



*Celebrating*

Research  
Impact

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College of Business

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# Foreword

From the Deputy Pro Vice-Chancellor, Research and Innovation



**I**t is my pleasure to launch the booklet *Celebrating Research Impact*.

The growth of knowledge is one of the core goals of all universities. At RMIT University the academic staff are dedicated to knowledge creation through research, and knowledge dissemination through industry engagement and teaching. A major priority of the College of Business is to undertake research in collaboration with industry. For this reason, the staff produce high quality publications, robust policy advice, and critical analyses on the many challenges confronting business, government, and the community sector.

Our research interests extend across the globe. Leading researchers in the College are internationally recognised and widely published in top-ranking journals. They bring to industry partnerships their expertise from the disciplines of management, law, accounting, digital information and communications, information management, logistics and supply chain management, marketing, economics, and finance.

The College hosts a number of research centres, groups and clusters that are distinguished by their commitment to research excellence and links to industry. College researchers work closely with the University's unique, interdisciplinary Enabling Capability Platforms, particularly Global Business Innovation, Social Change, and Urban Futures. Our research feeds directly into high quality supervision of doctoral candidates and transformative learning experiences for undergraduate students. Exposure to supervision and teaching that is informed by research enables our graduates to be better prepared for the world of work.

The College has a superb location in the heart of Melbourne that enables researchers to connect directly with a wide range of business, government, and social organisations. We invite you to learn more about our researchers and the impacts they have made. Please get in touch if you would like to work with us.

**Professor Geoffrey Stokes**  
Deputy Pro Vice-Chancellor,  
Research and Innovation

# News Shorts

## BOARDROOM DIVERSITY

Research undertaken by PhD candidate Sherene Smith indicates a lack of diversity in Australian company boards, with new members often selected from a close circle of acquaintances, and a lack of focus on relevant qualifications or experience. According to Smith this strategy is problematic, with board members preferring to protect their self-interests by conforming to the status quo of the group rather than considering the best interests of the company and its stakeholders.

## HIGHLIGHTING ECONOMIC ABUSE

Research conducted by PhD candidate Jozica Kutin is investigating economic abuse in young Australian adults. According to their studies, the 18 to 29 age group is often unlikely to seek assistance, being unable to identify indicators of this form of exploitation. Economic abuse occurs when one partner exerts control over the other's access to finances, assets or financial decision-making ability, and has been found to affect 15.7 per cent of women and 7.1 per cent of men in Australia during their lifetimes.



## RMIT LEGAL SPECIALIST WORKING WITH THE UN

Law academic, Dr Jonathan Kolieb, has been engaged as Legal Specialist by the United Nations on a project to strengthen international legal protections of children affected by war. The short-term aim of the work is to assist the UN Special Representative of the Secretary-General for Children and Armed Conflict to constructively engage with the *Inquiry on Protecting Children in Conflict*. Going forward, this work will inform the design of a UN strategy to improve the implementation of the international legal frameworks that protect children in armed conflict, and shape the approach of the UN system towards better implementation.



## THE CASE FOR PRISON LIBRARIES

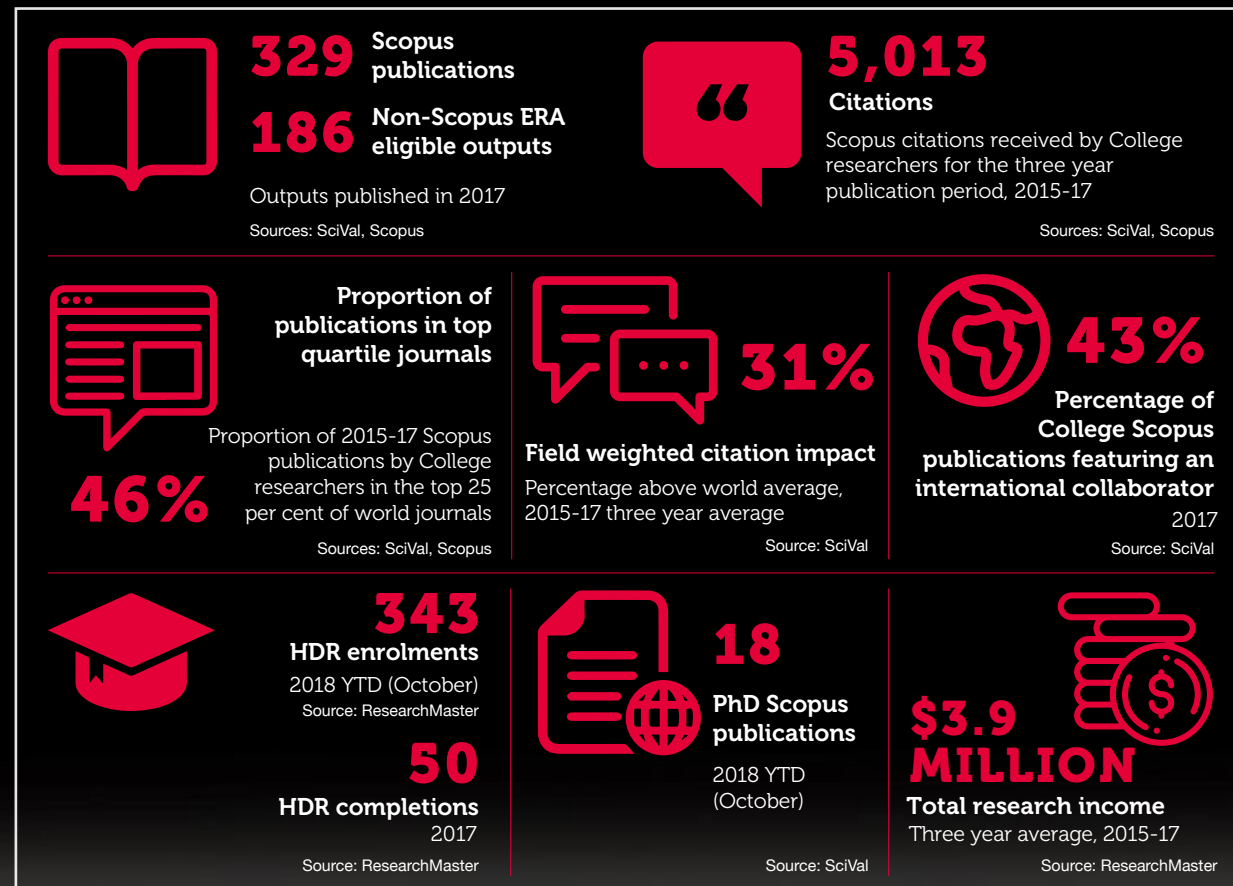
The US Department of Justice has been using the findings of a recent RMIT PhD graduate as evidence to support a major research project which seeks to demonstrate how prison libraries contribute to correctional outcomes. Dr Jane Garner, whose PhD thesis is entitled *The lived experience of Australian prison libraries: A phenomenological study*, has spoken to the Department of Justice's National Institute of Corrections in Washington DC and presented a number of ways that prison libraries can support prisoners, prison staff, and the broader community, while also assisting prisons in meeting many of their desired outcomes.

