

Melbourne School of Engineering



AUSTRALIAN INDIGENOUS POSTDOCTORAL FELLOWSHIP

(MULTIPLE POSITIONS AVAILABLE)

MESSAGE FROM MARK CASSIDY, DEAN, MELBOURNE SCHOOL OF ENGINEERING



 $World \ Engineering \ Convention: Mark \ Cassidy, Dean, Melbourne \ School of Engineering, Keynote; Engineering the future - people, places and partners, Melbourne, Victoria, 2019.$

The Melbourne School of Engineering acknowledges the Traditional Owners of country throughout Australia. The School recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians and continued connection to land, waters and culture. The school respects all first Nations People and warmly embrace our students, staff, Elders and collaborators as they do us whether it be locally, nationally or internationally.

Our people, relationships and culture underpin why for over 150 years, our School has been the leading provider of engineering and IT education and research in Australia. Our global reputation ensures we attract top academic staff and students who share our commitment to knowledge for the betterment of society.

Melbourne School of Engineering is built around three key pillars: world-class research, exceptional teaching and learning and a focus on wider engagement both with industry and the community.

We are leading cutting-edge interdisciplinary research in partnership with government and industry to address society's critical problems. Our research spans a vast range of blue-sky discovery and exploration and is complemented by a range of targeted industry-focused innovation and problem-solving programs.

Melbourne School of Engineering is globally recognised for our work across a number of areas including in hydrology and water resources, waste management turbulent flows, control theory, biomedical and neural engineering.

Our researchers are actively working towards advances in smart and sustainable development; Al, data and robotics, defence technologies and health technologies. Our expertise lies in medical technologies and pharmaceuticals, food and agribusiness, construction technologies, transport and defence technologies, advanced manufacturing and new energy technologies. These areas have been recognised as key to our future economic prosperity by the Australian and Victorian Governments.

"We are committed to creating an environment that values, supports and respects the unique views, knowledge and individual experience of our staff and students."

Our targeted research is embedded in curriculum to ensure we have effective pathways for students to advance to graduate research degrees. Our students experience research at its most practical and contribute to the outcomes of large-impact projects.

In 2015 we commenced MSE 2025, our bold 10-year vision to transform engineering and IT at the University of Melbourne. World-class thought leadership, the continued high quality of our graduates and the impact of our research to help address global problems are key areas of focus for MSE 2025. This vision will be realised through significant investment in new infrastructure, strengthening industry engagement and growing the size and diversity of our staff and student base to drive innovation and develop the transformative technologies of the future. MSE 2025 will see unprecedented opportunity for collaboration and knowledge bringing together some of the world's brightest IT and engineering minds.

Our School will open two major new sites within the next ten years. In early 2020 our innovation precinct, Melbourne Connect, will open its doors. The precinct is next to the University's main Parkville campus and will become Australia's leading innovation hub for data science and information technologies, hosting researchers, businesses, government bodies and community members.

Opening in 2024, our new campus at Fishermans Bend will facilitate collaboration with leading local and international organisations across the transport, energy, manufacturing, water, food, mining, defence and infrastructure sectors.

Diversity and inclusion in engineering and IT is central to us achieving this vision. We are committed to creating an environment that values, supports and respects the unique views, knowledge and individual experience of our staff and students. Our best work is done in collaboration, immersed in a supportive environment and a culture where new ideas and diverse perspectives thrive. We commit to ensuring our staff are clear about expectations, feel supported and encouraged to contribute their ideas and know where to turn if they require support.

We are implementing innovative strategies to engage effectively with industry, government, alumni and our communities to increase the impact and relevance of our teaching and research.

There has never been a more exciting time to join the School. Help us achieve our bold vision.



 $Melbourne Connect: Home \ to \ Melbourne School \ of Engineering, \ the \ Melbourne Entrepreneurial Centre, The Science Gallery, commercial and government partners, Parkville, Victoria.$

THE UNIVERSITY AT A GLANCE

Global rankings







in graduate employability worldwide

Times Higher Education World University Rankings 2019/QS Graduate Employability 2019

in the world

9000+ staff (FTE)



140+ Indigenous staff and an internationally recognised professoriate

34 highly cited researchers



Most of any Australian university

Elevate status

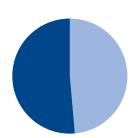


One of only 25 organisations of more than 1100+ nationwide with an 'Elevate' **Reconciliation Action Plan**

72 000+ students

In 2018, approximately 2,400 students enrolled in 51 subjects with a dedicated Indigenous focus

51% u/grad



49% grad

29 000+ international students

400+ **Indigenous** students, including 50+ Graduate Researchers

Research



Grants

\$179 M

in NHMRC, ARC and MRFF grants

THE UNIVERSITY OF MELBOURNE

Consistently ranked as Australia's best university, Melbourne enjoys an outstanding reputation as one of the world's leading comprehensive research-intensive universities.

