

DocFest Graduate Research Conference 2023

22-26 May

Abstracts



Themed session 1: Well-being and self-management

Dr Yasdan Mansourian

School of Information and Communication Studies

Unlocking the secret of Serious Leisure: How it cultivates belongingness and boosts wellbeing

Over the past five years I have explored Serious Leisure (SL) in diverse contexts. SL encompasses hobbies and voluntary activities which require learning new skills and creating commitment and social identity. SL should be challenging and rewarding, generate personal and communal benefits, and may become a profession. I have studied hobbies like bonsai growing, knitting, birdwatching, and pottery. The role of SL in cultivating a sense of belonging among people and how it impacts their overall wellbeing is one of the most visible themes in my data analysis. An inductive thematic analysis reveals that regardless of the nature of the pastime, SL engagement has a social aspect, and the participants often establish clubs and associations. For example, there are 57 bonsai societies in Australia. Moreover, I explain how I used the belongingness theory to conceptualise my findings deductively. Finally, I discuss the practical implications in policymaking, practice and research.

Diane Cass

School of Social Work and Arts

Tips and Tricks for Managing Writer's Block

I have been a published writer for over 30 years, with experience in areas ranging from business and law to poetry and creative fiction. When I started my writing journey, I often sat and stared at the page, wondering what I could write without getting anywhere. These issues are no longer a problem for me due to increasing my knowledge of writer's block and learning a few other 'tricks of the trade' along the way. Drawing on my own experience, I have put together a list of tools to aid the writer in overcoming any such blocks. I have also created tips for writers to improve their writing and presentation style. Practical applications from this presentation include increased output for writers, reduced anxiety regarding writing and especially timeframes, and time management to enable the writer to reach their goals.

Katrina Gersbach

School of Social Work and Arts

The juggle

Maintaining life balance throughout research and HDR study is essential to successful outcomes and wellbeing. We are living in a unique period of history where post mandated pandemic lockdowns, the lines between our social, work and study lives have become increasingly blurred. The author is a young female early career academic who has spent the last nine years teaching, raising children, studying and researching. Now moving into PhD study, this presentation will utilise an autoethnographic approach, to reflect on how planning and mentoring can help us build upon our transferable skills, celebrate our achievements and sustain wellbeing. Critiquing traditional

conceptualisations of work life balance (Perreault & Power, 2021; Shahjahan et al., 2022), practical skills, techniques and methods for success will be shared (Fisher, 2020; Holbrook et al., 2022; Smith, 2021). This presentation will engage with the notion of 'imposter syndrome' within the research realm and how this may manifest for female academics.

Dr Monique Shephard

School of Information and Communication Studies

A leap for mental health: How to save your sanity by doing a PhD

Dr Shephard recently completed her PhD exploring how young adult literature containing mental health themes could be used in English classrooms to improve mental health literacy in adolescents, titled *Adolescent responses to depictions of mental health in Australian contemporary young adult fiction*. This research used a grounded theory method to analyse adolescent views of one Contemporary Young Adult text when studied as part of the English curriculum in the Year 10 classroom and has implications for policy and practice within and beyond the school classroom. This presentation discusses Dr Shephard's journey into academia, the bumpy road to submission, and where she is now, offering tips and ideas to ease your own way.

Ruth Pape

School of Dentistry and Medical Science

A personal reflection of challenges and joys of navigating first year PhD probationary period at Charles Sturt University

My doctoral research aims to explore the unknown impact of the thorax on mammographic image quality. The path to undertake a doctoral degree is not for the fainthearted. It involves solving complex problems and making informed decisions to address the key research question. The first year of the candidature requires multiple activities and tasks to be accomplished before passing through to second year. Managing and navigating to maintain my study life balance over the first year of my candidature was challenging but fulfilling. The key challenges in my journey from then to now include the loneliness of studying in Australia without my family, the unknown and daunting task of navigating through the minute details of the doctoral journey including writing an intensive literature review, attending professional development training to meet my probation requirements and maintaining well-being whilst successfully presenting my confirmation of candidature seminar to defend my doctoral research proposal.