## GLOBAL INNOVATION COLLABORATION

A team led by the Director of RMIT's Global Business Innovation Enabling Capability Platform (ECP), Professor Anne-Laure Mention, and including colleagues from RMIT Europe, has secured €2.5 million in European research support funding. Named *OpenInnoTrain*, the project will develop an international and inter-sectoral network of researchers and industry practitioners collaboratively working on open innovation, university-industry cooperation and research translation practices. The project will facilitate knowledge development and sharing in four contemporary areas, FinTech, Industry 4.0, CleanTech, FoodTech, and will fund 540 months of scientific exchanges over four years.



# Research Highlights



# Professor Prem Chhetri

Professor of Supply Chain and Logistics and Director of the Global Supply Chain and Logistics Research Priority Area in the School of Business IT and Logistics

## IMPROVING global logistics networks

China is currently undertaking one of the largest trade and infrastructure projects in the history of humankind. Known as the Belt and Road Initiative (BRI), the venture has already led to an outlay of nearly US\$1 trillion – with US\$3-7 trillion more to come – on building a network of ports, railways, bridges, gas pipelines and roads in a bid to link the country with 71 nations in Asia, Africa, Europe and Oceania.

The BRI aims to not only improve China's connectivity but also form new trade policies and economic strategies, energising resource cooperation and engendering business partnerships in the process.

Professor Prem Chhetri is co-leading the Reconfiguring East Asian Logistics Networks under the *One Belt, One Road Environment* project to understand the likely challenges associated with emerging logistics networks in East Asia.

"This project will help leverage the competitive strengths of companies in Asia by engaging global thought leaders on collectively harnessing BRI business potential to create new opportunities for trade, investment, technological innovation and movement of labour," says Professor Chhetri.

The removal of trade barriers, transportation bottlenecks and increased sustainable development are a potential challenge for East Asia. Take, for example, the transport of large wine consignments. Distribution within Asia typically involves air, road and water transport, however, only countries with excellent multi-modal transport services are positioned to become elite wine gateways.

As an integral part of the project, Professor Chhetri and researchers from Inha University in South Korea and Zhejiang University in China have evaluated international cities based on logistics infrastructure capacity and service responsiveness. Their aim is to better understand how these cities cope with high levels of trading activity across multiple transportation methods.

The findings from this recent research indicate the prevalence of a multi-tier system wherein Shanghai and Hong Kong constitute mature markets, set apart by their ability to undertake complex logistics projects on a global scale. In contrast, Manila, Jakarta and Bangalore are making slow but steady progress towards improving their logistics infrastructure capacity and service responsiveness, and Dhaka, Phnom Penh and Ho Chi Minh City require further enhancement.

As next steps, Professor Chhetri and his team will collaborate with international agencies to examine the global impact and significance of the BRI on infrastructure development, shift in trade patterns and improvement in international logistics. You can continue to follow Professor Chhetri's developments by visiting the Global Supply Chain and Logistics website: [www.rmit.edu.au/about/our-education/academic-schools/business-it-and-logistics/research/global-supply-chain-and-logistics/research-projects](http://www.rmit.edu.au/about/our-education/academic-schools/business-it-and-logistics/research/global-supply-chain-and-logistics/research-projects)

**Professor Prem Chhetri is leading a project that focusses on the impacts and consequences of China's Belt and Road Initiative, which is transforming Asia's transport and service infrastructure.**



# Professor Anthony Forsyth

Professor of Law in the Graduate School of Business and Law

## CRACKING down on labour hire exploitation

In 2015, reports of underpaid wages and unfair treatment in the workplace made news headlines across Australia. Stories of disrepute implicated several sectors, and the 7-Eleven underpayment scandal received widespread media coverage. With the problem exposed, the Victorian Government committed to a comprehensive inquiry into the labour hire industry, promising to uncover the extent of the problem and address exploitation of vulnerable workers.

In 2015 Professor Anthony Forsyth became independent Chair of the Victorian Government Inquiry into the *Labour Hire Industry and Insecure Work*, appointed to examine exploitation of vulnerable workers in the Victorian labour hire sector and make recommendations for improvements in the law. During his investigations, he received over 700 written submissions from key stakeholders, including unions, workers, business groups, labour hire companies, community organisations and academics. He also held seven public hearings in both regional and urban Victoria to learn about individual experiences.

These hearings unveiled mistreatment in certain sectors, predominantly within horticulture, meat and poultry processing plants, and in the cleaning industry where complex contracting chains are common. "The provision of workers through third party providers, such as labour hire companies or contractors, involved mistreatment usually in the underpayment of wages," summarises Professor Forsyth. Malpractice also included unsafe workplaces, non-payment of superannuation, cash-in-hand work, unlawful tax

arrangements, and substandard accommodation linked to the provision of rural work such as fruit picking and wine production.

In light of this evidence, and in consideration of statistical data, academic literature, and existing Australian and international regulations, Professor Forsyth presented his findings to the Victorian Government and recommended the establishment of a labour hire licensing scheme in Victoria. "It's about keeping a level playing field," he says. "As well as benefitting workers, the proposed licensing requirements will prevent businesses with good intentions from being undercut by those more inclined to rip people off."

In 2017, labour hire licensing legislation was passed in Queensland and South Australia following Parliamentary inquiries in each state. Having accepted almost all of Professor Forsyth's 35 recommendations, the Victorian Government introduced the Labour Hire Licensing Bill into State Parliament in late 2017. Following debate in both Houses, the Bill was passed in June 2018.

Professor Forsyth considers his work on the inquiry to have been very rewarding. "It is good for academics to be involved in policy development, to adapt our knowledge to real social and economic problems, and lend our expertise to solve them." The new labour hire licensing law will be a positive step in the fight against workplace exploitation in Victoria – and a model for reform at the national level.





## Doctor Fiona Macdonald

Senior Research Fellow at the Centre for People, Organisation and Work in the School of Management

### CARING for our care workers

**L**onger days, lower pay, increased discrimination and greater risks: the daily challenges and difficult working conditions experienced by Australia's social care workers are being compounded by a changing national infrastructure.

