database

One of the world's most comprehensive life cycle inventories of environmental flow coefficients for construction materials.

90,000+
Downloads across 170+ countries

600+
Academic citations

60,000+
Certificates already issued using the EPiC Database, adopted under the NSW Building Sustainability Index (BASIX) standards

PixaLens

Transforming waste recycling with AI-powered vision and robotics

Startup | Licensing

Australia's recycling sector struggles with inefficient sorting, contamination, and limited visibility over waste streams – meaning valuable materials are lost to landfill.

Founded by researchers Dr Gihan Ruwanpathirana, Hasala Sakvithi and Dr Sadeep Thilakarathna from the University of Melbourne, and Dr Shanaka Baduge from RMIT, PixaLens uses AI-powered computer vision and robotic systems to identify and separate waste into high-purity material streams, improving both recycling quality and recovery rates.

Built on intellectual property developed through two Cooperative Research Centres Projects (CRC-P), an Australia's Economic Accelerator Ignite grant and University of Melbourne Proof-of-Concept funding, the startup has successfully installed its system in several plastic recycling facilities.

The team is now working on making the technology scalable and cost-effective, with aspirations to expand to other material recovery facilities throughout Australia.

Key facts

FACULTY
Faculty of Engineering and Information Technology

SECTOR
AI and Robotics; Advanced Recycling

YEAR FOUNDED
2024

ECOSYSTEM SUPPORT
- University of Melbourne Proof-of-Concept funding
- TRAM (Translating Research at Melbourne) Runway and TRAM Air support
- $4.1M Cooperative Research Centres Projects (CRC-P) funding
- $448K Australia's Economic Accelerator Ignite grant

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Responsible Consumption and Production; Climate Action

WEBSITE
pixalens.com

Karbonix

Building greener and faster: ultra-low emission modular panels for affordable housing

Partnership | Startup

According to some estimates, Australia will need more than five million new homes by 2050. But traditional construction is slow, costly and carbon-intensive.

Professor Tuan Ngo, Professor Tai Thai, Associate Professor Xuemei Liu and Associate Professor Rackel San Nicolas from the Faculty of Engineering and Information Technology are working with Karbonix Technologies – a University of Melbourne spinout and Melbourne-based cleantech company specialising in advanced materials and modular construction – to develop ultra-low emission precast production platforms that could transform how Australia builds.

The technology combines novel concrete formulations, AI-driven digital twins, and advanced manufacturing systems to reduce curing times by up to 50 per cent. The result: panels that are up to 40 per cent cheaper to produce and embody 60 per cent less carbon than conventional alternatives.

The partnership is now scaling towards pilot housing and infrastructure projects in Australia.

Key facts

FACULTY
Faculty of Engineering and Information Technology

SECTOR
Sustainable Construction; Affordable Housing

YEAR PARTNERSHIP COMMENCED
2022

ECOSYSTEM SUPPORT
- $545K Australian Research Council Linkage Project
- $600K Global Science & Technology Diplomacy Fund grant
- $2.4M Australia's Economic Accelerator Innovate grant

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Sustainable Cities and Communities; Climate Action

WEBSITE
karbonix.com.au

Australian Integrated Multimodal EcoSystem (AIMES)

A collaborative testing ground for smart transport innovation

Partnership

Growing urban populations are placing increasing pressure on city transport networks. Annual congestion alone costs Australia $18 billion per annum, while road crashes exact a staggering economic and human toll.

Founded by Professor Majid Sarvi, AIMES is a unique living laboratory collecting real-time data from smart sensors that are monitoring vehicles, public transport, cyclists and pedestrians across 100 km of inner-city Melbourne.

The ecosystem offers a platform for 50+ partners in government and industry to test intelligent transport solutions in real-world conditions – from connected tram networks to smarter intersections and autonomous shuttle trials – using advanced algorithms and AI-driven analysis to optimise safety and efficiency.

By linking research, industry capability and live urban data, AIMES is supporting safer and more sustainable transport systems for expanding cities worldwide.