Diane Cass

School of Social Work and Arts

Post Graduate Student Association: What's it all about?

We know that being a part of a group can provide support and friendship. The Charles Sturt Post Graduate Student Association (PGSA) is a group designed specifically for post graduate students to work together in support of each other. However, there are many students who do not join the Association because they are unaware it exists. In order to provide support to as many students as possible, the PGSA, in collaboration with the Researcher Development Team, has organised fortnightly online Research Rave sessions. The Raves are an excellent way of enabling students to share in a safe space, build socialisation, disseminate their research, and develop their abilities. This is important for many reasons, not least as it has established a peer led group of future leaders who

have built long lasting relationships, developed new leadership skills, improved collegiality and demonstrated their abilities to work together for a common cause.

Sara Kablaoui

School of Allied Health, Exercise and Sports Science

Striking the balance

Imposter Syndrome and the Dunning-Kruger effect can both impact researchers' productivity. In Imposter Syndrome, researchers underestimate their skills and accomplishments while in the Dunning-Kruger they may overestimate them. Scientific research regarding prevalence, risk factors, causation, diagnosis and treatment of Imposter Syndrome and the Dunning-Kruger effect are scarce with most of the findings presented in lay literature and the media. From an Islamic standpoint, the concept of moderation is highly regarded and considered a crucial characteristic instilled in the mindset of individuals from early childhood. Therefore, my goal as an Islamic researcher is to find the happy medium which is often challenging. This presentation will collate the available evidence and extrapolate some practical strategies that can assist me and other researchers in striking the right balance to progress in their research journey and overcome any hurdles that may be attributed to Imposter Syndrome and the Dunning-Kruger Effect.

Themed session 2: Research methods and methodologies

Ghulam Zakir-Hassan

School of Agricultural, Environmental and Veterinary Sciences

Groundwater Sustainability Issues in Pakistan: A case study of Managed Aquifer Recharge (MAR)

Groundwater is critically important for Pakistan's economy, however, the current extensive groundwater use in agricultural, domestic and industrial sectors is unsustainable. Rising groundwater demand has occurred against a backdrop of climate change, dwindling surface water resources, and population growth. The focus of groundwater management is mainly related to demand side management. There is potential for storing excess flood water through Managed Aquifer Recharge (MAR) to contribute to supply side management. MAR is complex; therefore, I took a multidisciplinary and transdisciplinary research approach, focused on a government MAR experiment at the Old Mailsi Canal. One output of my research is the 'Managed Aquifer Recharge Feasibility Index' (MARFI) that considers a range of physical and social parameters. MARFI's application shows that the case study is as a feasible project and indicates how MAR can contribute to the larger goal of sustainable management of groundwater in Pakistan.

Josephine Bampoe

School of Allied Health, Exercise and Sports Science

A mixed-method approach to the development of a Ghanaian-English speech and language assessment tool

Background: Speech therapy is an emerging profession in Ghana. To date there is a lack of formal tools to assess children's speech and language. This presentation discusses the proposed PhD research to develop a Ghanaian-English speech and language assessment tool. Method: An exploratory sequential mixed-methods design is proposed for a robust analysis. A qualitative approach best fits the need to develop a tool that is culturally relevant while a quantitative approach best fits the need to collect normative data and standardise the tool. This methodological design will

be adopted to develop the tool in three phases: (1) Develop a speech and language assessment tool; (2) Piloting and validation of the tool; (3) Collecting normative data from children to standardise the tool. Results: Data to be collected after ethics approval. Conclusion: The expected outcome of the research is to provide Ghana with a culturally responsive Ghanaian-English speech and language assessment tool.