Dr Fiona Macdonald is leading a program of research investigating the impact of Australia's new National Disability Insurance Scheme (NDIS) – widely regarded as the country's largest social reform since Medicare – on the nature of jobs and working conditions for care workers in the \$22 billion national disability sector.

"My research addresses questions critical to social and economic outcomes arising from the NDIS, including how to improve health, welfare and social cohesion for people with disability while enhancing the effectiveness of organisations and ensuring disability support workers have decent jobs," she explains.

To date, Dr Macdonald has made several discoveries regarding NDIS' impact on the job quality of care workers and the quality of their support and care for people with disability. For example, her 2016 research into NDIS' cash-for-care approach found the move away from paying care organisations using block-funding may be leading them to become more competitive, flexible and responsive... but at the expense of their staff. Workers – who are mainly female – are experiencing more fragmented working time, dwindling work conditions and increased skill expectations without receiving proper training.

The NDIS is also worsening issues care workers have faced for a long time. For example, home care workers have long fought for proper remuneration of travel time and downtime between appointments. Dr Macdonald's most recent study, undertaken with RMIT colleagues Ms Eleanor Bentham and Ms Jenny Malone, showed that this battle is far from over. Under the NDIS, employers are not paying workers for hours spent travelling to or waiting for their next appointment. This means that workers are being paid below their minimum entitlements – in some cases missing out on pay for multiple hours of work in a single day.

Dr Macdonald has communicated these research findings to key stakeholders as an invited keynote speaker at several industry events, including the Australian Services Union National Delegates Conference. By invitation, she has presented her evidence to the Commonwealth Parliament's Joint Standing Committee on the National Disability Insurance Scheme. Additionally, her research reports and recommendations have provided the evidence base for identifying policy directions at a 2017 NDIS Workforce Forum in Canberra attended by Federal Opposition frontbenchers.

Looking forward, Dr Macdonald has several plans to expand her research into the NDIS workforce, and she is currently collaborating with colleagues at the Centre for Future Work at the Australia Institute to extend the potential for research impact.



MY RESEARCH ADDRESSES QUESTIONS THAT ARE CRITICAL TO SOCIAL AND ECONOMIC OUTCOMES."

## Doctor Sam Tavassoli

Lecturer in the School of Management

### BUILDING biomedical innovation, layer by layer

**B**y now, most of us will have heard of 3D printing and its almost boundless potential for application in various areas of our lives. This revolutionary technology is a subset of additive manufacturing, and is now the focus of a major project funded by RMIT University, looking at its role as a 'disruptive technology' in the Medical Technology (MedTech) industry.

Dr Sam Tavassoli is part of a collaboration bringing together researchers from Lund University in Sweden, and industry partners Stryker and OMX Solutions, to investigate the adoption of additive manufacturing in the medical device sector. In particular, the study aims to explore how it might impact upon the emergence of entrepreneurial opportunities, predominantly in relation to implants for the spine, hips and other joints.

"Although the biomedical industry has great potential to be innovative, it is highly regulated and technologically uncertain. Tensions also exist between the various stakeholders, including manufacturers, regulatory bodies, insurers and surgeons, which further impede innovation such as 3D printed technology. This research aims to unlock the potential of additive manufacturing applications and help companies to exploit this technology," explains Dr Tavassoli.

Additive manufacturing offers the advantages of accuracy and affordability, with products built layer by layer thanks to computer-aided-design (CAD) software. An expert in economics of innovation and technological change, Dr Tavassoli perceives a great opportunity for MedTech to profit from this technology in the production of medical implants.

"Additive manufacturing will benefit potential new entrants to the industry, incumbent firms, and the overall healthcare system. It will also offer a benchmark in university-industry collaboration thanks to RMIT's leadership," asserts Dr Tavassoli.

The research team plans to develop solutions to remove technological, market and regulatory barriers for 3D printed medical devices. Biomedical companies are likely to find value in learning how to incorporate the technology into their business plan, and with many such firms based in Melbourne, Dr Tavassoli hopes to see the fruits of the research first hand.

In collaboration with about 80 stakeholders, the research team has already created the industry road map that identifies the trends, capabilities and barriers to adopt various applications of 3D printing in the medical device industry. But the journey doesn't end there, with plans to create comprehensive guidelines for overcoming barriers in adopting additive manufacturing.

The team's guidelines are expected to lead to significant value creation, including more jobs and an overall expansion of the industry as entrepreneurial start-ups emerge and incumbent firms exploit their businesses. Best of all, patients will profit from a dramatically reduced cost in implants due to import replacement. This means more affordable implants not only in Australia, but also globally.

**Dr Sam Tavassoli's project, Adoption and Diffusion of Disruptive Technologies: The Case of Additive Manufacturing in MedTech Industry, is funded by two of RMIT's Enabling Capability Platforms: Global Business Innovation, and Advanced Manufacturing and Fabrication.**



## Professor Jason Potts

Professor of Economics in the School of Economics, Finance and Marketing  
and Director of the Blockchain Innovation Hub

### RMIT'S new blockchain gang explores opportunities

When hearing the phrase 'blockchain', many people immediately think of the cryptocurrency known as Bitcoin. However, blockchain is more than just a technology that helps people send and receive virtual money; it is a technological advancement redefining the way society thinks about record-keeping and trust.

Seeing the technology's potential in a wide range of fields, Professor Jason Potts established RMIT University's Blockchain Innovation Hub in 2017. The Hub is exploring how rapidly advancing blockchain technology will emerge as the foundation for a new worldwide economic infrastructure for innumerable industries – ranging from finance to power distribution – by increasing transparency and security. The Hub's team brings together researchers in the fields of economics, political economy, organisational theory, law, sociology, politics and communications, illustrating the vast potential of the technology to influence different areas of society.

"Our research facilitates the adoption of blockchain technology within the Australian economy," says Professor Potts. "The economic impact of this will subsequently emerge via better business strategies for blockchain adoption and improved government regulation."

As cryptocurrencies edge into the mainstream, the Hub also examines the impact of blockchain on the wider economy and society, as well as the political process, developing metrics to measure the uptake of what remains a relatively mysterious technology.

The Hub is concentrating its research on a host of areas such as TradeTech, the application of innovative technology to global supply chains. It also provides advice in order to shape the kind of high-level international policy that is vital for utilising blockchain in trade situations.

Furthermore, the Hub sees great potential for the use of blockchain in healthcare, looking at efficient systems that deal with the transmission of highly sensitive information and how blockchain technology can provide the infrastructure to securely transmit data. This includes the creation of essential data pools for cutting-edge medical research.