The University

Established in 1853, the University of Melbourne is consistently ranked among the leading universities in the world. We are number 1 in Australia and number 32 in the world*.

Our distinctive Melbourne experience helps graduates become well-rounded, thoughtful and skilled professionals – making a positive impact across the globe.

Our research helps solve social, economic and environmental challenges today and into the future. We're connected with our communities, at home and around the globe – a connection that enriches our learning, teaching and research.

With a wide range of disciplines, the University of Melbourne currently educates over 60,000 students from over 130 countries.

The University comprises ten faculties providing learning that stimulates, challenges and fulfils the potential of excellent students from around the world, leading to personal development, meaningful careers and profound contributions to society.

The University employs approximately 9,000 staff including many renowned researchers and industry leaders who are internationally recognised.

The alumni network is significant and truly international, with representation from 160 countries. This international community includes former Prime Ministers, Governors General, and Nobel Laureates, and is testament to the world-class education the University of Melbourne delivers.

Parkville

The main Parkville campus is well connected by a short walk or tram to Melbourne Central Station and frequent buses to North Melbourne Station. Construction to build an underground train line connecting North Melbourne to South Yarra, via the University (Parkville Station) and the Central Business District, commenced in 2018. Parkville Station excavation is well underway and is due to open 2025/26.

The Parkville campus environment is leafy, green, vibrant and dynamic where music, exhibitions, sporting facilities, libraries and excellent cafes can be found for all to enjoy. There are multiple green spaces on campus as well as large public spaces located close by, including Royal Park and the Carlton Gardens.

The University of Melbourne is constantly expanding and improving its facilities to ensure that staff and students are working within world-class environments, and with top-quality resources.



 $Science \, Gallery \, Melbourne: \, Disposable \, Exhibition - Urinotron \, 2.0, \, Professor \, Peter \, Scales, \, Sandra \, and \, Gaspard \, B\'ebi\'e-Val\'erian (France), \, Parkville, \, Victoria, \, 2019. \, Contract \,$

 $^{^\}star$ Times Higher Education World University Rankings 2019

PURPOSE-BUILT WORLD CLASS CAMPUS

Place, community, purpose and opportunity.

Melbourne Connect

Melbourne Connect is due to open late 2020 and will be the new home of the Melbourne School of Engineering, the Melbourne Entrepreneurial Centre, Science Gallery Melbourne and other commercial and government partners. The purpose-built precinct will be home to a newly established digital and data institute that will be a hub for students, industry and government and MSE to engage in collaborative innovation. Further curation of innovation-focused and visionary partners will enable this unique precinct to set the benchmark for deep connections with industry.

Melbourne Biomedical Precinct

In an ongoing partnership with its neighbour, the Royal Melbourne Hospital, the University of Melbourne established the Melbourne Biomedical Precinct, a major global research and teaching powerhouse with 25 health services, research and academic partners sharing a formidable history of ground-breaking medical discoveries and developments. Partners within the Precinct include Walter and Eliza Hall Institute, Biomedical Research Victoria and CSL Ltd, all within a three-kilometre radius, allowing them to share resources and engage in meaningful collaborations.

Fishermans Bend

Set to open in 2024, the University of Melbourne is building a new, seven-hectare campus at Fishermans Bend as part of its almost \$1 billion commitment to create a world-class engineering school for the 21st century.

The new campus will feature large-scale research platform facilities for the Melbourne School of Engineering and the Faculty of Architecture Building & Planning. It will be the centrepiece of Australia's leading precinct for advanced manufacturing, design, engineering and technology excellence.

Located at the heart of Fishermans Bend Employment Precinct, the campus will allow students and researchers to collaborate with world-leading local and international companies in industries such as aerospace, defence, energy, infrastructure, the built environment, mining, transport and water.

Here, the School will drive research and innovation to address some the world's biggest challenges, while providing hands-on experience and work-integrated learning opportunities for our students.