Murray Parker

School of Agricultural, Environmental and Veterinary Sciences

The development of a unique methodological approach to explore sensory and multisensory intangible heritage: a case study of European Christmas markets

One of the biggest challenges faced by cultural heritage managers is the professional evaluation of aesthetic values, with past heritage assessments and research primarily touching on visual aspects. This research expands on this by examining these in conjunction with underexplored sensory components of heritage sites; including auditory, olfactory, gustatory and tactile elements. This research will investigate sensory experience, perceptions and ascribed values at European Christmas markets, exploring multisensory heritage and authenticity relationships. Novel methodologies will be developed using a pilot study to establish a research protocol for the primary study and future research, using on-site semi-structured interviews and field observations/measurements to obtain comprehensive quantitative and qualitative data. Field methods include binaural measurements (aural), photographic/video documentation (visual), smellwalks (olfactory), thermal walks, visual recording and descriptive processes (tactile), and mapping and descriptive processes (gustatory). This research is innovative, will advance heritage theory and will guide future heritage management processes.

Maslathif Purnomo

School of Education

Multimodal stance-taking in the genre of political discourse: A case of seventh Indonesian President, Joko Widodo

This study aims to analyse the multimodal and stance construction in the presidential addresses by President Joko Widodo presented from 2015 to 2019. This study applies the Communicative modes by Norris (2006) and stance triangle proposed by Du Bois (2007) as a framework for analysing every multimodal and stance constructed in Jokowi's PA. The multimodal stance-taking process is carried out by analysing each component of the stance triangle, namely evaluation, positioning, and alignment in Jokowi's presidential addresses. The data in this study were taken from video recordings uploaded to the YouTube website by national television stations in Indonesia. The data selection uses the theme technique by typing keywords according to the theme into the search menu on the YouTube website. Furthermore, to download data and process it, this study uses the NVivo software by classifying it according to the coding and categories determined by the researcher. As a result, 17 evaluation categories and 18 types of positioning were found in Jokowi's speech, as well as an explanation of the alignment that calibrated the positioning with an evaluation of the central issues presented in the addresses. From the 18 positionings found, specifically they can be grouped into 6 focused stances, which further can be seen that stances which focus on educational problems are as the general stances which have 5 times frequency realized in several actions regarding education.

Mehedi Tajrian

School of Computing, Mathematics and Engineering

An analysis of the child development myths and facts data using text mining techniques

In today's world, misinformation spreads quickly through websites and confuses people in making the appropriate decision. For example, new parents often get clouded in finding and doing the right things for their baby. Living in the data-centric era and using the internet, websites are the first choice for most parents to explore information about the development of their children. This paper examined a newly collected dataset on child development facts and myths from relevant websites. It utilises NLP techniques to clean the data and then applies the text mining methodologies for further analysis. It demonstrates some interesting results around detecting significant attributes, classification and contribution to misinformation. Therefore, communities could benefit from the research findings and the primary dataset.

Mahir Habib

School of Computing, Mathematics and Engineering

A Microservices and Message Broker-Based Architecture for Livestock Data Sharing between Producers and Consumers

The global food system relies heavily on livestock production, which faces numerous challenges such as environmental sustainability, animal welfare, and food safety. This study proposes a microservices-based architecture for sharing livestock event information between producers and consumers to address these challenges. The proposed architecture enables producers to push information about livestock events, such as weight, birth, and vaccination, to consumers. The microservices encapsulate various aspects of the livestock industry and communicate with each other through a message broker, ensuring reliable and real-time data exchange. The architecture provides data traceability and audibility, which ensures data integrity and ownership. A prototype system was implemented and tested using real-world data, demonstrating that the architecture provides a flexible and scalable solution for livestock data sharing. The proposed architecture offers a promising solution for promoting industry sustainability, accountability, and transparency. Further research is needed to investigate its scalability and performance for large-scale implementation.

Themed session 3: Open themed research papers**Rabin Dulal**

School of Computing, Mathematics and Engineering

Efficient Cattle Identification through Active Learning

Cattle identification is significant in livestock management, with applications in biosecurity, the food supply chain, tracking, and keeping cattle records, cattle trafficking, theft, and many more. The traditional methods of cattle identification, such as branding or tattooing, ear notching, and ear tagging are obsolete and labor-intensive. The current standard in Australia is to use RFID-based ear tags called NLIS tags. However, NLIS tags are vulnerable to attacks and can be duplicated, damaged, lost, and have difficulty in re-identifying and re-tagging once the tag is detached from the cattle. This research is about providing a solution to NLIS ear tags by the use of cattle muzzles using machine learning, and deep learning techniques. Cattle muzzles are unique like a human fingerprint. To sum up, this research is aimed to provide an effective cattle identification method by using cattle muzzle photos. This is like cattle facial recognition.

