

Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People, and their Elders past, present and emerging, who are the Traditional Custodians of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east. We are honoured to recognise our connection to Wurundjeri Country, history, culture and spirituality through these locations, and strive to ensure that we operate in a manner that respects the Elders and Ancestors of these lands.

Swinburne also acknowledges the Traditional Custodians of lands across Australia where we conduct business, their Elders, Ancestors, cultures and heritage.

Welcome Message

This is the fifth of the Faculty's annual postgraduate student conferences, and the third that has involved research students from all of FHAD's three schools—Arts, Social Sciences and Humanities, Design and Health Sciences. This is the second year in which we welcome the participation of our integrated PhD students, who are currently piloting projects for their subsequent PhD research. This expansion of our participating groups has resulted in the largest of our conferences to date, with a total of around 70 papers to be presented on the day.

The theme of the conference—Building Bridges: Connectivity Across Disciplines— has been carefully chosen. Nowadays, it is well understood, in both academic and professional contexts, that some of the more exciting research developments are those that happen in multidisciplinary settings. While many conferences that our PhD students attend during their candidature are necessarily focused on their particular disciplinary specialisation, our FHAD conference provides a unique opportunity for students to "bridge" these disciplinary divides and to share work with others engaged in quite separate fields.

Related to this is the important skill of effectively communicating the often technical details of one's research to non-specialist audiences. In the training program we have developed to prepare students for the conference, a major focus has been on how the key research genres of abstracts and presentations can be crafted for these broader domains.

Another training component of the event has been the work done by the student members of our organising committee. As in previous years, the contribution of this group has been exceptional, with all contributing their expertise to a wide range of activities: reviewing abstracts, conference programming, graphic design, publicity and social media and events management.

Our conference event does not end with the day's proceedings. For all presenters, there is the opportunity to go on and develop your presentation into a full research article for submission to a peer-reviewed journal and also to the Faculty's Publish and Flourish publication award. We encourage all participants to consider crossing this 'bridge' in the development of your research career. More will be said about this during the day.

Have a great conference!

The 2019 Organising Committee



Keynote Address
Consider every Threat and Opportunity
Dr Helen Almond
Lecturer in Digital Health,
Swinburne University of Technology

Helen Almond reveals her journey as an emerging scholar, discussing the threats and opportunities offered over her time as an HDR candidate and her first year as an early career researcher. The keynote reflects on Helen's experience of and engagement with digital health as a participatory researcher and her efforts to build collaborations with communities and colleagues locally, nationally and internationally.

Building Bridges: Faculty of Health, Arts and Design Postgraduate Conference

Wednesday 6 November: 8.30 am – 6.30 pm Swinburne, Hawthorn Campus, AGSE Building



8.30-9.15am	Registration AGSE Level 1 Foyer			
	Opening Session AGSE 202 Lecture Theatre			
9.15-9.20am	Acknowledgement of Country			
9.20-9.30am	Welcome address and housekeeping			
9.30-10.20 am	Keynote Address Dr Helen Almond, Lecturer in Digital Health, Swinburne			
	University of Technology - Consider every Threat and Opportunity			
10.20-10.40 am	Publish and Flourish Awards presented by Professor Lisa Given,			
	Associate Dean of Research and Development, FHAD			
10.40 – 11.00 am	Morning Tea			
11.05-12.30 pm	Session One: SEE PAGE 6 FOR DETAILS			
	AGSE 202 Mental health			
	AGSE 104 Feminist Perspective			
	AGSE 107 Design in Society			
	AGSE 108 International Healthcare			
	AGSE 109 It's all about Heart			
	AGSE 110 Creative Ethnographies			
12.30-1.15 pm	Lunch			
1.15-2.35pm	Session Two: SEE PAGE 7 FOR DETAILS			
•	AGSE 202 Aspects of Film			
	AGSE 104 Teaching, Learning and Research Across Ages			
	AGSE 107 Applied Media			
	AGSE 108 Design Impacts			
	AGSE 109 Visualising Health			
	AGSE 110 Family Violence, Crime and Trauma			
2.45-4.15pm	Session Three: SEE PAGE 8 FOR DETAILS			
	AGSE 202 VR and Digital Media			
	AGSE 104 Design Practice			
	AGSE 107 Ecology and Manufacturing			
	AGSE 108 Neuroscience and Physiology			
	AGSE 109 Accessing health care across culture and technology			
	AGSE 110 Health and Ageing			
4.30–6.30 pm	Drinks in AGSE Level 1 foyer			

Session One 11.05 – 12.30 pm

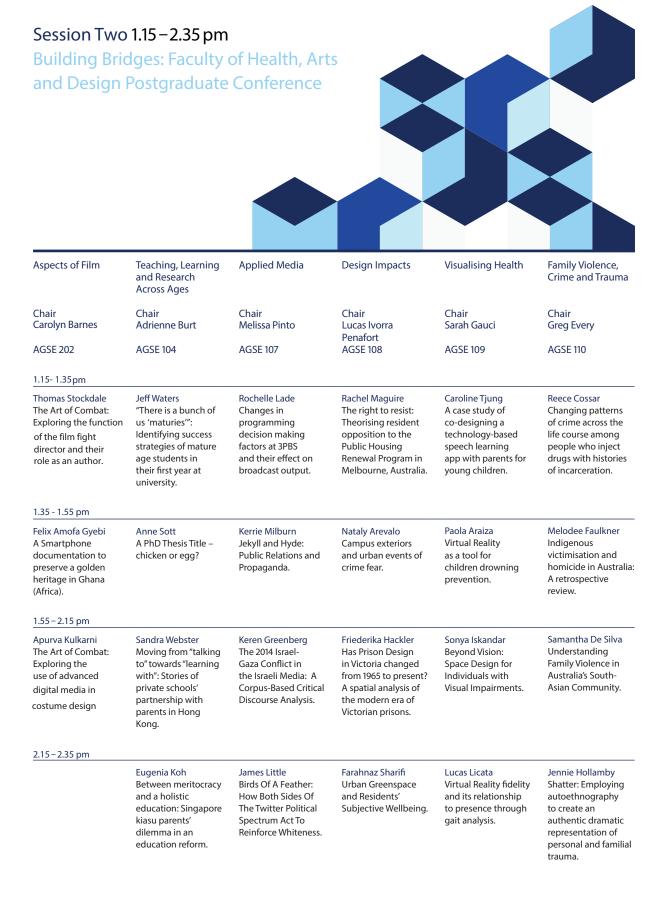
Building Bridges: Faculty of Health, Arts and Design Postgraduate Conference