 $Artist's \ Impression: The \ University of \ Melbourne - Fishermans \ Bend \ campus, \ Melbourne, \ Victoria.$

MELBOURNE, VICTORIA AND BEYOND

Livability and connectivity.

Melbourne

Melbourne is the capital city of Victoria and the second largest city in Australia. It is set around the shores of Port Phillip Bay and sits beside the Yarra River, around five kilometres from the bay.

The Economist Intelligence Unit has rated Melbourne one of the world's most liveable city for seven consecutive years, based on its education, entertainment, health care, research and development, tourism and sport.

The Wurundjeri, Boonwurrung, Taungurong, Dja Dja Wurrung and the Wathaurung people of the Kulin Nation are the Traditional Owners of the land now known by its European name of Melbourne.

The City of Melbourne is recognised as Australia's cultural capital with world-class galleries and museums, internationally renowned food and wine regions, and an impressive year-round calendar of events catering for all tastes. Melbourne has many precincts, each with its own unique character and offering different cultural experiences that lead to a top-quality dining scene that feels truly global.

To the North of the University campus you can experience the curious and lively bars of Fitzroy, shop with independent retailers along Brunswick Street, find unique handmade works at the Rose Street Artists' Market and immerse yourself in Melbourne's renowned coffee culture. Heading south of campus to St Kilda you will find Melbourne's beach culture where you will enjoy café's, bars and legendary live music venues.

Victoria

Regional Victoria is close by – from the wineries of the Yarra Valley to the walking tracks of the Macedon and Grampian Ranges, some of Australia's most beautiful beaches on the Mornington and Bellarine Peninsulas, the wonderful produce of Gippsland and the worlds first engineering project that is the remarkable Budj Bim Cultural Landscape.

Beyond+

Melbourne Domestic and International Airport is approximately 20 minutes from Parkville.



 $Budj\ Bim\ Cultural\ Landscape: Dr\ Kourosh\ Khoshelham, Senior\ Lecturer\ in\ Spatial\ Information\ and\ Master\ Students\ on\ Gunditjmar\ a\ country,\ South-Western\ Victoria,\ 2019.$

PEOPLE AND BENEFITS

The University is committed to providing an intellectually stimulating and personally rewarding workplace which attracts people who are the best in their professional, academic and teaching fields.

People

The University of Melbourne has made a commitment to promote an environment that accepts and appreciates every individual's uniqueness and characteristics, including race, gender, gender identify, sexual orientation, language, age, ethnicity, physical abilities, religion, socioeconomic background and national origin.

Creating a culture of celebrating difference and diversity, and supporting the flourishing of all members of the scholarly community and those in wider society, is a key driver at the University of Melbourne.

Join MSE

As the leading provider of engineering and IT education and research, we are committed to designing solutions today for the problems of tomorrow. We are transforming engineering and IT research and teaching at the University of Melbourne, guided by MSE 2025, our ten-year strategic plan. With an expected investment of \$1 billion in people and infrastructure, we are creating the entrepreneurial leaders and technology of the future — the people and things that will drive innovation and productivity to make a sustainable impact on the world in which we live.

Benefits

The University offers staff more than just a job – it offers them an opportunity to be part of a dynamic world class organisation which supports its people at every stage of their life and career.

- » Working in a culturally inclusive environment
- » Engaging in an active and vibrant campus life
- » A focus on health and wellbeing
- » Outstanding staff benefits in addition to competitive salary packages

Staff benefits on offer at the University include the opportunity to salary package everything from childcare and additional superannuation to subscriptions to the Melbourne Theatre Company. Benefits can be tailored to best suit individual needs and circumstances, including generous relocation support. Course fees can also be salary packaged and come at a 25% discount for staff and their immediate families. Unsurprisingly, the University has high numbers of working parents. The University offers staff access to several program initiatives that assist in balancing their work and life commitments, including onsite childcare facilities, flexible work arrangements and access to internal grant schemes to support academics returning from career interruption. The University of Melbourne was one of the first winners of the Fair and Flexible Employer Recognition award.