Genevieve d'Ament

School of Psychology

A holistic understanding of the co-created cellar door experience from staff and customer perspectives

The Australian wine industry contributes approximately \$45 billion annually to the economy and supports over 170,000 jobs in predominantly rural and regional areas. Wineries produce wine to sell with two sales streams available, wholesale or direct-to-customer through cellar doors which provide higher returns. Customer-based research has established enjoyable cellar door experiences are essential to building brand attachment, creating enduring customers, and increasing on-site and post-visit sales. However, research has not yet established what constitutes an enjoyable experience. The current project has used mixed methods, specifically wearable eye-tracking, in-depth interviews, memory work, and a cellar door survey to gain a holistic understanding of the cellar door experience from staff and customer perspectives. Results emerging from the data show the connection to the winery, staff, and brand, co-created during the cellar door experience to be essential. This discussion will present the findings, frameworks and recommendations developed for cellar door staff and management.

Neil van der Ploeg

School of Education

Student-centred choice architecture to reduce HELP debt

Attempting, failing and dropping out of University is costly for most students. Universities actively promote themselves to potential students, control admissions and deliver courses. Given these facts, they are at least partially responsible for their students' outcomes. The aim of the study was to design a student-centred system that could mitigate student failure while maintaining student opportunity and agency. Learning analytics were used to identify completely disengaged students across a large Australian university to all undergraduate course level students. A subsequent communication procedure was designed that required these students to reaffirm their desire to study. In the first semester of implementation 68 students were identified as completely disengaged. Of those, 17 students chose to continue and only a single student passed a subject. The remaining 16 students exercised their agency and failed all subjects. The student-centred system demonstrates that maintaining student agency can be in harmony with other ethical responsibilities.

Mitchell Cowan

School of Agricultural, Environmental and Veterinary Sciences

Rough terrain? Habitat selection and energetic costs for northern quolls living in a mining landscape

Mining modifies the landscape by removing natural habitats and introducing disturbed habitat. Animals can be attracted to mining landscapes due to the availability of resources, but in other cases, mining landscapes pose greater risks. Northern quolls (*Dasyurus hallucatus*) are an endangered mesopredator whose rocky denning habitat is threatened by mining in the Pilbara region of Western Australia, potentially forcing quolls to use unsuitable habitat. However, how northern quolls interact with mining landscapes is relatively unknown. We used GPS collars and accelerometers to monitor quolls in a mining landscape and assessed habitat selection and movement within different habitat types. While quolls used mining-disturbed areas in some cases, doing so came with high energetic costs compared to energy use in natural habitats, potentially lowering body condition and increasing predation risk when mining disturbance is prominent. This

highlights the importance of preserving natural habitats and understanding species interactions with human-disturbed landscapes.

Jessica Wyse

School of Agricultural, Environmental and Veterinary Sciences

Evaluation of the drying/hay making process on the content of phyto-oestrogens in lucerne hay

The concentrations of phyto-oestrogens in legume hays, a by-product of legume pastures, may potentially fluctuate during the drying process. Concerns about oestrogenic concentrations in hay have been predominantly raised by the dairy and equine industries, where feeding legume hay is a common practice. Coumestrol concentrations in lucerne hay have been reported as great as 201 ppm, resulting in hyper-oestrogenism in the cattle ingesting the hay. Concentrations of coumestrol, and other phyto-oestrogens have been observed to vary between fresh and dried 'hay-like' samples depending on the cultivar. Targeted analysis of key phyto-oestrogens in pasture were conducted using high-pressure liquid chromatography coupled with quadrupole – time of flight mass spectrometry (HPLC-QTOF-MS) [3]. Relative abundance of the isoflavones, daidzein, genistein, kaempferol, formononetin and biochanin A decreased after 48 hrs, whilst the relative abundance of coumestans; coumestrol, 4'methoxycoumestrol and 3'methoxycoumestrol continued to increase over the 48 hrs after being cut for hay.

