Welcome to the annual ANU College of Business and Economics (CBE) Research Overview. Despite the upheaval caused by bushfires, hailstorms and COVID-19, CBE has continued to produce, and receive recognition for, its high-quality, high impact research. With five projects supported in the latest funding rounds, CBE now has a total of 19 academics listed as Chief Investigators on 22 active Australian Research Council projects.

Many more of our academics are undertaking research funded by other parts of government, the private sector and philanthropists, the outcomes of which are featuring in the world’s top research outlets. Indeed, over 100 pieces of CBE research have been accepted for publication by top international journals in the last 12 months. And, on top of all these impressive achievements, our academics continue to use their subject matter expertise to shape discourse on the most pressing societal issues.

But we’re always keen to do more, and are actively looking for further opportunities to engage with the public and private sector to find solutions to the challenges they face.

Professor Steven Roberts, Dean
Associate Professor Emma Schultz, Associate Dean (Research)
NEW HIRES

CBE has recently welcomed world-leading academics to each of its four research schools.

Dr Evan Calford

Evan joined the Research School of Economics as a Senior Lecturer and Fellow in the John Mitchell Economics of Poverty Lab. Before coming to ANU, he was an Assistant Professor at Purdue University and worked on climate change economics and policy for the Australian Government. Evan’s research spans experimental economics, behavioural economics and game theory. He has a particular interest in applications of ambiguity aversion and other behavioural models of uncertainty to game theory. Evan’s work has appeared in internationally renowned outlets including *Econometrica*, *Experimental Economics*, and *Journal of Economic Behavior and Organization*.

Dr Eunice Khoo

Eunice joined the Research School of Accounting as a Lecturer. Prior to joining ANU, she completed her PhD at the University of New South Wales. Her doctoral dissertation examined how a firm’s reputation affects both its financial and non-financial outcomes, and earned her the Dean’s Award for Outstanding PhD Theses as well as the University International Postgraduate Award. Eunice’s current research builds on her PhD and her earlier industry experience as an external auditor, exploring issues in auditing, corporate governance and corporate social responsibility. Eunice also investigates directors’ reputation and financial incentives, and explores how firm reputation affects the quality and timeliness of financial reporting and auditing.

Professor Andrew Wood

Andy joined the Research School of Finance, Actuarial Studies and Statistics as a Professor of Statistics. Prior to this, he spent 20 years at the University of Nottingham, including 10 years as the Head of Statistics. Andy’s research interests range from theoretical statistics to statistical methodology to applications of statistics, with his current focus on directional statistics and statistical shape analysis. He regularly publishes in leading international statistics journals including *Journal of the American Statistical Association* and *Biometrika*. Andy is also an Associate Editor of *Biometrika* as well as a former Joint Editor of *Journal of the Royal Statistical Society, Series B* (Statistical Methodology).

Dr Birgit Muskat

Birgit joined the Research School of Management as a Senior Lecturer. She holds a PhD from the University of Trier, and a habilitation degree (higher doctorate) from the University of Bamberg. Her research interests include service experience management, knowledge transfer and entrepreneurship, with a focus on international aspects of tourism and hospitality management. Birgit’s research has been published in high-quality outlets. She serves on the editorial board of *Journal of Travel Research* and *Journal of Vacation Marketing*, and was awarded the Dean’s Award for Research Impact.
CBE academics are Chief Investigators on five newly funded Australian Research Council projects.

Dr Francis Hui
Discovery Early Career Researcher Award – Modern Statistical Methods for Complex Multivariate Longitudinal Data
Francis is developing cutting-edge statistical theory and methodology for model building, inference, and prediction for multivariate longitudinal data that accounts for complex observation and correlation structures of data. These methods will be computationally efficient and statistically rigorous, with the associated software to be adopted by end users across multiple disciplines and organisations. For example, they will help increase our understanding of how social and environmental factors influence an individual's wellbeing over time, informing the design of national strategies and intervention programs to manage drivers of poor physical, cognitive and mental wellbeing.