 $Melbourne\ Entrepreneurship\ Gala\ 2019:\ Proudly\ hosted\ by\ the\ Melbourne\ Entrepreneurial\ Centre\ (MEC)\ on\ behalf\ of\ the\ University\ of\ Melbourne,\ in\ partnership\ with\ major\ sponsor\ Launch Vic.$

POSITION DESCRIPTION

Position No. 0050569 Position Title: Indigenous Postdoctoral Fellowship

Position summary

The Melbourne School of Engineering Postdoctoral Fellowship provides the opportunity for a post-doctoral researcher to develop a research project in Engineering or Computing & Information Systems. As part of their application potential candidates will be required to articulate their research plans and if successful will be located in the department most relevant to their proposed research project.

The key goal of the three-year fellowship is for the successful candidate to prepare a competitive application for a Category 1 government grant, e.g. ARC DECRA, ARC Discovery Indigenous or equivalent. The successful applicant will be provided with an experienced research mentor relevant to their field of expertise to achieve this goal.

The Melbourne School of Engineering Indigenous Postdoctoral Fellowship is remunerated at Level A (Postdoctoral Grade 1) or Level B (Postdoctoral Grade 2) in line with qualifications and experience. The successful candidate will be furthermore supported through an AUD 20,000 per annum fund for project costs and if required to resettle in Melbourne will be supported through a generous relocation fund.

The fellowship represents just one of many commitments to build a cohort of Indigenous academic staff within the Melbourne School of Engineering and to enrich the Faculty's diverse scholarly community. It forms an important link in building a sustainable career pathway for Australian Aboriginal and Torres Strait Islanders within the Melbourne School of Engineering — from undergraduate to Professorial level and beyond.

Key responsibilities

RESEARCH

- » In consultation with the assigned mentor, create a strategic research agenda that outlines a research output for the duration of the Fellowship.
- » In respect to the research plan, develop and conduct research both independently and in collaboration with Faculty staff as appropriate to the project.
- » In consultation with the assigned mentor (and/or supervisor), work towards submitting an application for Category 1 research funding.
- » Publish peer-reviewed academic papers and other scholarly outputs.
- » Present conference/symposium papers at appropriate Australian and international forums.
- » Contribute to research workshops as appropriate.
- » Where appropriate, contribute to supervision of honours or Masters higher degree students (subject to completion of PhD).

TEACHING

» In consultation with the assigned supervisor, opportunity to contribute to teaching including preparation and delivering of lectures, tutorials and other relevant subject coordination duties.

LEADERSHIP

- » With guidance, contribute to planning activities or committee work.
- » Contribute to meetings within the assigned school.
- » Engage in public outreach and community engagement activities.

Selection criteria

ESSENTIAL

- » A PhD (awarded or near completion) in Engineering, Computing and Information Systems or a related field.
 - Candidates who are near completion are expected to submit their PhD in the first year of the fellowship.
- » An outline of the proposed research project in line with the applicant's developing research profile. The proposal should include details of the anticipated project outcomes and how these may lead to strong opportunities for further external funded fellowships or academic employment.
- » Strong evidence of ability and desire to build an academic career trajectory.
- » In-depth familiarity with research trends and methodologies relating to the field of research.
- » Demonstrated ability to work independently and collaboratively in a team to achieve project goals and meet agreed deadlines as appropriate.

Special Requirements

- » Only Indigenous Australians are eligible to apply.
- » Employment in this position is conditional upon adhering to the University's "fit and proper" checks where required and receipt of a valid Working with Children Check prior to commencement.

How to apply

Female candidates are strongly encouraged to apply.

Visit: **about.unimelb.edu.au/careers**, current opportunities, finding the position by title or number.

FOR MORE INFORMATION

Enquiries only, please do not send applications to this contact.

Name: Ross Peek

Position: Indigenous Strategy

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Email: ross.peek@unimelb.edu.au

RELEVANT WEBSITES

The University of Melbourne: unimelb.edu.au

Melbourne School of Engineering: eng.unimelb.edu.au

Melbourne School of Engineering - Join: eng.unimelb.edu.au/about/join-mse#why-join-engineering

Melbourne Connect: melbconnect.com.au

Melbourne Entrepreneurial Centre: unimelb.edu.au/mec Melbourne Science Gallery: melbourne.sciencegallery.com Melbourne Biomedical Precinct: melbournebiomed.com

Fishermans Bend Campus: about.unimelb.edu.au/priorities-and-partnerships/fishermans-bend

UoM Sustainability: **sustainablecampus.unimelb.edu.au**

Visit Melbourne: **visitmelbourne.com** Visit Victoria: **visitvictoria.com**



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