The subject of identity is central to all economic, political and social exchange, and it is another component of the Hub's agenda. Currently, identity data is often held in the form of poorly maintained company records, endless government registries and social media databases, which are notoriously unreliable. The Hub explores how blockchain technology can allow for identity data to be held and controlled by individuals, and examines the impact on privacy, civil liberties and wider society.

"As a solution to the problem of distributed secure record-keeping and updating, the use of blockchain technology will extend far beyond digital money. We believe it represents the dawn of a new generation of economic infrastructure," enthuses Professor Potts.

In partnership with experts at the University of Brighton in the UK, Professor Potts has also been carrying out a much more abstract and pioneering use of the technology. They are building a musical instrument on the blockchain.

Professor Potts explains: "Nearly 400 years ago, Johannes Kepler gave the world his three laws of planetary motion. What most people don't realise is that Kepler made his discoveries using music to investigate the motion of planets; he even created musical notations and instructions for how to hear and play geometrical forms. Combining blockchain technology with Kepler's work and with data representing models of the solar system, we are building Concordia, an immersive virtual reality-based instrument through which users can 'play' the platform's data structures and 'hear' what our solar system's celestial bodies sound like."

With the wide-ranging potential blockchain offers, RMIT aims to be at the forefront of innovation in the field. With this in mind, Professor Potts and his collaborators in the Hub are already developing several new courses and micro-credentials aimed at undergraduates, postgraduates and an executive audience, all keen to keep their fingers on the digital pulse.

Find out more about the Hub's blockchain activities and RMIT's new blockchain courses by visiting: <https://sites.rmit.edu.au/blockchain-innovation-hub>



# Professor Simon Feeny and Associate Professor Alberto Posso

School of Economics, Finance and Marketing

## IMPROVING vision boosts productivity and well-being: A Vietnamese perspective

Vision loss robs people of their productivity, health and happiness, and the link between poverty and blindness is beyond doubt. When you add the connection between failing eyesight and comorbidities, such as mental illness, the cataract crisis across the developing world comes into sharp focus.

As it stands, untreated cataracts remain the largest cause of blindness or vision impairment around the world. In Vietnam alone, the rate of cataract surgical availability is not rising sufficiently to match the increase in cataract sufferers. Though surgical rates doubled between 2007 and 2014, the number of people over 50 years of age suffering from bilateral low vision rose by 500,000. There are approximately 1.1 million people in Vietnam living with untreated cataract cases.

Yet the economic benefits from cataract surgery are clear. Historical research confirms that successful procedures in poorer areas have led to important economic improvements, with studies concentrating on additional income earned in labour markets as an authoritative gauge.

However, the economic impact alone has not been enough to attract the level of funding needed. Research conducted by Professor Simon Feeny, Associate Professor Alberto Posso and their team is filling the gaps in the narrative to provide the evidence donors need. The total value of corrective eye surgery should be judged by overall evaluations of the people involved, not simply by their ability to work, according to the findings of their study *Beyond Monetary Benefits of Restoring Sight in Vietnam: Evaluating Well-being Gains from Cataract Surgery*.

A collaboration between RMIT, The Fred Hollows Foundation and Ho Chi Minh City University of Social Sciences and Humanities in Vietnam, this study differed from historical ones in two pivotal ways. Firstly, it examined the ways in which the burden of cataract disease falls on a patient's wider circle of family and friends. Secondly, it explored the historically unaddressed areas of psychosocial and physical health.

The project used a diverse approach to analyse the wider benefits of cataract surgery. In-depth interviews, for instance, were conducted alongside quantitative surveys with cataract patients before and three months after the procedure.

The data revealed statistically significant improvements for several non-monetary measures of well-being, including better mobility, self-care, ability to undertake daily activities, self-reported health, life satisfaction and outlook on life.

The study's findings also provided an important insight into the impact of cataract surgery on patients' carers. The research team discovered that caregivers, who are mainly women, often experience the same low level of income and psychological instability as the visually impaired people they look after. Excitingly, quantitative data also indicated improved work attendance for 59 per cent of caregivers three months after their dependent had received surgery.

"Our results show that the true rate of return on cataract surgery is higher than previous studies thought. As well as the transformation to the patient, there are considerable psychosocial benefits to caregivers," says Professor Feeny. These findings will contribute to future fundraising campaigns by The Fred Hollows Foundation, providing donors with evidence that funding interventions to restore sight is significantly more impactful than previously believed.

In the future, Professor Feeny and Associate Professor Posso intend to replicate this study in other nations with a high cataract disease burden and health resource constraints. Their goal is to highlight how economic development interacts with both the benefits and costs of eye disease. "We also want to do research into timings. This study examined the impacts three months after cataract surgery, but impacts should also be ascertained over longer periods to examine whether they persist, increase or decrease," Feeny concludes.



Professor Simon Feeny and Associate Professor Alberto Posso shine a light on the non-monetary benefits of successful cataract surgery in Vietnam, proving that psychological well-being, better physical health, support for carers and hope for the future have as much currency as increased income.



## Doctor Anne Kallies

Lecturer in the Graduate School of Business and Law

### GETTING smarter with new technology consumer rights

At the 2017 G20 meeting, then Prime Minister Malcolm Turnbull announced a major new research cooperation between Australia and Germany, the *Energy Transition Hub*, a project aimed at identifying the economic opportunities for both countries in a zero carbon world.

Dr Anne Kallies, with Dr Sangeetha Chandrashekeran and Professor Lee Godden from the University of Melbourne and partner universities in her native Germany, is conducting a project under the hub umbrella looking at the legal and governance frameworks of advanced metering infrastructure, also known as smart meters.

With its smart meter rollout completed in 2015, the state of Victoria is considered a frontrunner in this area. The rest of Australia, governed by a different regulatory model, is also introducing the new technology. "This is one of the few occasions where Australia is ahead of Germany in energy-related matters, and they are very interested in our learnings," notes Dr Kallies.

Several political assurances are linked to the introduction of smart meters, including the ability for individuals to monitor their own energy use, and even trade electricity with their neighbours. The research team is investigating whether these assurances are being translated to true consumer empowerment. Victorians pocketed the cost of the mandatory smart meter rollout, but are they reaping the rewards?

Two reports by the Auditor General have indeed queried the tangible benefits to the end user. "We all paid for the smart meters but what do we actually get for it?" asks Dr Kallies. "We want to know whether consumers are really acknowledged in the actual law and regulations of smart meter rollouts. Our role as researchers is to assess what has happened, and then look forward to build an accountability model for consumers."

The 'green promise', including the potential for customers to benefit from renewable energy such as solar power, is another assertion under examination. The research team hopes to determine whether we can improve energy transitions with these new types of technology while keeping everyone accountable; this includes transparency about the costs passed from the energy supplier to the consumer.