Shiphrah Sande

Centre for Customs and Excise

Utilisation of Rules of Origin in Free Trade Agreements in the COMESA Trading Bloc

Governments enter into bilateral or regional Free Trade Agreements (FTAs) to eliminate or reduce tariff and non-tariff barriers to trade between or among themselves. FTAs provide benefits such as preferential duty rates for goods that originate in a contracting party. Each FTA contains special rules, known as Rules of Origin (ROO), which are critical components of all FTAs because they are used to determine if the goods are eligible for preferential treatment. Commentators indicate that some traders choose not to take advantage of the benefits provided by FTAs due to the complexity and burdensome compliance requirements of ROO. However, the question of whether a similar situation exists in relation to FTA utilisation in the COMESA trading bloc has not yet been examined, and this is what this research intends to do.

Ashley Brabon

School of Agricultural, Environmental and Veterinary Science

Comparison of interfragmentary compression across simulated condylar fractures repaired using two techniques

Introduction: Equine condylar fractures are commonly repaired using lag screws. Inadequate interfragmentary compression can lead to post-operative complications. Our objective was to compare compression achieved by two different lag screw Configurations, in simulated condylar fracture repairs. **Materials and Methods:** Lateral condylar fractures were simulated in 25 cadaver limbs (10 hind, 15 front). In each limb, pressure-sensitive film (Prescale®, Fuji Photo Film Co.) was placed in the fracture prior to repair with 4.5mm diameter lag screws. Screws were placed in a linear or triangular configuration and tightened to 4 Nm. Pressure prints obtained were scanned using dedicated software (Fuji FPD-8010E, Fuji Photo Film Co.). Areas which demonstrated pressure

application were compared descriptively and an ANOVA model was fitted, using software R .
Results: Forty-four repairs (13* linear front, 14* triangular front, 7* linear hind, 10* triangular hind) performed on 21 (13 front, 8 hind) limbs were included in the analyses. Mean (\pm s.d.) area experiencing pressure >2.5 MPa was $517 \text{ mm}^2 \pm 152$ and $573 \text{ mm}^2 \pm 156$ for linear and triangular repairs, respectively. This difference was not statistically significant. Mean (\pm s.d.) contact area experiencing pressure >10 MPa was greater for triangular repairs ($164 \text{ mm}^2 \pm 67$) than linear repairs ($110 \text{ mm}^2 \pm 45$) $p = 0.003$ Conclusions: Interfragmentary contact area produced by the triangular construct was, greater than for the linear construct, at pressures greater than 10 MPa.

Themed Session 4: Research Practice

Patience Moyo

School of Nursing, Paramedicine and Healthcare Sciences

Exploring the experiences and perceptions of the utilisation of structured clinical handover frameworks by nurses working in acute care settings: A Scoping Review

Objective/Aim: Inconsistencies in utilising the structured clinical-handover-frameworks exist despite evidence that these tools improve communication for safe-high-quality-patient-centred care. This scoping review aims to explore the current-existing-practices and identify knowledge-gaps in relation to this topic area. Methods: The Joanna-Briggs-Institute-guideline for scoping reviews guided this study. Studies included were limited to those meeting the predetermined Population-Concept-Context-framework, English, from year 2000 - 2022 and peer-reviewed-primary-research. 5-databases were searched; 425-studies were imported into COVIDENCE™ for screening; 197-duplicates removed. 228-studies remained and were screened against the inclusion/exclusion criteria resulting in 24-studies meeting the eligibility-criteria. 24-studies were evaluated for relevance and quality of research using the QualSyst-tool. All authors independently undertook all screening-processes. Results: The review provides evidence that implementing the structured-clinical-handover-frameworks improves handover-processes, increases patient-safety, and yet practice gaps still exist. Impact statement: Further research is needed to establish why inconsistencies in utilising structured-clinical-handover-frameworks exist; determine strategies to reduce the inconsistencies for improved handover-practices, safety-and-patient-health-outcomes.