Key facts

FACULTY
Faculty of Engineering and Information Technology

SECTOR
Intelligent Transport Technology; Smart Cities

YEAR FOUNDED
2016

ECOSYSTEM SUPPORT

- $3.2M C-ITS National Harmonisation and Pre-deployment project (Australian Government; NSW, QLD, SA, VIC and WA Departments of Transport; Transport Accident Commission; ITS Australia)
- $150K Stocktake and Roadmap for Vehicle Technology Deployments (Austroads)

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Sustainable Cities and Communities; Industry, Innovation and Infrastructure

WEBSITE
eng.unimelb.edu.au/aimes

04

Empowering our communities

STARS

Standing Together Against Racism in Sport

Social Venture | Licensing

EnAccess Maps

Removing barriers to everyday mobility through shared data

Startup | Social Venture

Pathways 2 Participation

Tackling school non-attendance with evidence-based interventions

Social Venture | Licensing

Image: iStock.com/xavierarnau

STARS

Standing Together Against Racism in Sport

Social Venture | Licensing

STARS equips sports leaders and clubs with practical tools to recognise racism, respond effectively and create safe, inclusive environments for all participants.

Community sport is meant to be a place of connection and belonging. Yet for people from culturally and racially marginalised backgrounds, experiences of racism can make participation unsafe, unwelcoming or exclusionary.

Originally developed between 2021 and 2023, the STARS program, a collaboration between the University of Melbourne and Welcoming Australia, was conceived as a participatory action research project, working with local clubs, councils and community partners to co-design an approach grounded in the realities of grassroots sport.

Co-Founders Professor Karen Block, Research Fellow Dana Young and Welcoming Australia's Maia Tua-Davidson worked alongside club leaders and members to ensure the program was both evidence-based and fit for purpose.

Following its initial research and pilot phase, STARS leveraged support from the Melbourne Entrepreneurial Centre's TRAM Track program and the University's Proof-of-Concept Fund to develop the STARS Upstander Trainer Accreditation Program. This program provides a scalable approach to the delivery of anti-racism and upstander training within sport organisations and communities, by building a national network of facilitators.

The program combines online modules – covering racial literacy, the extent of racism in sport and the upstander framework – with an in-person workshop. This hybrid approach equips participants with both conceptual knowledge and the practical skills needed to deliver training and facilitate conversations on race and exclusion in sport.

Piloted in Queensland in 2025, the program garnered significant interest from sports leaders and organisations. Feedback has been overwhelmingly positive, with participants reporting increased confidence and capability to deliver anti-racism and upstander training to their communities.

The next iteration of the program launched in Victoria in April 2026. The team is now seeking philanthropic and brand partners to support more sport leaders to become STARS trainers across Australia.

> "[The STARS project is] giving people tools: if they see something, they can say something."
>
> — STARS Program participant

Key facts

FACULTY	Faculty of Medicine, Dentistry and Health Sciences
SECTOR	Public Health
YEAR FOUNDED	2020
PEOPLE	**Professor Karen Block** Melbourne School of Population and Global Health **Dana Young** Research Fellow, Melbourne School of Population and Global Health **Maia Tua-Davidson** Welcoming Clubs Manager, Welcoming Australia
ECOSYSTEM SUPPORT	• University of Melbourne Proof-of-Concept Fund • Nossal Institute for Global Health • Community-based partnerships • TRAM (Translating Research at Melbourne) Track
SUSTAINABLE DEVELOPMENT GOALS ADDRESSED	• Good Health and Well-Being • Reduced Inequalities
WEBSITE	go.unimelb.edu.au/xj82

Milestones and highlights

195

Club members attended the Active Inclusion and Upstander anti-racism workshops during the research phase

231

Surveys and 24 qualitative interviews documented racism experiences in sport, and positive program impact

LAUNCH

Of the STARS Upstander Trainer Accreditation Program in Queensland and Victoria

Image: iStock.com/FG Trade

EnAccess Maps

Removing barriers to everyday mobility through shared data

Startup | Social Venture

People using mobility aids face uncertainty when planning everyday trips due to lack of reliable accessibility information.

EnAccess Maps is a digital platform that enables users to share and find lived-experience insights about venue accessibility, empowering informed decision-making before arrival.