Professor Prashant Bordia
Discovery Project – Older Workers and Psychological Contracts: A Dynamic Perspective
Prashant is leading a team of researchers from ANU, Macquarie University and the University of Western Australia in exploring how the workplace psychological contracts of older employees change with their age. They are using intensive, repeated, in-depth interviews and a large-scale longitudinal panel study to provide this important insight. Their analysis will not only fill significant gaps in the understanding of older workers’ needs and orientation toward work, but identify the age-related changes and organisational practices that motivate older workers to sustain their productive participation in the workforce.

Professor Markus Brueckner
Discovery Project – Automation and Income Inequality: Empirics and Macro Policy Implications
While the increased use of robotics and artificial intelligence may ultimately make citizens better off, the effects on domestic income and wealth inequality remain uncertain, depending strongly on general governance and macroeconomic policy regimes. Markus is leading a team comprising researchers from ANU and the University of Western Australia who are working to clarify income inequality implications, both domestically and abroad. Their work will better equip the Australian Government to address the implications of transitions in technology, by offering a vision of the future consequences of potential restorative changes to its fiscal, trade, financial and foreign policies.

Associate Professor Pierre van de Eng
Discovery Project – A History of Foreign Multinational Enterprises in Australia from Federation
Foreign multinational firms played a critical, but poorly understood, role in our nation’s development. Pierre and a team from the University of Wollongong and the University of Melbourne are working to deliver the first history of these corporations in 20th century Australia. By facilitating a detailed, long-term understanding of multinationals, the team will inform public debate and policy about the roles of foreign investment and foreign enterprises in the modern Australian economy.

Dr Stephen Dann
Discovery Project – Gaming the Plate: 3D Food Printing for People with Swallowing Disability
Around 8% of the world's population suffer from a swallowing disability. Stephen and a team of researchers from the University of Technology Sydney and Deakin University are working to identify ways that 3D food printing could be used to improve the visual appeal of puree meals for these people. Their study will engage those with a swallowing disability, as well as their supporters, to understand the impact of 3D food printing on quality of life, enjoyment, participation and safety. It will also identify factors affecting the implementation of 3D food printing in disability and aged care services, to inform policy, practice and future research.
ONGOING AUSTRALIAN RESEARCH COUNCIL PROJECTS

Nineteen CBE academics are Chief Investigators on 22 active research projects funded through four different Australian Research Council schemes, a selection of which are showcased below.

**Associate Professor Alessandra Capezio**
**Discovery Project – Strengthening Australia’s Science Workforce: A Job Embeddedness Perspective**

While the Australian Government invests heavily in building the supply of science, technology, engineering and mathematics (STEM) graduates critical to boosting national productivity and innovation, STEM workers often leave these occupations. Alessandra and a team of researchers from Monash University, Georgetown University, the University of Illinois, the University of Arizona and the University of Washington are using a job embeddedness perspective to understand why STEM employees stay or leave their profession. Beyond advancing theory, the project will develop an evidence-based toolkit, online masterclass, and an online community of practice to contribute to the broader STEM community.

**Professor Markus Brueckner**
**Future Fellowship – Income and Wellbeing: Evidence from International Commodity Price Shocks**

Exports of natural resources such as iron, coal and copper are an important source of income for the Australian economy. The international prices for these commodities have declined in recent years, causing a drop in national income. Markus is using objective and subjective measures of wellbeing at both the cross-country time-series and the subnational levels to understand how falling commodity prices have affected the wellbeing of Australians.

**Associate Professor Alfred Tran**
**Discovery Project – Are Tax Base Erosion and Profit Shifting Countermeasures Effective?**

Multinational enterprises use base erosion and profit shifting to avoid paying corporate taxes in Australia. With up to 10% of corporate tax revenues under threat, the federal government has devised a range of policy initiatives to combat corporate tax avoidance. Alfred is leading a team from ANU and the University of Melbourne in developing ways to evaluate the effectiveness of these countermeasures and, in doing so, provide policymakers with critical insights into the integrity of the corporate tax system.