Mental Health across Trauma, Schizophrenia and Eating Disorders	Feminist Perspective	Design in Society Across Asia and the World	International Healthcare	It's all about Heart: From Exercise to Social Anxiety	Creative Ethnographies: Shared and Personal Universes
Chair Jessica Grahame	Chair Gerry McLoughlin	Chair Chris Koch	Chair Keren Greenberg	Chair Natalie Thorne	Chair Anne Scott
AGSE 202	AGSE 104	AGSE 107	AGSE 108	AGSE 109	AGSE 110
11.05 -11:25 am					
Kathleen de Boer Assessing the Trauma Recovery Program: Phase One Results.	Adrienne Byrt Exploring the support needs of mothers of preterm infants through feminist co-design sociology.	Liyao Chen Exhibition Design in Contemporary China: Balancing local, regional and national identity and the impacts of globalization.	Amanda Braga Lima Sousa Primary health care in rural and remote territories: An analysis of the similarities and differences between Australia and the Brazilian Amazon.	Stephen Keenan The effect of 12 weeks of intermittent fasting and resistance exercise on lean body mass.	Vincent Tran Exploring Early Shared Universes: Construction, Continuity and Consistency in Asimov's Foundation.
11.25-11.45 am					
Inge Gnatt Eating disorders and trauma: An exploration of the role of compassion in recovery.	Ashlea Gleeson Examining gender in the Australian communication design industry.	Fanny Suhendra The role of graphic design in Indonesia's Revolusi Mental campaign.	Tania Ciotti Professional and personal terra incognita: Exploring unrecognised complexity and unaddressed tensions in Bi- Lingual / Bi-Cultural Australian social work practice.	Clara Zwack Exploring The Cardio-Metabolic Health Profile of Young Adults With Intellectual Disability.	Dewi Widyastuti Identity Expressions In EFL Creative Writing In Indonesia.
11.45 - 12.05 pm					
Stephanie Miles Cognitive rigidity, rumination and perfectionism in females with a past or current diagnosis of anorexia nervosa.	Sarah Callahan Banning Batman: Tracing the seriality of debates surrounding gender, sexuality and children.	Olamide Shittu Emerging sustainability concerns and policy implications of urban household consumption.	Mohammed Nazim Uddin Further validation of psychometric evaluation of the modified seven-item Kessler Psychological Distress Scale (K7).	MC Chong Investigating the role of extracellular vesicles in exercise and health.	Greg Every Workshopping models: An autoethnographic perspective of two Melbourne communities of practice.

12.05 - 12.25pm

James Karantonis Validation of crossdiagnostic cognitive subgroups on the schizophreniabipolar spectrum. Robertus Guntur Progress in coverage of bed net ownership and use in Indonesia 2000 –2011: evidence from population-based surveys. Shradha Vasan Investigating the cardiovascular and metabolic profiles of young adults with loneliness and social anxiety.



Session Three 2.45 – 4.15 pm

Building Bridges: Faculty of Health, Arts and Design Postgraduate Conference



interdisciplinary collaboration.

VR and Digital Media	Design Practice	Ecology and Manufacturing	Neuroscience and Physiology	Accessing Health Care across culture and technology	Health and Ageing
Chair Thomas Stockdale	Chair Sonya Iskander	Chair Olamide Shittu	Chair Clara Zwack	Chair Jeffrey Waters	Chair Lauren Young
AGSE 202	AGSE 104	AGSE 107	AGSE 108	AGSE 109	AGSE 110
2.45 - 3.05 pm					
Andrea Andiloro Playing with War: Videogame ideologies.	Vimalkrishnan Rangarajan The Role of Emotion in Conceptual Graphic Design: A Study of Design Students.	Boom Xain Chai Optimizing Gate Location in Liquid Composite Moulding (LCM) Processes.	Zoltan Vilagosh Practical Computer Models for the Study of the Interaction of Terahertz Frequencies with Human Skin.	Shenae Calleja Healthcare access for autistic adults in Melbourne (Australia) - where are we now?	Madeleine Nankivell "CoQ10 and Cognition a Review and Study Protocol for a 90- Day Randomized Controlled Trial Investigating the Cognitive Effects of Ubiquinol in the Healthy Elderly.
3.05 - 3.25 pm					
Adele Conte Snapchat and Instagram 'story' features: The spatial implications of "being there" ephemerally.	Chrisoph Koch The future of industrial design and its role in Industry 4.0.	Lucas Ivorra Penafort Building trust relationships between small organisations: An instrumental case study in Colombia and the role of complexity.	Katie Wykes The effects of visual imagery vividness on perceptual rivalry.	Zhi Qing Zhang Understanding the barriers and motivators for older adults in engaging with local government e-services.	Lauren Young Diet and Brain Function: Relationships between Diet Quality, Cognitive Function and Mood into Older Age.
3.25 - 3.45 pm					
Jessica Guy How real and virtual toys and games affect children's play and parent-child interactions.	Linus Tan Reconsidering design reflections as an act of tacit knowledge production.	Melissa Pineda Mapping ecological injustice hotspots in cities.	Natalie Thorne Investigating therapeutic pathways targeting autism spectrum disorders using nanoparticles.	Giannis Misiakos Co-designing a Sexual and Reproductive Health Educational App with Adolescents with Cancer.	Sarah Gauci The relationship between diet, glucose control and cognitive performance in Age Associated Memory Impairment.
3.45 - 4.05 pm					
Chris Vik Musical instrument design for virtual reality.	David Mesa Technology roadmapping as a decision-making tool for assisting scientific research commercialisation.	Udani Wijewardhana A statistical model for the persistence of threatened birds developed using citizen science data: Systematic Review.	Caitlin Yolland Antioxidants, Cognition and Schizophrenia.	Muhammad Qureshi Why is Pakistan lagging in the promotion of HIV/ AIDS education among its population?	Hana Phillips Exploring the relationship between Healthcare and Design: A review of current barriers to effective interdisciplinary