Founder and University of Melbourne alum Sabrina Leung began building the platform while studying, drawing on her experience as a disability support worker.

She progressed the venture with funding from the Melbourne Accelerator Program (MAP), which also provided mentoring and early-stage development support. Along with backing from LaunchVic, this enabled validation through six pilot programs resulting in partnerships with six local councils.

Key facts

FACULTY
Faculty of Arts (alum)

SECTOR
Social Impact; Accessibility

YEAR FOUNDED
2021

STAGE
Early-stage

ECOSYSTEM SUPPORT
- Melbourne Accelerator Program (MAP)
- LaunchVic CivVic Labs

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Reduced Inequalities; Good Health and Well-Being

WEBSITE
enaccessmaps.com

Pathways 2 Participation

Tackling school non-attendance with evidence-based interventions

Social Venture | Licensing

Addressing absenteeism has become a priority for Australian schools, with attendance rates declining since national reporting began, impacting student academic outcomes and wellbeing.

Pathways 2 Participation (P2P) is an evidence-based program co-developed by the University of Melbourne and Deakin University to help schools respond proactively to student avoidance and non-attendance.

The model provides a data-driven preventative approach combining targeted supports with intensive interventions, bringing together teachers, mental health professionals and families. A pilot across 16 schools in partnership with the Victorian Department of Education found that 82 per cent of staff reported that students benefited from the program.

Co-Founders Associate Professor Lisa McKay-Brown and Professor Glenn Melvin are now further validating P2P through controlled trials with the Association of Independent Schools of South Australia, the Melbourne Archdiocese of Catholic Schools, and the Department for Children and Young People (Tasmania) ahead of plans to scale nationally.

Key facts

FACULTY
Faculty of Education

SECTOR
Education; Mental Health

YEAR FOUNDED
2023

ECOSYSTEM SUPPORT
University of Melbourne Innovation by Design program support

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Quality Education; Reduced Inequalities

Image: iStock.com/Rawpixel

05

Partnering for transformative technologies

Airwallex

A Melbourne-born unicorn championing the next generation of entrepreneurs

Partnership Startup

ARC Training Centre for Transformative Health Sensing Technologies

A research and industry collaboration to drive the future of health monitoring

Partnership

Partnership: Rockwell Automation

Advancing Australian manufacturing through digital transformation

Partnership

Partnership: Thermo Fisher Scientific

Strengthening research capabilities across the Melbourne Biomedical Precinct

Partnership


BLACK PLA PRO
RED PLA PRO
BLACK PLA PRO
Bilby 3D
Bilby 3D
Bilby 3D
FLASHFORGE

Airwallex

A Melbourne-born unicorn championing the next generation of entrepreneurs

Partnership Startup

Founded in 2015 by four University of Melbourne alumni, Airwallex began with a clear ambition to build financial infrastructure better suited to a global, digital economy. Today, the company's University roots continue to shape its commitment to supporting students and emerging entrepreneurs.

The traditional financial system was not built for the speed of the modern digital economy. For a scaling startup or an established enterprise, managing global finances often means grappling with legacy infrastructure that is slow, expensive, and operationally opaque. From the difficulty of issuing local cards to the friction of multi-currency reconciliation, the absence of a unified financial stack creates a 'complexity tax' that hinders innovation and prevents businesses from operating seamlessly across borders.

Airwallex's founders drew on their backgrounds in engineering and commerce to create an end-to-end financial infrastructure platform that empowers modern businesses to scale globally, streamlining everything from borderless payments and card issuing to treasury management and embedded finance.

What began as a Melbourne-founded startup has grown into one of Australia's most globally recognised technology companies. With 26 offices worldwide and a team of over 2000 people serving more than 200,000 businesses ranging from SMEs to multinationals, the company has been valued at approximately US$8 billion, reflecting strong investor confidence in the platform as it continues to expand across new markets.

Now entering its second decade, Airwallex is increasingly focused on supporting the next generation of founders and entrepreneurs. The company maintains an active partnership with the University of Melbourne's Entrepreneurial Centre (MEC) and Faculty of Engineering and Information Technology. This includes a three-year $3 million partnership, recently extended with an additional $2 million commitment, to support scholarships, student initiatives, entrepreneurship programs and pathways into technology careers.

