

# Principal's Newsletter

Research and Innovation

## Inside this September Issue

- Introduction from Deputy Vice Chancellor Research and Innovation
- Leading the way in Research and Innovation
- Meet some of RMIT's innovators
- Spotlight on RMIT's Research and Innovation areas
- Digital Engagement with Secondary Schools
- Contact Us



## Womin Djeka!

I am delighted to share with you this quarter's Principal's Newsletters with a theme of RMIT's Leading Research and Innovation.

RMIT's researchers are forerunners in innovative research, utilising our partnerships with industry, government and community. Through the ongoing uncertainty and disruption around us, we continue to witness extraordinary innovation, as well as adaptiveness of our global community in the face of crisis. Our commitment to shaping the world with impactful research has never been more important.

One of RMIT's responses to COVID-19 is to focus on the future – recovery. RMIT's eight Enabling Capability Platforms will be focusing on five key initiatives to restart a post COVID-19 world:

- Greener Start – Enabling Environmental sustainable futures
- Healthier Start – Enabling resilient health systems and populations, responsive to major health challenges
- Digital start – Enabling social innovation and inclusion for digital futures
- Better Work Start – Enabling effective, resilient ethical and responsible businesses for the future workforces; and
- Fairer Start – Enabling a more inclusive and equitable future Australia.

I look forward to seeing how we can continue to use the disruption as a catalyst for innovation and challenging our everyday.

I hope you enjoy this quarter's newsletter.

Best wishes

Professor Calum Drummond AO  
Deputy Vice-Chancellor Research & Innovation  
and Vice-President

Leading the way in

## Research and Innovation



*The prototype device developed by a team at RMIT University can electronically replicate the way human skin senses pain.*

### New electronic skin

Researchers have developed a prototype device that electronically replicates the way human skin senses pain, opening the way to better prosthetics, smarter robotics and alternative skin grafts.

[Read more](#)



*A proof-of-concept Nutromics smart patch.*

### A world-first wearable smart patch

A wearable smart patch will deliver precision data to help people personalise their diets and reduce their risk of developing lifestyle-related chronic diseases like Type 2 diabetes.

[Read more](#)



*Dr James Waldie, poses with NASA Extravehicular Activity suits used for spacewalking.*

### Next gen spacesuits

Australian researchers will lead development of the next generation of space suits in a major international collaboration involving NASA and the European Space Agency. Director and Chief Engineer at Human Aerospace and RMIT alumnus, Dr James Waldie, said space travel - let alone exploration of the Lunar or Martian surfaces - took a huge toll on the human body.

[Read more](#)



*Common whitetail dragonfly. Public domain image by Christopher Johnson (Insects Unlocked, University of Texas at Austin)*

### Insect wings inspire new ways to fight superbugs

Scientists have revealed how nanomaterials inspired by insect wings are able to destroy bacteria on contact.

Lead author, RMIT University's Distinguished Professor Elena Ivanova, said finding non-chemical ways of killing bacteria was critical, with more than 700,000 people dying each year due to drug-resistant bacterial infection.

[Read more](#)



## World-first sleep apnea treatment

Our scientists have patented a world-first therapy that could treat sleep apnea. Developed by RMIT in collaboration with Snoretex Pty Ltd, the patented muscle toning technology was presented for the first time at the virtual gathering of the global biotech industry.

[Read more](#)



## Ground-breaking digital tool for rural Australia

New research aims to strengthen walkability in rural and regional areas, delivering an innovative smart online tool to support and encourage Australians to get active.

RMIT's project lead is Dr Melanie Davern, a Senior Research Fellow in the Centre for Urban Research and the Director of the Australian Urban Observatory – says this is a ground-breaking digital platform, which is mapping liveability in major cities across the country.

[Read more](#)



Professor Claire Macken

## The future of Business and Innovation

With disruption now considered 'the new norm' RMIT's new **Bachelor of Business Innovation and Enterprise** course focuses on the future of business innovation.

Students will learn how to transform business activities through the application of technologies such as cybersecurity, blockchain, data analytics and remote sensing and work with industry to create artefacts that can be used as a professional portfolio in the real-world.

What will graduates of 2025 and beyond need to succeed in business?

"This course creates opportunities for students to develop their professional capabilities: allowing them to intentionally create their professional-self in order to successfully navigate the complex world of business". Graduate roles include corporate strategist, social innovation projects manager, concept designer and enterprise architect.

Professor Claire Macken  
Deputy Pro Vice-Chancellor Learning and Teaching  
College of Business and Law at RMIT University  
Keynote speaker of University-Industry Innovation Network (UIIN).

[Learn more about RMIT's new course](#)

Meet some of

## RMIT's Innovators



Michelle Thomas Zacharias

### Meet Michelle - Future Leader

Michelle Thomas Zacharias, a recent Master of Landscape Architecture graduate, has been awarded the Future Leaders Student Award at the 2020 AILA Landscape Architecture Awards.

This award recognizes achievement in design and planning that is based on the development of innovative and practical solutions to landscape architectural challenges. Her project focused on improving social conditions in red light districts in New Delhi, India.

[Read more](#)



Mary Featherston AM. Photo: Tom Ross

### Meet Mary - Influential designer

Prominent interior designer Mary Featherston AM has joined the RMIT School of Architecture and Urban Design as an adjunct professor of interior design.