List of presenters and email addresses

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Publish and Flourish

One of the aims of the Building Bridges conference is to encourage student participants to work their presentations into full publishable articles or book chapters. To this end, we would like to announce our Publish and Flourish award.

There will be four prizes awarded. The prize for the winning author will be a gift voucher to the value of \$1,000. Three runners up will each receive prizes to the value of \$500.

Note: Applications to the award are restricted to presenters at the Building Bridges conference.

Guidelines

- Presenters at the conference may submit one article or book chapter to the competition.
- The article should be based broadly on the content of your conference presentation.
- For your article or book chapter to be eligible, it must be submitted to a reputable refereed outlet. Swinburne Research Analytics provides a list of ranked journals. You can filter the results by field of research (FOR) codes and by quintiles. You are encouraged to target journals in quintiles 1 and 2. Evidence of this submission will need to be provided in the form of an emailed acknowledgement of receipt from the journal or book editor.
- The article should be submitted to the relevant journal (or book editor) sometime between the date of the conference (06 Nov 2019) and 31 May 2020.
- The deadline for submissions to Publish and Flourish is 31 May 2020.

· Submit your work to HDRConf@swin.edu.au.

Judging the award

Articles will be assessed by the 2020 Organising Committee, according to the following criteria:

- . Quality of the research
- · Grounding in relevant theory/scholarship
- · Quality of the writing
- · Evidence of submission of article to journal/edited book

The prizes will be awarded by end of July 2020 and the winners will receive formal recognition of their achievement at next year's FHAD HDR Student Conference.

Research writing assistance

To assist students with the planning and preparation of their work for publication, a training session, From Presentation to Publication, will be run by Tim Moore and Deb Dempsey on Thursday 21 November 2019, 2.30-4.00 ATC 816, Hawthorn Campus.

As part of the Faculty's HDR Communication and Writing Support Program, students can also receive individual editorial advice from Tim Moore. Sessions will be limited to one hour per applicant to the award.

Contact tjmoore@swin.edu.au

Publish and Flourish

Winners and runners-up 2019

The Organising Committee is very pleased to announce the following winners and runners up in this year's competition. These winners presented papers at last year's Building Bridges conference and have since submitted their papers to peer-reviewed journals.

Winner:

Jacqueline Pengelly Resistance training following median sternotomy: A systematic review and meta-analysis

Runners up (alphabetical order):

Linus Tan

Managing codified knowledge in creative firms, the case of architecture practice

Mohammed Nazim Uddin

Psychometric evaluation of an interview administered version of the WHOQOL-BREF questionnaire for use in a cross-sectional study of a rural district in Bangladesh: an application of Rasch analysis

Zoltan Vilagosh

Computational Phantom Study of Frozen Melanoma Imaging at 0.45 Terahertz

Special mention (alphabetical order):

Georgina Buckley

Retired athletes and the intersection of food and body: a systematic literature review exploring compensatory behaviours and body change

Nikolaj Travica

Plasma Vitamin C Concentrations and Cognitive Function: A Cross-Sectional Study

The winner receives \$1,000 and the runners up \$500.

Building Bridges

Organising committee

Expression of interestOrganising Committee for 2020 Conference

Building Bridges Staff/HDR Student Committee members: Kathleen De Boer, Greg Every, Jennie Hollamby, Christoph Koch, Apurva Kulkarni, Stephanie Miles, Melissa Pineda Pinto, Mattia Vettorello, Lauren Young, Carolyn Barnes, Carolyn Beasley, Karen-Leigh Edwards, Flavia Marcello and Tim Moore.

The organising committee would like to thank the following people for their support of the conference:

- Professor Robbie Robertson and Professor Mia Lindgren, Dean, School of Arts, Social Sciences and Humanities
- Professor Janet Hiller and Professor Bruce Thompson, Dean, School of Health Sciences
- Professor Jane Burry, Dean, School of Design
- Professor Lisa Given, Associate Dean, Research and Development, Faculty of Health, Arts and Design
- Professor Scott Thompson-Whiteside, Pro-Vice Chancellor, Faculty of Health, Arts and Design

We also thank Fresh Fork Sustainable Organic Catering for the excellent refreshments and coffee! Are you interested in being part of the Organising Committee for the 2020 FHAD HDR Student Conference?