**Associate Professor Emma Schultz**
**Discovery Project – The Ageing Population, Superannuation and Corporate Dividend Policy**

While research invests considerable effort in understanding how demographics impact upon the need for, and structure of, government systems, including social security and taxation, relatively little is known about their effect on capital markets or corporate decision-making. Emma is leading a team of researchers from ANU, the University of Melbourne and the Chinese University of Hong Kong to examine how population age affects one important aspect of corporate decision-making, namely dividend policy. Although individual investors are, by nature, atomistic, the team argues that changes in investor preferences will ultimately prompt companies to alter their dividend policies. The team’s findings will help more fully characterise how Australia’s ageing population will affect the public and private sectors.
OTHER EXTERNALLY FUNDED RESEARCH PROJECTS

CBE academics partner with industry and government to address pressing societal issues.

Dr Eunice Khoo
Shareholder Support for Directors with CSR Expertise and CSR Performance Records

Eunice is exploring whether shareholders value directors’ corporate social responsibility (CSR) expertise and hold them accountable for a firm’s CSR performance. In particular, she is investigating if shareholders increase their support for directors with CSR-related expertise, and increase (decrease) their support for directors following an improvement (deterioration) in a firm’s CSR performance. The insights she is gaining are important given boards are seen increasingly as responsible for CSR-related issues, shareholders are more concerned with CSR-related issues, and shareholder activism has grown in the past decade following the adoption of proxy access proposals.

Dr David Cheng
Human Resource Systems for a Cybersecurity Workforce

David is helping the Defence People Group (DPG) in the Australian Department of Defence understand how best to reward workforces and, in doing so, supporting DPG’s contribution to the Five Eyes technical cooperation program. By exploring practices across jurisdictions and market sectors, David is helping inform the design of human resource systems within Defence organisations.

Professor Alan Welsh
Statistical Machine Learning

Alan is working with Data61 to advance the science of making inferences from data. They are currently collaborating on a range of problems in modelling and machine learning such as mixed models, zero-inflated count data, compositional data and robustness. Their efforts will contribute to developing world-class information and communications technology research capabilities and build CBE and Data61’s reputations as being at the forefront of research worldwide.
Philanthropically Funded Research Projects

Generous donors fund research-led teaching.

Professor John Stachurski leads a team of researchers from ANU, the Berkeley Institute for Data Science and Northern Arizona University awarded A$1.3 million by the Alfred P. Sloan Foundation to develop tools for creating next-generation scientific textbooks and lecture series.

Their work is based around the rapidly growing Jupyter platform, which combines state-of-the-art web publishing with an emphasis on open access and open science – a practice that encompasses unhindered access to scientific articles.

"Traditionally we have used hardcopy textbooks to convey scientific ideas to students but this mode of communication is becoming less suitable each year. Our team aims to develop a set of tools for creating documents that replace traditional textbooks in the scientific domain," explains John.

“These tools will be powerful, elegant and easy to use. They will fully exploit modern technologies such as web publishing and cloud-based computing,” he adds.

The documents produced from these new-generation tools will be called “executable books” and will allow students to freely access study materials, take advantage of the tools’ integrated techniques to enjoy a better learning experience, and test their understanding of scientific concepts while learning.

John believes they will become “an attractive alternative” to “outdated” textbooks for students.
RESEARCHERS IN THE SPOTLIGHT

CBE researchers continue to produce and disseminate high-quality, high-impact research.

Professor John List

World-leading applied economist John List joined the Research School of Economics’ John Mitchell Economics of Poverty Lab in late 2019. Since his arrival, John has used his field experiment expertise to inform three groundbreaking experiments, the results of which have either already been published, or are forthcoming, in top international journals.

In a study published in *Journal of Political Economy* earlier this year, John and a team of researchers from the Norwegian School of Economics and the University of Southern California use a randomised control trial to provide the first evidence of a causal relationship between early childhood education and social preference formation.

“Previous research investigates how early childhood education affects cognitive achievement and noncognitive skills. However, the literature is silent on how it shapes social preferences, if at all. We provide much-needed evidence in this regard,” John notes.

“In doing so, we also demonstrate the importance of adopting a broad perspective in the design and performance measurement of these early educational offerings,” he adds.

In another recent *Journal of Political Economy* study, John and colleagues from the London School of Economics and Political Science and Boston University use commercial pilot productivity data to explore how managerial practice affects productivity.