Drawing on experiences in both countries, the researchers are writing an issues paper describing the situation from the consumer's perspective. For example, how might a customer access their own energy and communications data to take advantage of smart meter technology? Dr Kallies expects interest from industry about this research, but the ultimate goal is to improve the legal and regulatory framework, and ensure that consumers reap the benefits of an advanced metering infrastructure.

## Professor Lisa Farrell

Professor of Economics in the School of Economics, Finance and Marketing and Director of the Markets, Culture and Behaviour Research Priority Area

### ECONOMICS of addiction

From the pleasure of sipping a morning coffee to the necessity of our household electricity, consumption is an unavoidable part of life. The consumption of so-called 'risky products' (think tobacco or alcohol) is for most people a controlled leisure activity. So what happens when addiction becomes destructive? One economist at RMIT University wants to create safe environments for the consumption of risky products, and minimise the harm on vulnerable individuals.

Professor Farrell studies the excessive consumption of risky products which threatens to cause financial challenges or interfere with personal relationships and everyday life. "That's when we need to be mindful of the costs to individuals, those around them and society more broadly," she says.

In a recent project in collaboration with VicHealth, Professor Farrell and a team of researchers assessed the role of alcohol within society. "By understanding individual roles in an episode of drinking we were able to identify and segment the market by consumers' habits and behaviours," she says. This research contributed to a paradigm shift in health promotion which increasingly targets specific consumer behavioural profiles rather than demographics such as age or gender.

In a project funded by the Australian Research Council, Professor Farrell made discoveries and recommendations related to illicit tobacco.

Unsurprisingly, the study found highly addicted smokers turning to the black market to avoid high taxation on legal cigarettes. More fascinating for the research team, the study also unveiled a yearning for the taste of Australian tobacco (which ceased legal production in 2009), as well as a section of smokers falsely believing that the black market offered them a healthier product – an 'organic' alternative to its legal counterpart. "Smokers are being pushed to a marketplace because of price factors, leading them to even greater health risks," says Professor Farrell, whose research substantiates behavioural-based approaches in health promotion, such as plain packaging, rather than traditional price hikes.

Other forms of addiction are also a focus of Professor Farrell's research, and she considers online gambling to pose a huge challenge in terms of health promotion and regulation. "Australia has the highest per capita expenditure on gambling in the world and it's something we need to address," she says. "We've also been looking at the relationship between gambling, happiness and general levels of well-being. The earlier you can identify the risks and support the individuals the better." With its tangible benefits for communities, health agencies and support groups, Professor Farrell aims to engender positive change through her research into risky and addictive products.

Led by Professor Farrell, the Markets, Culture and Behaviour Research Priority Area looks at individual and business decisions from a holistic perspective. The group integrates behaviours and psychology in order to understand the interaction of our hearts and our minds in decision making.





## Professor Nava Subramaniam

Professor of Accounting in the School of Accounting and Director of the Governance, Accountability and Law Research Priority Area

### RESTRUCTURING third sector thinking

The Australian not-for-profit (NFP) sector is currently under extreme pressure to reform in the face of funding shortages, changes in government funding policies, growing demand and increased marketisation and competition.

These developments have provided impetus for many Australian charities and NFP entities to review their strategic stances and alliances. "Large numbers are considering organisational restructure through mergers, amalgamations and acquisitions (M&A)," explains Professor Nava Subramaniam.

To explore this trend, she launched the *Mergers, Amalgamations and Acquisitions in the Australian Not-for-profit Human Service Sector* study. Her goal was to better understand the key motivations, risks, barriers and opportunities facing NFP institutions, while also determining when M&A activity is an appropriate response to the political and economic challenges facing the sector.

Professor Subramaniam and her team performed 21 in-depth interviews with a variety of third sector board members, CEOs, senior management personnel and finance officers in 2017. The lived experiences of almost all participants revealed that they had either completed, or seriously considered, an M&A restructure in order to stimulate strategic organisational growth.

Upon completing her research, Professor Subramaniam found that M&A activity was most successful when the combining organisations had closely aligned values and

clear economy-of-scale opportunities. She also found, however, that many NFPs do not pay adequate consideration to alternate structural arrangements to M&A which may suit them better, and potentially consume less time and fewer resources.

"Alternatives could be more simple, for example, a cost-sharing or result-sharing agreement," she says, "one which doesn't have too many legal identity changes and could easily be resolved through allied agreements or services."

Research has also revealed that for NFPs the M&A process is rarely simple or slick; robust board and CEO leadership, good governance, financial resources and a collaborative approach to strategic planning are critical success factors. Failure to heed them could hamper the ability of NFPs to serve their users. More pointedly, one should be prepared to deal with organisational values and cultural differences to make M&As work.

Looking forward, Professor Subramaniam plans to extend the impact of her research and provide useful information for both NFPs and policymakers. "I aim to develop a national index or register of the number of mergers, types of mergers, restructured governing boards and, if possible, costs of mergers. Such information would be most useful for informing the changing structural landscape of the Australian NFP sector," she concludes.

Bookmark [www.galresearch.com](http://www.galresearch.com) to stay up-to-date with Professor Subramaniam's research.



## Professor Mark Leenders

Professor in the Graduate School of Business and Law

### THE best of both worlds: Balancing creativity and commercialism

Staying ahead of competitors increasingly requires creativity, but with failure rates ranging from 50 per cent to 90 per cent, many new products and services never make it to market. If innovation is the key to survival in today's business world, how can companies and entrepreneurs balance invention with shrewd marketing strategy?

Professor Mark Leenders wants to help organisations deliver on their innovation ambitions, asking the questions which stump many a business mind: How can companies connect their marketing and R&D capabilities? What is the best way to balance proactive and reactive innovation strategies? How can sustainability and circularity be aligned with a viable business model?

Professor Leenders' research is often set in the creative industries, where human imagination, skill and talent create intellectual property and contribute to innovative business models. His expertise leads him into the world of movies, video games, music festivals, healthcare, and even wineries. After all, squandering money on a doomed product makes no sense, regardless of the sector.

While exciting innovation comes with a huge investment risk. Done successfully it can create jobs, solve problems, win customers and attract capital for further invention. On the other hand, failure to innovate stifles companies and economies as a whole. "While different entities face different innovation challenges, products in the broader creative industries are inherently 'experience' goods," explains Professor Leenders. "Consumers have difficulty in assessing quality before consumption. My research aims to identify smart practices, structures and strategies that can shift the balance between success and failure."