We are looking to appoint an interdisciplinary team of four to nine postgraduate students from across the School of Arts, Social Sciences and Humanities, School of Health Sciences and the School of Design. The students will work with academic staff to:

- develop the conference theme and program
- organise the event
- provide support to each other and fellow students with abstract writing, presentation and post-conference publication development:

Expressions of Interest by 30 November 2019 to: HDRConf@swin.edu.au



Amofa Gyebi, Felix

A Smartphone documentation to preserve a golden heritage in Ghana (Africa)

The mobile phone has been one of the most disruptive technologies to penetrate Africa in recent times. The populace in Africa who hitherto had limited to or no access to advanced technological tools with the evolution of technology are now exposed to screen production through smartphones, including apps for filming and editing. These are used for the production of a range of genres: films, documentary, web videos, music videos, animations, comedy skits, mobile Apps and photos. To date however, there has been little documentation of smartphone video applications for documentary filmmaking. This PhD research is practice-led with participatory video as its framework. The study aims to capture how smartphone documentary storytelling is being used to preserve bead culture among the Krobo of Ghana. Four documentary films which include Baby Ghana (1957) by Jean Rouch and My Stolen Childhood (2018) guide the production of the artefact for this study. This study will provide the Krobo youth and other local communities with opportunities, often for the first time since colonization on the continent of Africa, to articulate and display their worldviews when and how they choose.

Felix Amofa Gyebi (B.A., Dip., MPhil.) is a versatile artist and a teacher with vested interest in the use of mixed media to produce artefacts. He is currently a PhD candidate at Swinburne University. He is passionate about Emerging Media and Smartphone Filmmaking for the advancement of community engagement through storytelling.

Andiloro, Andrea

Playing with War: Videogame ideologies

War is arguably one of the most common themes in videogames, regardless of whether its depiction is realistic or fantastic. Given the genealogy of the medium itself as a direct spawn of the military-industrial complex, one cannot help but wonder whether there is some deeper link between war and videogames. War-themed videogames, as is the case with other media, are dense with ideological content. War themed video games have a sizeable player base, and this study aims to uncover how ideologies are represented in those games, and to understand how players experience and make sense of the act of playing them. To address this problem, this dissertation will be composed of two parts: a) an ideological analysis will be conducted to uncover the ideologies that dominate in the games; b) a phenomenological analysis of the experience of players will be conducted to understand what sense they make of the games.

Andrea Andiloro is a Ph.D. candidate in the Centre for Transformative Media Technologies at Swinburne University. He holds a BA in Political, Social, and International Sciences, from the University of Bologna (Italy), and a MA in Digital Media and Society, from Uppsala University (Sweden). He is currently supervised by Prof. Angela Ndalianis and Dr. Steven Conway.

Araiza-Alba, Paola

Virtual Reality as a tool for child drowning prevention

The World Health Organisation has recognised swimming and water safety education as a priority to prevent drowning. Immersive Virtual Reality (VR) is a possible innovative solution to engage the community in water-safety education. VR provides an ability to visualise objects and scenes that would otherwise be difficult or hazardous to experience in real life. The research project investigates the effectiveness and engagement of VR as a tool for children's water-safety learning. Children (n=182) aged 10 to 12 years were randomly assigned to one of three instructional learning mediums - VR, Video or Poster. Overall 109 (94.7%) participants increased their learning scores after participating in the water safety workshop and retained their knowledge during the subsequent tests at one and eight weeks. There was no difference in the level of water-safety knowledge obtained across the three mediums, however, participants in the VR workshop reported higher levels of interest and enjoyment than participants using the other two mediums. Feedback from the children's teachers found that they thought VR was a useful, engaging and effective method of learning. Furthermore, VR showed its effectiveness as a selfdirected learning tool, allowing participants to visualise objects and scenes that would otherwise be difficult or hazardous to experience, making the content easier to understand and learn without the help of an expert to deliver the learning content.

Paola Araiza is a PhD student at Swinburne University doing research in developmental psychology at Swinburne Babylab. Her research project involves the use of Virtual Reality Technology with children. Her research interests include clinical psychology, children cognitive and emotional development and technology.

Arevalo, Nataly

Campus exteriors and urban events of crime fear

University campuses in the twenty-first century are required to deliver high-quality education, formal and informal study spaces, adequate infrastructure and a safe overall experience. However, in developed countries, campuses still show high levels of crime and disorder, necessitating diverse strategies (e.g. anti-violence programs, patrolling) to prevent incidents. Alongside the actual effects of crime, another safety-related problem occurring during the student's journeys on campus exteriors is crime fear. In the literature, events of crime fear are defined as a psychophysiological construct involving personal, social, and environmental factors generated or associated with crime occurring in a particular time and urban space. Little research has thoroughly examined the design factors influencing urban events of crime fear in campus exterior space. Therefore, this conference paper has two aims: 1) present current gaps of a mixed-method literature review of Crime Prevention Through Environmental Design (CPTED); 2) provide research avenues to fulfill current literature voids on urban events of crime fear on campus exteriors. The paper concludes by calling for the development of a research agenda in campuses from a design perspective to enhance the overall student's safety experience, raising awareness of potential urban events of crime fear events on campus exteriors, and

showing the implications of crime fear for higher education institutions.

Nataly Avarelo is an urban designer experienced in environmental and social interactions. She proposes strategies to build healthier, safer, and equitable precincts targeting sustainable development goals. Nataly's PhD research focuses on Crime Prevention Through Environmental Design (CPTED) policy and practice.

Byrt, Adrienne

Exploring the support needs of mothers of preterm infants through feminist co-design sociology.