The partnership has delivered 43 scholarships valued at up to $30,000 each and supported 60 students through a financial hardship fund. It has sponsored awards in the Faculty's Endeavour program as well as MEC's Student Startup Competition, recognising student-led teams developing innovative solutions to real-world challenges.

In 2026, Airwallex also launched Latitude 37, a startup investment initiative focused on supporting and scaling emerging technology companies, reflecting the company's continuing dedication to nurturing the next generation of Australian innovation.

> "The Airwallex Excellence Scholarship gave me exposure I wouldn't have had otherwise – extending a journey that started in South Asia and East Asian markets into APAC and Europe. That breadth sets me apart and is positioning me for a managerial role in tech."
>
> — Dinuka Piyadigama, University of Melbourne alum and Airwallex Excellence in Technology Scholarship recipient

Key facts

FACULTY	Faculty of Engineering and Information Technology (alum) Faculty of Architecture, Building and Planning (alum) Faculty of Business and Economics (alum)
SECTOR	Fintech
YEAR FOUNDED	2015
STAGE	Late-stage/Series G
PEOPLE	**Jack Zhang** Co-Founder and Chief Executive Officer **Jacob Dai** Co-Founder and Chief Technology Officer **Lucy Liu** Co-Founder and President **Max Li** Co-Founder
ECOSYSTEM ENGAGEMENT	Late-stage mentor and strategic partnership with the Melbourne Entrepreneurial Centre (MEC) and Faculty of Engineering and Information Technology
SUSTAINABLE DEVELOPMENT GOALS ADDRESSED	• Industry, Innovation and Infrastructure • Partnerships for the Goals

Milestones and highlights

2015
Founded in Melbourne by a multidisciplinary team of University of Melbourne alumni

2017
Established first operations outside Australia in Asia

2019
Achieved unicorn status (valuation > US$1 billion) following Series C funding

2025
Publicly reported funding rounds valued Airwallex at approximately US$8 billion

ARC Training Centre for Transformative Health Sensing Technologies

A research and industry collaboration to drive the future of health monitoring

Partnership

A newly established centre led by the University of Melbourne is bringing together researchers, MedTech companies, hospitals, defence and sports organisations to develop the next generation of trusted health sensing technologies – and train the innovators who will bring them to life.

Wearable devices and smart implants that continuously monitor our health hold enormous promise. Yet many consumer-grade health sensing technologies lack the validation, data security and regulatory rigour needed for widespread adoption. Meanwhile, Australia faces a growing shortage of researchers with the interdisciplinary skills needed to bridge this gap.

The ARC Training Centre for Transformative Health Sensing Technologies is bringing together the expertise needed to address these challenges. Supported by $5 million from the Australian Research Council, the Centre draws on a team of 16 researchers from the University of Melbourne, Adelaide University and Queensland University of Technology, alongside 20 partner investigators from industry, hospitals, defence and sport.

The Centre's research will focus on four interconnected streams: developing and validating accurate and reliable sensors; building privacy-preserving data protection systems; creating interoperable multimodal data platforms; and applying advanced AI analytics to generate meaningful health insights.

The long-term vision is bold: to give every Australian access to a personalised health digital twin – a continuously updated virtual model of an individual's health status.

The Centre will equip early career researchers with the skills the Australian MedTech industry urgently needs. PhD students and postdoctoral fellows will undertake industry placements and develop expertise in entrepreneurship and commercialisation, with pathways into various University programs such as TRAM (Translating Research at Melbourne), Tin Alley Ventures and the Genesis Pre-Seed Fund.

Over the next five years, the project will generate new industry standards, novel technologies, and a community of practitioners that will extend well beyond the life of the Centre.