His research shows that there are many mechanisms and practices available to an organisation to address innovation bottlenecks beyond merely forming cross-functional teams. In assisting companies with this balancing act, he also shows that innovation strategies are most effective if accompanied by brand building strategies.

Besides developing business innovation simulation tools, Professor Leenders has advised McKinsey & Company in relation to 'stage gate systems' – a means of managing stages of new product creation. His industry-specific evidence demonstrates that these systems often have a negative influence on innovation performance because of bureaucratisation, and he offers tips on using them more effectively.

Professor Leenders is currently looking at virtual world platforms, including opportunities for entrepreneurs to start virtual businesses and earn real-world money. "Rather than focussing solely on the user, I try to understand the business ecosystem and those developing the new applications or services," he says. Given the potential of virtual platforms to impact upon data privacy and health, this research may also impact upon policy in future.

With creative industries contributing more than \$30 billion a year to the Australian economy, it is vital for business to harness innovation. Through his research, Professor Leenders influences businesses to manage the various trade-offs and tilt the scales to their advantage.



# Professor Bronwyn Naylor and Mr Stan Winford

Centre for Innovative Justice and Graduate School of Business and Law

## MAKING irrelevant convictions history

Victoria is the only Australian state without spent convictions legislation. This means that even trivial offences from decades ago can still appear on police criminal record checks. It represents a significant social barrier for many Aboriginal Victorians, at a time when the government looks to close the gap in employment rates between Indigenous and non-Indigenous Australians. Aboriginal people are currently 20 per cent less likely to participate in the labour force.

The *Criminal Record Discrimination Project* is an Aboriginal-led collaboration between numerous community and legal organisations, including Woor-Dungin and RMIT University. It is overseen by an Advisory Committee with over 50 members, including Professor Bronwyn Naylor and Mr Stan Winford.

The project has the dual aim of introducing to Victoria a legislated spent convictions scheme and an amendment to prohibit discrimination against people with an irrelevant criminal record. Removing prejudice on these grounds will increase financial and economic opportunities of Aboriginal people in Victoria, while broadening their opportunities for civic engagement.

In April 2017, Woor-Dungin hosted a consultation with community members and legal stakeholders on what spent convictions legislation and protection from discrimination on the basis of irrelevant criminal history should look like in Victoria. To inform these discussions, Mr Winford interviewed Aboriginal legal services from other states and territories.

Contact with local individuals revealed innumerable examples of discrimination faced by Aboriginal people. Many had been prevented from getting a job, obtaining insurance, receiving approval as a kinship carer and serving on community or government boards because of an irrelevant criminal record.

A paper summing up the recommendations based on the consultations shows that Victoria is completely out of step with every other Australian jurisdiction. "All other Australian jurisdictions have spent convictions schemes and most have some form of anti-discrimination protection to ensure that people

with irrelevant criminal records are not prevented from participating in their communities," notes Mr Winford.

"It is clear that a more robust, statutory information management regime for criminal records is well overdue in Victoria," he adds.

The paper also included 11 case studies detailing cases where Aboriginal people with an irrelevant criminal record have experienced discrimination. Professor Naylor supervised the development of these case studies.

"It's vital that Victoria introduces legislation to protect people from discrimination on the basis of an unrelated criminal history as well as spent conviction legislation," says Professor Naylor. "Current laws entrench the discrimination faced by Aboriginal people and limit their valuable contribution to society."

With the endorsement of members of Victoria's Aboriginal communities, the paper was submitted to the statewide Aboriginal Justice Forum, which unanimously endorsed it in December 2017. The paper is currently with the Victorian Attorney-General, awaiting a response.

Professor Naylor, Mr Winford and the team are hopeful the paper will have an effect in line with the impact of their previous work. Most recently, the state parliament passed legislation to change records relating to children who were taken into state protection, up to the 1990s, in response to the *Criminal Record Discrimination Project*.

This type of work is typical of the social justice advocacy work carried out in RMIT's Centre for Innovative Justice (CIJ). For example, Mr Winford has recently been working on another project that takes a look at how the criminal justice system unfairly treats individuals with Acquired Brain Injury. To find out more about the work of the CIJ, visit: [www.cij.org.au](http://www.cij.org.au)

Professor Bronwyn Naylor and Mr Stan Winford are participating in a historic project to change legislation connected with spent convictions and irrelevant criminal records in Victoria.



## Professor Anne-Laure Mention

Director of Global Business Innovation Enabling Capability Platform

### BLAZING a trail for innovation

In our technology-enabled, data-driven world, there is an increasing emphasis on customer-centred innovations and blending services with technology. Firms are scrambling to find ways to explore and exploit knowledge, internationalise operations, and scale-up in general. Keeping up with evolving technology is essential, but are traditional structures and barriers to collaboration hindering progress?

Professor Anne-Laure Mention aims to answer this question by focussing her research on two streams of thought. Firstly, she is exploring the human side of open innovation – the process by which knowledge is used to accelerate ideas – by studying the notion of ‘openness’ at individual, team and company level. Secondly, she is looking at collaborative design approaches for innovation and the critical early development phase of business ecosystems.

She has multiple research projects underway with local and international partners, including a large scale European Union proposal that is exploring the relevance and impact of regulation on emerging financial technologies, such as FinTech and RegTech. “You could say that collectively, my projects address the current societal challenge of how to design, organise and execute pathways for innovation,” says Professor Mention.

Her research seeks to discover how knowledge transfer, governance and desired performance can be combined within public and private sector firms in order to increase innovation capabilities, while developing frameworks and toolkits that will help solve the challenge of nurturing innovation.

In addition, her ongoing analysis of sandboxes (virtual spaces for running untested software) will provide recommendations for governance conditions that foster experimentation with new technologies. “Economically, we will be able to design efficient innovation ecosystems where individual firms can grow and scale-up,” adds Professor Mention. “Politically, we will shape the structures and artefacts at the intersection of innovation, regulation, law and intellectual property.”

Ultimately, policymakers will gain advantages from a clearer understanding of emerging technologies in the financial sector and beyond, and governing authorities will benefit from globally converging guidelines. This will bring supervisory oversight to an otherwise complex market.

The research will also be beneficial to decision-makers in innovative companies, innovation hubs and start-up accelerators, who will particularly benefit from deeper understanding and curated strategies of innovation management. This recently occurred with the major European open innovation project, the *European Academic Network for Open Innovation (OI-Net)*, where Professor Mention worked with high-level policymakers and universities to shape the development of a Europe-wide curriculum for open innovation.

For society, Professor Mention’s research will carry the most long-lasting benefits, instilling trust and transparency in technology-enabled services and reducing the risk of systemic failures.