It is widely known that the transition to parenthood can be a challenging time for women as they come to terms with their newfound mothering roles. For mothers of moderate- or latepreterm infants, this sudden introduction to parenthood can make this tumultuous transition more challenging. Feminist sociological research methods can capture the lived experience of new mothers while questioning the broader social forces that influence the day-to-day lives of women. Co-design methods provoke insight and inspiration while engaging multiple stakeholders throughout a design process to ensure future solutions meet the needs and wants of those who intend to use a product or service. This paper outlines an innovative methodological approach, feminist co-design sociology that was used to explore women's perceptions of social support after the birth of a moderate- or late-preterm infant. Integrating codesign and sociological research methods created unexpected rapport and openness between the researcher and participant as participants self-documented their experiences using a probes kit, and during subsequent interviews. Furthermore, this approach provided rich data from a small sample of hard to reach mothers. As a novel and robust framework, feminist codesign sociology could be worthwhile when exploring the lives of other groups of hard to reach parents.

Adrienne Byrt is a Master by Research candidate at Swinburne University of Technology. Adrienne's interdisciplinary research in sociology and co-design intends to highlight the social pressures women face during the transition to parenthood, while also eliciting prospective design solutions for improved support services.

Callahan, Sarah

Banning Batman: Tracing the seriality of debates surrounding gender, sexuality and children

Addressing gender and sexuality inequality in education is being increasingly recognised. However, inclusion of such programs in the early years remains controversial, and often produces strong political and sociocultural debate and opinion. This was evident last year when recently designated PM Scott Morrison commented on inaccurate reporting which claimed that teachers were being taught how to identify transgender children, stating 'we don't need gender whisperers in our schools, let kids be kids' (Morrison 2018). Historically, debates around gender, sexuality and young children persist and are repeated when normative standards are challenged. Little

research attention, however, has been paid to how these debates tend to operate in a serial way. Taking a unique approach to recurring phenomena, this research analyses processes of seriality – repetition with variation – in an attempt to trace discourses that uphold normative standards of gender and sexuality in the lives of young children and those who challenge them. This presentation will focus on one of the study's case studies which maps the cultural dialogue that persists and repeats upon the action of banning particular behaviours and objects; from books, cartwheels, superhero play to hugging. Using data collected from archival research and secondary sources, this research will discuss what shapes discussions on gender, sexuality and children and why some narratives are successfully reproduced, as well as how they differ.

Sarah Callahan is a PhD candidate, researching gender, sexuality and early childhood. Her research uses seriality as a framework for analysis to demonstrate how ongoing sociocultural debates uphold the dominant discourses of developmentalism and childhood innocence.

Calleja, Shenae

Healthcare access for autistic adults in Melbourne (Australia) - where are we now?

Autistic people are frequently reported to experience higher levels of morbidity and mortality than the general population. A substantial number of autistic adults are transitioning from paediatric to adult services, yet, research has concentrated on young children. Autistic adults struggle to have their health needs met and this project identifies the reasons for this disparity in relation to healthcare access. This mixed methods research explored the lived experiences from autistic adults and their primary caregivers. Qualitative methods were used to explore perception and feelings of participants and standardised measures screened for health concerns. Navigating the National Disability Insurance Scheme [NDIS] has been highlighted as both a barrier and enabler for autistic adults. This is an important finding during the time of the roll-out process in Australia and access to services. The complexity of health, support from carers and health professionals, life events and the delivery of healthcare, directly related to the barriers of healthcare access. Discussion: Future interventions in Australia should focus on healthcare access and the NDIS. Communication, the physical environment, and personal support to improve quality of life are vital to consider. The findings highlight the need for longitudinal studies to evaluate the quality and sustainability of future interventions to improve healthcare access for autistic adults.

Shenae Calleja is a PhD candidate at Swinburne University of Technology. With previous work and collaboration with a Victorian hospital, the need for further support for autistic adults was identified through incident reports. Her research interests and primary focus is on the barriers and enablers of healthcare access for this particular cohort.

Chai, Boon Xian

Optimizing Gate Location in Liquid Composite Moulding (LCM) Processes

Fibre Reinforced Plastics (FRPs) are engineering fibres (typically carbon, glass or aramid) encased within a matrix of plastics (thermosets or thermoplastics). These materials boast high tensile strength while being lightweight. This attractive material property is desired by the automotive industry, as higher specific strength (strength over density) equates to lighter vehicles, which will result in the increase of the vehicle's fuel efficiency and decrease in its carbon footprint. However, the manufacturing process of FRPs is time consuming, resulting in high production costs due to high overhead/running costs and low productivity. Thus, optimization of FRPs' manufacturing process is crucial to increase part production rate. As high machine cost prohibits trial-and-error experimental testing, computer simulation approaches and software are favoured to avoid the hefty cost of experimental setups. Nevertheless, without prior knowledge or process experience, optimization of FRP's manufacturing process is a challenging task, even with the aid of simulation software. Composite researchers around the globe have utilized numerous approaches to optimize the process, such as Genetic Algorithm (GA), Exhaustive Search (ES), Geometry Manipulation Approach or a combination of mentioned approaches. The capabilities, assumptions made and restrictions of each approach will be reviewed and discussed in this conference paper.

Boon Xian Chai is currently a first year PhD student, with his research efforts focusing on simulation and optimization of manufacturing process of Fibre Reinforced Plastics (FRPs). This is an interdisciplinary research work that revolves around Optimization Algorithms (Mathematics), Manufacturing Process Design (Engineering) and Material Science (Chemistry).