> “Health sensing technologies have huge potential to transform all health-related areas, from aged care to sports and workplace safety. Our vision is to create an intelligent human digital twin that simulates a person's health status to support their ongoing wellbeing."
>
> — Professor Peter Lee, Director, ARC Training Centre for Transformative Health Sensing Technologies, University of Melbourne

Key facts

FACULTY	Faculty of Engineering and Information Technology
PARTNERS	Adelaide University; Queensland University of Technology
SECTOR	MedTech; Health Sensing Technologies
YEAR ESTABLISHED	2025
EXECUTIVE COMMITTEE	**Professor Peter Lee** University of Melbourne, Centre Director **Professor Graham Kerr** Queensland University of Technology, Deputy Centre Director **Associate Professor Olga Ohrimenko** University of Melbourne, Deputy Centre Director **Professor Mark Hutchinson** Adelaide University, Chief Investigator **Mrs Meg Belmonte** University of Melbourne, Centre Manager
ECOSYSTEM SUPPORT	Australian Research Council Industrial Transformation Training Centre grant
SUSTAINABLE DEVELOPMENT GOALS ADDRESSED	• Good Health and Well-Being • Partnerships for the Goals

Milestones and highlights

$5M
Australian Research Council funding awarded under the Industrial Transformation Training Centres scheme

$5.27M
In-kind and $1.76M cash contributions from partner organisations

23
Researchers to be trained, including 15 PhD students and eight postdoctoral fellows

20
Industry partners spanning Australian MedTech companies, global technology leaders, sports organisations, defence and international universities

Image: iStock.com/baranozdemir

Rockwell Automation

Advancing Australian manufacturing through digital transformation

Partnership

Australian manufacturers face a dual challenge: meeting the country's 2035 emissions reduction targets while modernising production. Yet most lack the digital infrastructure needed to support transformation at scale.

The University of Melbourne and Rockwell Automation are working together to test a new wireless system in real manufacturing environments. The technology combines millimetre-wave radio – which transmits data much faster than Wi-Fi or standard 5G – with edge computing to process information almost instantly on the factory floor.

A pilot integrating this system with Autonomous Mobile Robots (AMRs) has shown potential gains of up to 20 per cent in output and a 40 to 60 per cent reduction in operational downtime. Part of a broader Memorandum of Understanding signed in 2022 by the two organisations, the project aims to help Australian manufacturers cut waste, reduce energy consumption, improve productivity and meet decarbonisation targets.

Key facts

FACULTY
Faculty of Engineering and Information Technology

SECTOR
Advanced Manufacturing; Industrial Automation

YEAR COLLABORATION BEGAN
2022

ECOSYSTEM SUPPORT
- University of Melbourne Proof-of-Concept funding
- TRAM (Translating Research at Melbourne) Runway, Track and Bootcamp support
- $199K Australia's Economic Accelerator Seed grant
- $299K Australia's Economic Accelerator Ignite grant

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Industry, Innovation and Infrastructure; Partnerships for the Goals

Thermo Fisher Scientific

Strengthening research capabilities across the Melbourne Biomedical Precinct

Partnership

A partnership with Thermo Fisher Scientific is giving University of Melbourne researchers access to cutting-edge tools and expertise to tackle challenges in health, sustainability and manufacturing.

Central to this collaboration is the launch of the Applications, Service and Knowledge Centre at the University's Bio21 Institute, where Thermo Fisher specialists work alongside researchers to provide support with complex data analysis, equipment performance, and technical training.

The partnership extends to major University initiatives and spans three key pillars: research innovation and infrastructure, precinct development, and enterprise strategy.

Specific areas of research collaboration include Multiomics, Microplastics, Automation and Renewables. The acquisition of the southern hemisphere's first Orbitrap Astral Zoom mass spectrometer, funded by an Australian Research Council grant, marks a major investment with the potential to transform biomedical research.

The partnership also creates opportunities for early-career researchers to gain industry experience and develop in-demand skills within the Melbourne Biomedical Precinct and beyond.