Professor Mention’s future research direction includes looking at innovative methods to test current folk theories (which predict behaviour) in innovation management, and new ways to operationalise policies. Work is already underway, for instance, to develop novel insights on the human side of open innovation. Professor Mention is also supervising PhD research incorporating cognitive and social psychology experiments to examine effects on open innovation behaviour and performance.

“I am planning to deliver similar social impact in the form of innovative education and training programs at all levels from the current stream of research on FinTech, regulatory sandboxes and the broader human side of open innovation,” concludes Professor Mention.

Find out more about how Professor Mention and her colleagues are solving critical global problems and delivering significant economic, social and environmental impact by visiting RMIT’s Enabling Capability Platforms: [www.rmit.edu.au/research/research-expertise/our-focus/enabling-capability-platforms](http://www.rmit.edu.au/research/research-expertise/our-focus/enabling-capability-platforms)

**Professor Anne-Laure Mention looks beyond theories in order to understand the practice of incorporating innovation and knowledge transfer as it unfolds in business and wider society.**

**“ECONOMICALLY, WE WILL BE ABLE TO DESIGN EFFICIENT INNOVATION ECOSYSTEMS WHERE INDIVIDUAL FIRMS CAN GROW AND SCALE-UP.”**



A portrait of Professor Alemayehu Molla, a man with glasses and a mustache, wearing a dark suit jacket over a light-colored checkered shirt. He is standing in front of a server rack with blue cables.

## Professor Alemayehu Molla

Professor of Information Systems in the School of Business IT and Logistics

### RESTARTING the global IT environment

As businesses come under increasing pressure from customers, competitors and regulators, the need to implement sustainable business practices has become a very real challenge. Balancing economic and environmental performance is a key strategic issue of our time.

The RMIT-Connection Research Information and Communications Technology (ICT) Sustainability Framework tackles this duality. The ICT Sustainability Framework was the result of a research partnership between Connection Research, Fujitsu Australia and RMIT University.

Led by Professor Alemayehu Molla, the team created the Sustainability Framework as a pioneering guide to assist organisations aiming to transition to truly globalised ICT sustainability. The team focused on a large array of ICT sustainability concerns, covering supply chain, lifecycle management, data centres, end-user computing and energy use measurement and management, among other topics.

The resulting Sustainability Framework has since been used as a consulting tool by Connection Research and ICT Sustain. Moreover, Fujitsu has applied it to sustainability benchmarking since 2010, providing unmatched analysis of the trending maturity of ICT sustainability in organisations based in Australia, Canada, China, India, Japan, New Zealand, the UK and the US, via the Global ICT Sustainability Benchmark Report.

Fujitsu's report also contains helpful tips, expert advice and 'quick-win' strategies that businesses can use to achieve improved efficiency and competitive gains. Glen McLatchie, General Manager ICT, Meridian Energy Limited, said: "The Global ICT Sustainability Benchmark Report is so much more than a report. It's a great tool that allows organisations to fundamentally shift their approach to sustainable ICT for the better health of their organisation and the planet."

Professor Molla believes his research into this evolving area has been pivotal to changing attitudes. "Researchers and organisations are now starting to consider the role of ICT in businesses, not only in contributing to their environmental footprint, but also in tackling climate change problems," he says.

Moreover, the Sustainability Framework has also been used to develop a professional training course recognised by the Australian Computer Society and Thailand's National Science and Technology Development Agency Academy.

Though this specific project is no longer active, Professor Molla is still working to implement environmentally sustainable solutions that make economic sense to business problems. As such, he is currently engaged in studies focussing on the use of disruptive digital technologies – such as big data, Internet of Things and artificial intelligence – for sustainability.

**Professor Alemayehu Molla has been leading timely research that focuses on 'greening up' the credentials of Australia's vibrant Information and Communications Technology sector.**

A portrait of Professor Pia Arenius, a woman with short brown hair, smiling. She is wearing a denim jacket over a dark top and is sitting on a modern, curved staircase with yellow railings.

## Professor Pia Arenius

Professor of Entrepreneurship in the School of Management and Director of the Entrepreneurship and Innovation Research Priority Area

### WEARABLE technology unlocks entrepreneurs' emotions

About a decade ago, Professor Pia Arenius asked ten founders of a Finnish company to make an audio diary. Handing each a small digital recorder, she tasked them with documenting their emotions and actions in the workplace. Analysing their diaries for emotive trigger words, she concluded her countrymen to be an unemotional bunch!

Thankfully, technology has come a long way since then and Professor Arenius, who never gave up on the concept of linking emotion to entrepreneurial activity, has abandoned the recorders in favour of wearable devices. Worn like a watch, the wristbands collect physiological data such as heart rate and skin conductivity – reliable indicators of a person's stress, excitement and arousal levels – in a non-intrusive way. "People can fabricate their emotions," explains Professor Arenius, "and as we know, some even have difficulty describing them, but biological data doesn't lie."

For her study, Professor Arenius enlists budding businesspeople to wear the wristbands for a number of days at a time, during which they also receive mobile phone surveys asking how they're feeling and what they're doing at that moment. By comparing the physiological responses to the individuals' self-reported data, the study looks beyond purely business-related outcomes. "I am also interested in the well-being of the entrepreneur, and the implication of one person's entrepreneurial activities on their family and wider social network. Do they get enough sleep? Are they exercising enough?"

With the wearable technology generating data every millisecond, Professor Arenius is collaborating with mathematicians and statisticians to make sense of the figures. "In the long run we're talking about machine learning and artificial intelligence. The amount of data from these devices is so huge that we need to create algorithms and processes to analyse the patterns before being able to compare the physiological responses with entrepreneurial activities."

The potential of wearable technology for assessing someone's mental state is vast, in particular for industries concerned with neurological diversity in entrepreneurship and entrepreneurial well-being. Wearables can also be used to measure people's emotional state in a range of situations, from checking their reaction to a particular website, to their responses to specific work or life scenarios. As wearable technology continues to advance they have the potential to impact many aspects of how people live, learn and work.

Professor Arenius has always been fascinated to know if there is a correlation between success and failure amongst budding entrepreneurs, and in future hopes to unlock the key to persistence in entrepreneurial activity. "There is no strict formula for predicting who is going to be successful and who won't. It is a phenomenon which is contingent on many factors, including the person, context, opportunity, timing and resources."

Thanks to technological advances, Professor Arenius is now equipped with a tool capable of revealing the effects of the entrepreneurial process on the individual, where physiological responses speak for themselves.



## Professor Sara Charlesworth

Distinguished Professor of Management

### GOOD quality work underpins good quality care

With its ageing population, providing long-term care for Australia's elderly is a crucial challenge facing providers and policymakers.