Chen, Liyao

Exhibition Design in Contemporary China: Balancing local, regional and national identity and the impacts of globalization

Globalization has left a strong mark on China's culture, economy and society, including in relation to exhibition design practice. Globalization has raised the importance of contemporary art, seeing both display practices and museum architecture diverging dramatically from the character of traditional Chinese art museums. Recently, however, Chinese exhibition designers have begun to reject the traditional presentation approaches that dominate the international art system. Drawing on historical research, Chinese designers have sought to re-establish the culturally distinctive characteristics of Chinese exhibition design as an expression of Chinese national culture. My paper extends this approach to consider local and regional traditions in the exhibition of Chinese material culture, recognising important variation in display practices from one place to another. The paper approaches exhibition design as a platform for communicating meanings and values to Chinese audiences drawn from Chinese folk culture, Feng Shui theory and the philosophical concept of Yin-yang. In discussing museum case studies, supported by analysis of visitor studies data and qualitative interviews with exhibition design professionals, the paper examines how museum display design is implemented in contemporary China and how traditional Chinese ideas and characteristics are reflected or suppressed, either intentionally or not, in its practice.

Liyao Chen worked as a lecturer in interior design and landscape design in China for twelve years before starting her PhD. Her design works have won many Chinese national and provincial awards.

Chong, MC

Investigating the role of extracellular vesicles in exercise and health

It is well established that habitual physical exercise confers metabolic and cardiovascular benefits that can reduce the risk of metabolic and other chronic diseases, resulting in a reduction in all-cause mortality. As such, the derived benefits of exercise have been suggested to be multisystemic. Although the protective effects of exercise are well established, there is limited understanding of the underlying systemic level changes occurring in the body cells. Recent work has suggested that the release of extracellular vesicles (EVs) during exercise promotes the crosstalk between organs and may be responsible in mediating the multisystemic adaptations of exercise. However, the specific role of EVs within the context of exercise and health is still underexplored. This study aims to examine the role of EVs released during exercise in health. Specifically, two questions are raised. First, does the release of EVs during exercise represent an important mechanism for inter-organ crosstalk of the body? Second, are there any specific proteins released via this mechanism that mediate the adaptions of exercise? This study will provide information regarding the specific role of EVs during exercise and describe the factors released in EVs that potentially contribute to the multisystemic adaptations of exercise.

MC Chong is a PhD candidate at Swinburne University of Technology, with research interests in the areas of molecular exercise physiology and extracellular vesicles biology. MC holds a BSc in Sport and Exercise Science from Campbell University, and a MSc in Sport and Exercise Physiology from Liverpool John Moores University.

Ciotti, Tania

Professional and personal terra incognita: Exploring unrecognised complexity and unaddressed tensions in Bi-Lingual / Bi-Cultural Australian social work practice.

The 100 year plus history of the social work profession has seen profound changes in the scope of social work practice and in the incorporation of practice ideologies and theories—with concomitant changes in the expectations and implications for social work practitioners. These changes have involved shifts in practitioner roles and identities and in desired/appropriate client outcomes. Perhaps in no other practice arena have these changes been more profoundly experienced than in that of ethno-specific practice—particularly by bi-lingual/bi-cultural practitioners working within their own cultural

contexts. Here dynamics of ethnicity, professional education and practice standards, personal and professional identity and client expectations have grown more complex and potentially contentious. My thesis addresses research gaps in the specific bi-lingual/bi-cultural Australian social work practice context. The paper will provide a theoretical discussion outlining the broader international and related human services literature regarding the multiple personal, professional and cultural dynamics at play and how they interweave and inform shifting and emerging concepts of identity, cultural competence, culture and role. This will include consideration of the complex conflicts and tensions that operate within and across cultural contexts.

Tania Ciotti is a BiLingual/BiCultural Social Worker with over 25 years' experience across ethno-specific and mainstream practice contexts, over 15 years in tertiary education and more than 15 years in private practice. She is an Accredited Mental Health Social Worker (AASW) and is currently completing a Master by Research degree.

Conte, Adele

Snapchat and Instagram 'story' features: The spatial implications of "being there" ephemerally

Snapchat and Instagram and the 'story' feature available on each platform demonstrate a changing social media spectrum. The 'story' feature incorporates a sense of ephemerality as it enables users to post photographic or video content that is only accessible for twenty-four hours. It also affords augmented reality (AR) by providing users with the option of adding elements such as geo-filters, stickers, or various other forms of metadata as digital overlay. My research project will be a technocultural analysis of users and their adoption of this feature and the way it shapes their new media practices. This presentation will be based on the findings that resulted from a mixed-methods approach including surveys and semistructured interviews. As 'stories' are both a temporary mode of sharing and enable the use of AR technology, users are required to interact with their space both physically and virtually simultaneously. I will focus on how respondents perceive this experience of space when mediated by the 'story' feature. By presenting this main finding, I argue that the 'story' feature encourages an increased sense of spatial awareness and thus, more meaningful interactions with location.

Adele Conte is a Master by Research candidate at Swinburne University. Currently working as a digital marketing coordinator, Adele is passionate about social media and its impact on user. After completing a Bachelor of Communication (Media Studies) and a Bachelor of Research (Honours), her thesis looks at the convergence of ephemeral messaging and augmented reality through the 'story' feature.

Cossar, Reece

Changing patterns of crime across the life course among people who inject drugs with histories of incarceration

The age-crime curve – the pattern of crime through the life course - is the most observed population-level outcome in

criminology. Studies exploring this phenomenon across patterns of substance use are rare and changes in involvement and diversity of crime have not been previously described in a cohort of people who inject drugs (PWID). Primary survey data from a cohort (N = 400) of men incarcerated in the Australian state of Victoria and who reported regular injecting drug use prior to their current sentence were linked to jurisdictional police records. We describe age-crime curves from age 10-30 for the cohort across all arrests and by 1) crimes against the person, 2) property/ deception, and 3) drug-related crimes. Mean age of first contact with police was 14.9 years (SD = 3.3) and a mean age of first arrest was 16.7 (SD = 3.5) years. The age-crime curve for all arrest types exhibited a later-onset than is typically observed and showed a steep and linear increase in offending into the early 20s and that persisted throughout the 20s. This pattern was consistent across violent and property-related crime, while drug-related offending continued to increase into the late 20s. The life course pattern of crime among PWID has shown limited desistance in crime compared to that shown in the literature. To better understand life course patterns of offending among PWID further research exploring the diversity in crime and its temporal relationship with drug use and other exposures is needed.