Nicole Sim

School of Psychology

Research Ethics: Beyond a Singular Code

In research, two paradigms of ethics exist: research ethics and professional ethics. My interdisciplinary research spans across the fields of Psychology and Journalism, which implores this question: how do I balance ethics in research alongside ethics in journalism and psychology? Despite multiple ethical codes that are industry-specific, they share core ethical principles. My research incorporates the NHMRC, MEAA and APA codes of ethics. By doing so, appropriate steps can be taken to ensure ethical practices pre-, during and post-interviews that honour both the safety and security of participants, as well as that of the researchers, are adhered to. These practices, which include secured communication methods, anonymity, and ethical incentives, guide researchers in filtering out unethical data from respectful data. Although ethical considerations may be arduous to accommodate in inter-, multi-, and cross-disciplinary research, these pre-emptive steps set solid ground for a positive research experience for participants.

Maslathif Purnomo

School of Education

Multimodal stance-taking in the genre of presidential address: A case of seventh Indonesian president, Joko Widodo

This study explores the Presidential Address (PA) as a genre of political discourse delivered by a sitting president. The PA serves multiple purposes, including conveying the president's vision and mission, instilling ideology, claiming leadership, and providing direction and inspiration to the public. The study investigates the interplay of multimodal and stance in forming the PA, filling a gap in previous research that focused separately on multimodal and stance aspects. Employing a multimodal stance analytical framework, the study analyzes Joko Widodo's Presidential Addresses from 2014 to 2019, revealing three essential findings. First, posture mode is a prominent mode used by Jokowi to represent stance. Second, the stance related to education dominates the content conveyed by Jokowi. Third, the use of multimodal has driven Jokowi to produce an effective dominant stance in his PA presentation. The study has significant implications for the methodological and theoretical development of research on the PA and can improve language and political communication while serving as a source for teaching language and communication.

Raj Acharjee

School of Business

Integrated Five Key Communication Issues in Project management

This proposal outlines a literature review to identify and critically evaluate factors causing communication issues. The literature suggests that there are five key components of communication issues: Ineffective leadership, lack of cultural awareness, poor knowledge management (KM), limited stakeholder management, and isolated functional processes. These issues impede communication and information flow which impacts accuracy of project metrics (Safapour, et al., 2020). It appears that these five components of communication issues are interconnected and that all need to be addressed together to make project communication effective. Integrated communication issues, when addressed, will ensure effective information and data inflow for informed decision making. The current research project will fill this gap. It justifies the application of qualitative techniques to collect data and describes the process of data analysis to seek research solutions. It outlines the research contribution in terms of its practical application and theoretical contribution useful to project professionals.

Anne Johnson

School of Agricultural, Environmental and Veterinary Sciences

Using interviews to understand agroecological practice in the Australian viticultural context

In the summer of 2021-2022, interviews with 33 winegrape growers from 8 NSW wine-growing regions explored the topic of incorporating biodiversity into agricultural practice. This qualitative study was linked with a biodiversity landscape survey which provided logistical economies of scale. Working as a team made driving distances, sampling, and recruitment easier for both studies. Ethical best practice was used as part of the process of building respect and trust when recruiting and interacting with farmers, especially in the adherence to biosecurity and sanitation practices between farm visits. The interview was conducted as a triadic interaction between the interviewer, the vineyard, and the grower who managed the vineyard. Interviews were mostly conducted outdoors

as a precaution for COVID, which meant participants could point out features of the vineyard. This often allowed their passion for the subject to show, particularly around their environmental improvements.

E-posters Competition

Diane Cass

School of Social Work and Arts

Imposter Syndrome: Can we do more?

Imposter syndrome can affect outcomes, personal goals and negatively impact all aspects of a student's life. Imposter Syndrome was identified in the 1970s as stemming essentially from females being considered by society as incompetent'. Research has focused on multimodal therapy (including group work) to support the person with Imposter Syndrome. While we can support a person who has Imposter Syndrome, getting to the source of the initial problem could reduce the resulting incidences substantially. This is a problem because the cycle of male privilege and issues emanating from the dominant discourses are continuing. This is important because in order to reduce the incidence of this condition, we need to continue to work on equality, reducing male violence and redefining dominant discourses prevalent today.