"Sustainable aged care services are critical to Australia's future. The demand for aged care workers is growing and these jobs are hard to automate. However, many frontline care workers are employed in poor quality jobs with low pay while facing extreme time pressure, high stress and a lack of career opportunities. I began to wonder about the extent to which poor job quality was making it difficult to recruit and retain care workers and if it was hampering providers' ability to deliver quality care," explains Professor Sara Charlesworth.

Thus was born the *Quality Jobs and Quality Care* project. In this study, Professor Charlesworth and her team worked with aged care organisations to identify small-scale changes to improve the ways frontline care work is organised to produce both better quality jobs and better quality care. The project was undertaken in partnership with three of Australia's leading aged care providers – Brightwater, HammondCare and Helping Hand – and the main Australian aged-care union, United Voice.

Within the aged care providers, the research team worked with managers and workers to identify and design six separate 'interventions', each of which was implemented for a six-month period and then evaluated.

In one aged care provider that provides home care services, many care workers – who work alone on home visits – reported feeling isolated and unsure of how to proceed when faced with a new situation. While new home care workers received initial training and mentoring, little on-going accessible support was available.

As a result of the research team's discussion with line managers and home care workers, the organisation introduced 'specialist buddy mentors'. Their role was to provide in-person and over-the-phone support to both new and experienced staff members. Following this small change, employees reported feeling more confident and supported when visiting a new client. They also felt better able to meet the needs of increasingly complex care required by older clients and clients recently discharged from hospital.

At another aged care provider, Professor Charlesworth's team aimed to solve the challenge of how to achieve consistency of care for residents with dementia. Working together with nursing and allied health professionals and frontline care workers, the team looked for ways to improve quality of care provided and care workers' job satisfaction. The provider limited the number of frontline care workers assigned to each resident to provide for ongoing relationships with regular workers, who became involved in the design of personalised care for residents. One way this was achieved was through a 'well-being mapping' exercise with residents and their families to discuss ways individual resident needs, preferences and well-being could be improved.



"Care workers were thrilled to be involved in this care planning. It enabled them to talk to the nursing and allied health staff about what they already knew about a particular resident. They also gained a better understanding of the history and preferences of the persons to whom they were providing care," says Professor Charlesworth. "This experience supported the hypothesis driving the whole project: that good quality care is underpinned by good quality work."

The team has since produced the *Quality Jobs, Quality Care* toolkit to encourage the uptake of the practical steps and lessons learned in the project across the broader aged care industry. The toolkit helps aged care organisations through what might otherwise be a daunting process of incorporating small-scale changes to improve job and care quality.

Professor Charlesworth's important work is continuing through an Australian Research Council Discovery

Project, *Decent Work Good Care: International Approaches to Aged Care*, which is pushing her research into an international setting. Through this project, Professor Charlesworth and the Australian, Scottish and Canadian team of Chief Investigators aim to better understand how government policies, funding and regulation shape the provision of decent jobs and good, quality care. Follow the project's findings on its website: [www.decentworkgoodcare.com](http://www.decentworkgoodcare.com)

**Distinguished Professor Sara Charlesworth leads research into what better practices might look like in the aged care sector, even in the face of limited government funding.**



# College of Business Information

## RESEARCH Overview

**R**esearch is a core activity of the College of Business. Our academics are dedicated to both knowledge creation (through research) and knowledge dissemination (through industry engagement and teaching).

Our researchers solve real-world problems in collaboration with diverse and dynamic partners. The College has a strong record of industry engagement and counts large multi-national companies such as ANZ, IBM and World Vision among its partners. To support industry-engaged research, the College has created a cohesive and dynamic research environment that fosters entrepreneurship and innovation.

The College has multiple areas of research concentration (outlined in detail below) that seek to integrate our interdisciplinary research expertise with the needs of industry.

The College has a central location in the heart of Melbourne. This enables researchers to establish close links with industry, whether it is with business, government, or the wider community. Collaboration with external partners, producing industry-relevant research, and translating our research to positive change in the community, are all vital components of our research culture and practice.

### Areas of Research Concentration

Research in the College of Business covers a broad range of business discipline areas, reflecting the activities of our Schools. The College has a number of research concentration areas aimed at integrating our interdisciplinary research expertise with the needs of industry. These include:

- The Centre for People, Organisation and Work
- The Blockchain Innovation Hub
- Entrepreneurship and Innovation
- Global Supply Chain Management and Logistics
- Governance, Accountability and the Law
- Markets, Culture and Behaviour
- International Development and Trade

The College of Business also hosts the innovative Behavioural Business Lab, and is aligned with the Global Business Innovation Enabling Capability Platform, which is of particular strategic importance to RMIT.

The nationally renowned Centre for Innovative Justice and the Australian APEC Study Centre are also both affiliated with the College of Business.

The above is not an exhaustive list, and our areas of research concentration are constantly evolving to respond to new societal and industry problems. Refer to the Business Research website for the most up to date information.

### Higher Degrees by Research Opportunities

RMIT has a reputation for employing leading experts, producing high quality research and harbouring deep industry links. This is the unique environment we offer our PhD candidates.

RMIT PhD candidates are equipped with the skills to solve real-world local and international problems. Our PhD candidates graduate with work ready skills, applicable for a variety of careers.

To find out more about RMIT's higher degree programs and scholarship offerings visit: [www.rmit.edu.au/research/phds-and-other-research-degrees](http://www.rmit.edu.au/research/phds-and-other-research-degrees)

### Learn More About Our Research

In 2018 the College of Business launched a series of videos that profile eight of the College's leading researchers and their research stories. Visit [www.RMITbusinessresearch.com.au](http://www.RMITbusinessresearch.com.au) to watch the videos and learn more about our research.

### Connect With Us

Follow us on Twitter and Facebook to hear more about the fascinating research coming out of the College of Business.



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### Partner With Us

Contact us at [business.research@rmit.edu.au](mailto:business.research@rmit.edu.au) to enquire about the ways in which you can partner with us.

### General Enquiries

Please contact the College of Business Research Office at [business.research@rmit.edu.au](mailto:business.research@rmit.edu.au) for all general enquiries.





The College of Business is predominantly located in the Swanston Academic Building (pictured) in the heart of Melbourne, Victoria. This building is a cutting-edge teaching and learning hub that boasts a 5-star green rating for sustainability.

# Achieve your PhD at the College of Business

Our PhD candidates are equipped with the skills to solve real-world local and international problems

The College of Business has a reputation for employing leading experts, producing high quality research, and harbouring deep industry links

This is the unique environment we offer our PhD candidates

Discover our higher degree programs and scholarship offerings

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