Reece Cossar is a final year Doctor of Psychology (Clinical and Forensic) candidate. His research focuses on offending patterns and the impact of mental health in a population of people who inject drugs. He has a particular interest in life-course criminology and changes and patterns of crime.

de Boer, Kathleen

Assessing the Trauma Recovery Program: Phase One Results

Phase based approaches to treat complex posttraumatic disorder (CPTSD) is a recommended treatment modality (Cloitre et al., 2011). While few studies have looked into this treatment, the work that has been done has found this approach to be effective at addressing the wide array of symptoms experienced by those with particularly complex traumatic histories (Cloitre et al., 2002; Cloitre et al., 2010). Initial safety and stabilization group programs for such populations have also reported effectiveness (Dorrepaal et al., 2010; Dorrepaal et al., 2012), however researchers recommend that further studies explore pairing initial group programs with subsequent trauma memory processing. This study was aimed to assess the acceptability and effectiveness of an initial 10-week treatment group for women with histories of complex trauma and possible diagnoses of CPTSD. The results collected and presented form part of a larger project assessing the effectiveness and feasibility of a two-phase treatment program; the 'Trauma Recovery Program'. Using Interpretative Phenomenological Analysis, the following preliminary themes have been identified: service engagement, understanding self and phase one impact. The qualitative data suggests that phase one of the 'Trauma Recovery Program' is an acceptable and effective treatment and is worthwhile preparatory phase prior trauma memory processing

Kathleen de Boer completed her B.Sc. at The University of Melbourne and Honours in Psychology at Swinburne University. She is currently completing a PhD – Clinical Psychology. She is an aspiring clinical psychologist, teacher and researcher with a keen interest in Post-

De Silva, Heshani Samantha

Understanding Family Violence in Australia's South-Asian Community

The 2016 Victorian Royal Commission into Family Violence identified a demand for culturally appropriate family violence services in Australia. Yet, knowledge regarding the different experiences of family violence across cultures is limited and often extrapolated from research conducted in other countries. Whether these same experiences are relevant within an Australian context is unknown, but crucial to ensuring services are relevant. Given that the South-Asian community is one of the fastest growing populations in Australia, this PhD research aims to examine the South-Asian experience of family violence in Australia and then to consider how these differences are catered for by current services. To begin, a literature review will be conducted to explore what is currently known about family violence cross-culturally, particularly in South-Asian communities. The following areas will be of interest; risk factors, cognitive responses, behavioural and psychological impact, help-seeking behaviour, perpetrator relationship and history of violence. This review will refine our current understanding of family violence and facilitate attempts to contextualise the South-Asian experience of family violence in Australia. Overall the research hopes to ensure that future policies and services are well-informed in addressing the needs of South-Asians in Australia.

Heshani Samantha De Silva is a PhD (Clinical Psychology) candidate at Swinburne University of Technology. Her research interest includes, family violence, cross-cultural research and psychometric tools more generally. Sam holds a BCrim/BSc(Psychology)(Honours) from the Australian National University. Outside of academics she loves to read, play board games and travel.

Every, Greg

Workshopping models: an autoethnographic perspective of two Melbourne communities of practice

While supervisors are able to guide students in the development of their scholarly and writerly voice, it will be argued here that for the HDR scholar, an informed community of practice of critical friends residing outside the academe can provide a useful way to test creative writing. Such critical friends come from disparate backgrounds and provide a broad sounding board, particularly for creative texts. This paper compares two Melbourne-based critical friend writing groups and draws one out as a recommended model which has helped writers develop and polish their skills and experiment with genre, story and description.

Drawing on Anderson and Wenger's thoughts on communities of practice, this presentation argues that a sophisticated

critical friends group provides a means by which to experiment and test not only the creative text but also reader responses to the text. The presentation looks at a successful model that has functioned fluidly for a critical friends writing group that meets monthly to expose their work to the constructive criticism of group members. Talented critical friend groups, this presentation concludes, offer a means to supplement supervisory wisdom and when added to supervisory input provide a broader base for writerly development.

Greg Every is a PhD candidate at Swinburne. He holds a BA (Journalism) from RMIT and a Bachelor of Research (Honours) from Swinburne. His awards include a Gold Quill from the International Association of Business Communicators. His commercial career included Corporate Affairs roles at Coles Myer.