“Despite research supporting management as an important determinant of firm-level performance, there is little evidence regarding any causal relationship between managerial practices and skilled labour productivity. We use a novel dataset to provide preliminary insights,” John explains, adding that “of the four distinct management practices we investigate, monitoring and target setting are particularly effective in increasing productivity.”

Finally, John and co-authors from George Mason University and the University of Chicago explore how experimental insights can inform policymaking in their forthcoming *International Economic Review* paper.

“We develop a simple model highlighting three key aspects of the so-called scaling-up problem, namely, when evidence becomes actionable, properties of the population and properties of the situation,” John explains.

“All three must be explored in the original research program, otherwise scaling exercises are particularly vulnerable.”

Professor John List

Image: ElenaBaryshnikova, Shutterstock.com
Associate Professor Louise Lu

Louise is an Associate Professor in the Research School of Accounting. She is also one of CBE’s homegrown research success stories, having completed her PhD in Accounting at the college in 2012. “My PhD thesis explored how corporate and private interest motives affect political donations. It also investigated how corporate governance moderates these effects,” explains Louise.

Post-graduation, Louise has continued researching in the areas of financial accounting, corporate social responsibility and corporate finance. She is currently exploring the relationship between accounting and human behaviour, firm structures and processes, and the wider sociopolitical environment of the firm.

In particularly timely work, Louise and co-authors from Singapore Management University, Monash University and the University of New South Wales document the adverse impact sick employees have on firms’ production of critical information such as management earnings forecasts. “We find a significant decrease in the timeliness, number and accuracy of earnings forecasts among firms headquartered in areas with high flu activity,” explains Louise.

“Our findings are particularly important given the death toll from COVID-19 and multiple flu pandemics,” she adds.

In a separate project, Louise and a team of researchers from the University of Melbourne and the University of New South Wales show that CEO pessimism significantly increases in the wake of the death of a former colleague. “This pessimism is evidenced through CEOs’ forecasts and in their external communications more generally. While the pessimism can be transitory, it has a significant economic influence in the capital market,” Louise notes.

CBE’s research students have gone on to celebrate some impressive feats post-graduation.

Dr Gladys Lee
Gladys graduated with a PhD in Accounting in 2014. Her dissertation explored the use of whistleblowing in the detection of corporate fraud. Upon graduating, Gladys joined the University of Melbourne’s Department of Accounting, where she is now a Senior Lecturer. Gladys’s research interests centre on audit quality and the intersection between accounting and business ethics. Her work has been published in internationally renowned outlets including *Contemporary Accounting Research*, *Auditing: A Journal of Practice and Theory* and *Journal of Corporate Finance*.

Dr Pin-Te Lin
Pin-Te graduated with a PhD in Finance in 2019. His thesis provided an in-depth examination of US housing price determinants. Towards the end of his studies, Pin-Te accepted a Lectureship in Real Estate Finance at the University of Reading’s Henley Business School. He continues to research in empirical asset pricing and housing markets, and now also serves as the Deputy Director of Studies for the Henley Business School’s Department of Real Estate and Planning.

Ms June Ma
June graduated with a Bachelor of Economics (First Class Honours) and a Bachelor of Laws (First Class Honours) in 2015 and 2016, respectively. She used her economics honours thesis to develop an economic model of bitcoin mining, the process that underpins the verification of transactions on all proof-of-work-based blockchain. The model predicts the behaviour of bitcoin miners in response to changes of different network variables. Upon graduation, June joined the Reserve Bank of Australia and, later this year, will head to Harvard University to commence her PhD.

Dr Serene Ng
Serene graduated with a PhD in Management in 2012. Her thesis explored the implications of abusive supervision in the workplace. Serene is currently Chief Operating Officer of Nanyang Technological University’s (NTU’s) Lee Kong Chian School of Medicine and was previously the Director of NTU’s Office of Administration. Her roles at NTU build further on her 20 years in leadership roles in finance, international marketing and human resources at Esso, IE Singapore, Tyco, Ingersoll Rand and ThyssenKrupp. Serene also continues her research in leadership, with her work recently accepted by the internationally renowned *International Journal of Hospitality Management*. 