Claire Shannon

School of Education

Preferred teacher presence strategies of female online postgraduate students at an Australian regional university

Teacher presence is important in the online learning environment, as the learning space lacks the inherent physical presence that a teacher in a physical classroom provides. Without teacher presence, students can feel isolated, unsupported, and dissatisfied, leading to higher student attrition (Stone & Springer, 2019). As a result, teachers need to use teacher presence strategies to effectively support students in the online learning environment. This study interviewed female postgraduate students studying online at an Australian regional university to provide in-depth descriptions and justifications of preferred teacher presence strategies. Most students preferred a synchronous teacher presence strategy that mirrored real-time connection and support students received from a physical university campus, meeting students' needs through aspects of the Community of Inquiry model with less transactional distance than asynchronous teacher presence strategies (Garrison et al., 1999; Moore, 1993). This study recommends using regular real-time synchronous teacher presence strategies to effectively support online students.

Jorge Ramos

School of Agricultural, Environmental and Veterinary Sciences

Temperature Buffering Capacity of Shade Trees in Coffee Agroforestry Systems of Timor-Leste: An Assessment of Biophysical and Household Drivers.

Increasing temperatures are reducing the land suitable for coffee farming worldwide. Coffee plants are highly sensitive to climatic variations. By 2050, Timor-Leste's (TL) daily average temperatures could increase by 1.4 °C. Coffee, TL's main agricultural export, is 100% produced under the shade of trees in agroforestry systems (CAS), however, excessive tree shade is perceived by TL's coffee sector as a cause for low coffee production. Many farmers are reducing the canopy of CAS, others are

maintaining the canopy management status quo. Changes to canopy cover will likely impact the microclimate conditions of CAS. This research aims to: A) Assess the perceptions that drive farmers to manage the canopy of shade trees in their CAS. The protection motivation theory is used to analyse household and environmental factors that influence adaptation behaviour of farmers. B) Assess how canopy proportions affect temperatures inside CAS. A microclimate model reliant on energy flux principles is used to analyse the biophysical characteristics of CAS for TL, providing microclimatic estimations resulting from different canopy management scenarios.

Nicole Sim

School of Psychology

Research Ethics: Beyond a Singular Code

In research, two paradigms of ethics exist – research ethics and professional ethics. My interdisciplinary research spans across the fields of Psychology and Journalism, which implores this question: how do I balance ethics in research alongside ethics in journalism and psychology? Despite multiple ethical codes that are industry-specific, they share core ethical principles. My research incorporates the NHMRC, MEAA and APA codes of ethics. By doing so, appropriate steps can be taken to ensure ethical practices pre-, during and post-interviews that honour both the safety and security of participants, as well as that of the researchers, are adhered to. These practices, which include secured communication methods, anonymity, and ethical incentives, guide researchers in filtering out unethical data from respectful data. Although ethical considerations may be arduous to accommodate in inter-, multi-, and cross-disciplinary research, these pre-emptive steps set solid ground for a positive research experience for participants.

Teresa Cochrane

School of Indigenous Australian Studies

Koala Dreaming: An exploration of Indigenous methodologies in ecology conservation.

Higher Degrees of Research particularly in science have a very structured framework on how they can be completed, and this is reflective of Western approaches. The 'traditional' Western method is usually seen as completing a thesis or dissertation, but other methods can be used to explore and communicate research findings. My PhD will challenge this Western approach by using Indigenous methodologies and science as the foundation for understanding and researching the ecology of Koalas and Eucalyptus. It will be completed in exegesis style in the form of an Art Gallery to show how both Indigenous and Western science and methodologies can complement each other. Another reason to complete the work through an Art Gallery installation is to allow broader audiences of varied learning styles and education levels the ability to access research findings. My research will draw on past and current Indigenous methodologies and the cultural knowledge of both Aboriginal and Torres Strait Islander people, but also the knowledge of Indigenous communities internationally.