Mary is one of RMIT's most eminent alumni in architecture and design. She is considered one of Australia's leading thinkers and designers in the creation of educational and play spaces for children.

[Read more](#)



Arnan Mitchell (left) and Crispin Szydzik (right)

### Meet Crispin - Emerging star researcher

RMIT graduate Crispin Szydzik is providing real-world solutions. His research shrunk whole laboratory's worth of equipment onto microchips (the size of a postage stamp). Crispin began his journey with RMIT through TAFE, then studied an engineering degree followed by a PhD.

'I think it's an excellent example highlighting RMIT's flexible pathways and a great example of the RMIT motto 'A skilled hand and a cultivated mind', says Arnan Mitchell, Director, Micro Nano Research Facility Electronic & Telecommunications Engineering, and Crispin's PhD supervisor.

[Read more](#)



Professor Madhu Bhaskaran

### Meet Madhu - Academy award winner and top RMIT researcher

RMIT's Professor Madhu Bhaskaran has been recognised by the Australian Academy of Science for her outstanding contribution to science, with a prestigious honorific award. Her signature advance is in the field of stretchable electronics where she has developed techniques to stretch devices to an unprecedented level – allowing them to be worn on the skin.

Madhu is a true RMIT success story – completing a Master of Engineering at RMIT before going onto a PhD and then embarking on a stellar research career.

[Read more](#)

## RMIT's Research and Innovation areas



### Australian 1st - New cyber security research centre to tackle growing cyber threat

RMIT has launched Australia's first cyber security research centre that takes an industry driven approach to meet the rapidly evolving cyber security challenges in Australia and globally.

The centre is a leading source of knowledge and expertise in multi-disciplinary cyber security research and innovation, strategy advice, workforce development and community awareness.

[Read more](#)



*Director of the new Health Transformation Lab Vishaal Kishore and Brendan Lovelock, Health Practice Lead at Cisco Systems.*

### World 1st - RMIT and Cisco launch game-changing Health Transformation Lab

A first-of-its kind lab will give health and innovation leaders from across Australia and around the globe a place to solve some of our thorniest health challenges.

Some of the game-changing innovations already being led by the Lab include a brooch that can detect loneliness, a 'tunechair' that can activate memory and reduce agitation in dementia patients and health drones that have the potential to improve patient rehabilitation outcomes.

[Read more](#)



*Anne-Laure Mention, Director, RMIT Global Business Innovation ECP*

### Global Business Innovation hub

RMIT will be "Leading and harnessing research-driven change to unlock the value and impact of innovation within Australia and worldwide". With the GBI ECP, impactful research will be aimed at increasing the innovation capabilities of private and public sector firms, through a multidisciplinary and collaborative approach with external stakeholders, combining excellence and relevance, and promoting RMIT as an innovation hub.

[Read more](#)



### RMIT is set to lead an innovative European Training Network for Industrial Digital Transformation

The new PhD program is expected to produce a new generation of high performing early stage researchers in innovation and technology management able to embrace the major challenges of future industrial systems.

[Read more](#)

# Digital Engagement with

## Secondary Schools

The RMIT Student Recruitment team continue to provide a fully digitised service to ensure we meet the needs of all your students, parents, and career advisers.

Here's a snapshot of our year to date:

- 350+ digital stream events and presentations for Years 9 – 12 on all things RMIT.
- 35 + [Discover What's Next](#) webinars for your students and parents on a range of topics and hear from current RMIT students directly.
- Supporting your career advisers, parents and students with one-on-one virtual consultations and a Virtual Careers Adviser briefing.
- 650+ global secondary schools with 85% digital-enabled engagement.
- Launch of My Career Match to support your students with career development.

### RMIT Research rankings rise again

RMIT has continued to rise as a global leader, with further advances in the [2020 Academic Ranking of World Universities \(ARWU\)](#).

RMIT has performed strongly in the [2020 CWTS Leiden Ranking](#), which ranks the world's top research intensive universities.

RMIT has moved up 51 places in the [2021 Times Higher Education World University Rankings](#), strengthening its reputation as a leading global university.

"As a global University, we are proud of the expansive collaborations and partnerships that we have developed locally and internationally as we pursue research that is focused on making a real difference to our communities," says Deputy Vice-Chancellor for Research and Innovation and Vice-President, Professor Calum Drummond AO.



### Open Day Reimagined

Open Day 2020, held on 8 and 9 August, was reimagined as a personalised and immersive virtual event by RMIT University.

The Open Day platform welcomed thousands of prospective students from around the world to delve into RMIT and see what the University has to offer, with information sessions, over 250 videos and tours of RMIT's buildings and world-class facilities.

More than 1,000 staff and 200 student volunteers helped over the weekend, including interacting with prospective students in well-attended live Q&A sessions and via live chat.

"This is such an important opportunity for us to connect with our future students while showcasing all that the University has to offer – the overall results were positive, with strong engagement across both days" said Senior Adviser Student Recruitment & Development Jasmin Tavita.

### Contact Us

We hope you enjoyed this edition.

If you have any feedback, suggestions or would like further information about RMIT, please contact us:

Email: [student.recruitment@rmit.edu.au](mailto:student.recruitment@rmit.edu.au)

Phone: (03) 9925 2555

Website: [www.rmit.edu.au/study-with-us/career-advisers/contact-us](http://www.rmit.edu.au/study-with-us/career-advisers/contact-us)