Key facts

FACULTY
Faculty of Medicine, Dentistry and Health Sciences

Faculty of Science

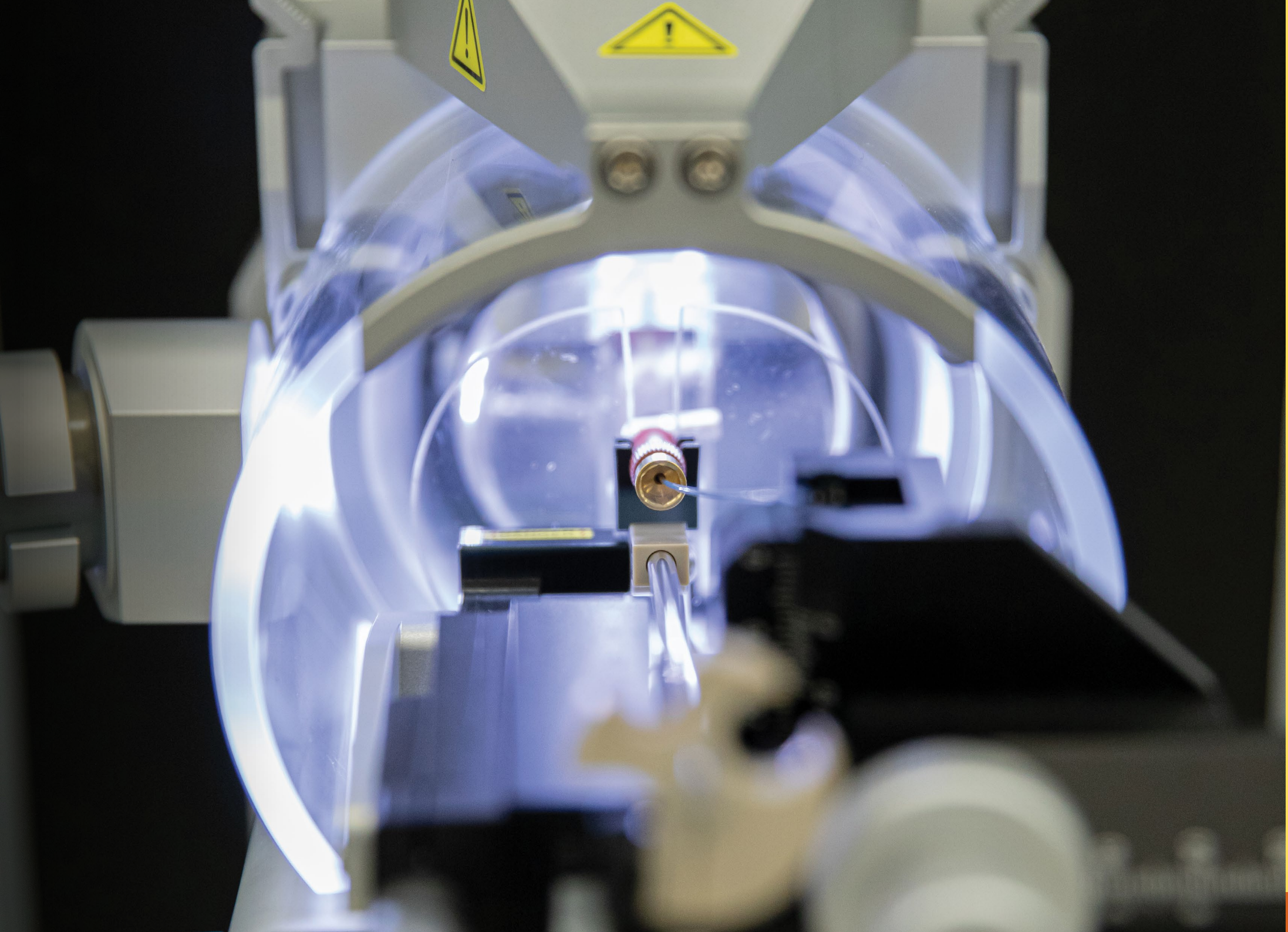
Bio21 Institute

SECTOR
Research Infrastructure

YEAR COLLABORATION BEGAN
2025

ECOSYSTEM SUPPORT
Australian Research Council Linkage Infrastructure, Equipment and Facilities (LIEF) grant

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED
Good Health and Well-Being; Industry, Innovation and Infrastructure



Find out more about transforming ideas into new products, services and ventures at the University of Melbourne.

THE UNIVERSITY OF MELBOURNE