Faulkner, Melodee

Indigenous victimisation and homicide in Australia: A retrospective review

Indigenous Australians have historically been subjected to high levels of interpersonal and institutional violence. Since the Royal Commission into Aboriginal Deaths in Custody (RCIADIC) over 25 years ago, actual rates of indigenous victimisation and homicide have continued to increase. The aim of the present literature review is to examine sociocultural factors which increase victimisation, through publicly available government reports, via the Australian Bureau of Statistics (ABS) and Australian Institute of Criminology (AIC), as well as the extant literature. The methodology includes data searches within Google, Google scholar and the Swinburne University of Technology library databases of the terms victimisation, homicide and Indigenous Australians. Within the cultural context of disempowerment and colonialized abuse, as well as Stolen Generation intergenerational trauma, sociocultural factors which increase victimisation rates are discussed. Mirroring the Canadian Indigenous homicide rate and missing persons crisis, the Australian Indigenous homicide rate is the highest of any racial or minority group. Homicide sub types such as intimate partner homicide are of particular concern with up to 20 percent of victims identifying as indigenous as well as up to 24 per cent of perpetrators. Indigenous Australians also suffer the highest rates of incarceration and inter-personal violence with an indigenous person currently 17 times more likely to be in detention than a non-indigenous person. Domestic violence victimisation is a known precursor to severe intimate partner violence culminating in homicide and also is a significant antecedent to homelessness for women and children with 25 per cent of specialist crisis accommodation seekers being identified as Indigenous Australians. Overall, proportional rates of indigenous homicide as evidenced from the AIC National Homicide Monitoring Program (NHMP) remain of concern and up to half of the recommendations of the Royal Commission into Aboriginal Deaths in Custody remain unimplemented more than 25 years on.

Melodee Faulkner is a PhD candidate at Swinburne University of Technology and holds a Bachelor of Science (Hons) from Monash University and Bachelor of Music Performance (VCA)

Melbourne University. She is a former Senior Project Manager in Technology at a major bank with expertise in database management and integrational systems upgrades as well as green fields Defence systems experience.

Gauci, Sarah

The relationship between diet, glucose control and cognitive performance in Age Associated Memory Impairment

Deteriorating cognitive performance is a risk factor for the development of Alzheimer's Disease and is influenced by various lifestyle and health factors including diet, arterial stiffness and glucose control (Francis & Stevenson, 2013; Hardman, Kennedy, Macpherson, Scholey, & Pipingas, 2016; Messier, 2005; Muela et al, 2018). The current study aimed to explore how adherence to either the Western Style Diet (WSD) or Prudent Style Diet (PSD) interacted with glucose control and arterial stiffness to impact cognitive performance of elderly individuals. The sample comprised 144 (M=65.15 years, SD=6.46) physically healthy participants with Age-Associated Memory Impairment. Dietary information was gathered using a food frequency questionnaire, and patterns were scored using the method developed by Gardener et al. (2015). Glucose control was measured using glycated haemoglobin (HbA1c) and arterial stiffness was evaluated by measuring Pulse Wave Velocity. Cognitive performance was assessed using the Swinburne University Computerized Cognitive Ageing Battery (SUCCAB) and Rey's Verbal Learning Test (RVLT). A significant interaction between arterial stiffness and adherence to the PSD was found for immediate recall of words on RVLT. The significant interaction demonstrates that diet may impact verbal learning through its relationship with arterial stiffness. Understanding how diet is interacting with other risk factors may help to tailor interventional strategies targeting individuals who are at risk for of cognitive decline.

Sarah Gauci is a current PhD candidate at Swinburne University. She has her Bachelor of Science where she majored in psychology and psychophysiology, in 2017 Sarah completed her honours in psychology. Sarah's research interests are in modifiable risk factors for cognitive decline and how diet is related to cognitive performance

Giles, Sarah

A lot Like Joy: Artefact and exegesis

This practice-led research project is comprised of a novella, A lot Like Joy, and an exegesis which outlines the methodological and theoretical work that underpins the fiction.

A lot Like Joy examines intimacy as Clair, the protagonist, has come to know and experience it. The novella sees Clair question what she thinks about intimacy as she studies a series of ink paintings made in the early 1950s by Australian modernist artist Joy Hester. Clair examines a formative and traumatic memory from her early adolescence and the impact that experience had on her relationships into adulthood. Through her own artistic practice, Clair attempts to reimagine her notions about intimacy. This project seeks to articulate the redemptive capacities of artistic practice for women, inspired by l'écriture féminine as a concept and (inter)textual practice which

makes space for the plurality of femininity. In its early iterations, l'écriture féminine aimed to challenge phallocentrism and create space to explore sexual difference. These aims become central in A lot Like Joy. This presentation is an overview of my project as a whole, including extracts from A lot Like Joy in order to illustrate the relationship between the artefact and the exegesis and to explicate the role of l'écriture féminine.

Sarah Giles is a student in Swinburne University of Technology's Integrated PhD Program. She holds a BA from Swinburne University. Sarah's research interests include the application of feminist theories in literature and creative writing practices. Particularly that of l'écriture féminine as it pertains to femininity as a style used to develop creative works.

Gleeson, Ashlea

Examining gender in the Australian communication design industry.

This thesis explores the nature of gender within contemporary communication design in Australia. It questions the perceived notion that design is gendered by examining the experience of women and non-binary designers and interrogating the culture of Australian design environments. This research emerged from an increasing interest in gender representation in the Australian design industry. It commenced with a broad investigation of feminist literature that provided a historical overview of gender, as well as the exploration of gender in the Australian design industry. The results of which, confirmed that literature on design and gender in Australia is limited. Further investigation broadened the scope of Australian creative industries to include architecture, graphic design, industrial design and information communication technology sectors, as well as examining international sources. The literature reveals a perception of design as a gendered vocation. In essence, the discussion focuses on the binary of male and female with little discussion of intersectionality and diversity (Akama & Barnes, 2009). Crenshaw's theory of intersectionality plays an important role in this research. Intersectional feminism was actualised as an outcome of interdisciplinary research between academic fields (Dill & Kohlman, 2014, p. 2). As this research will utilise an intersectional feminist framework, it will be inherently interdisciplinary. As such, the literature review will traverse different creative industries as it seeks to understand the prevailing paradigm and cultivate knowledge around the nuances across disciplines.

Ashlea Gleeson is a multidisciplinary designer with experience ranging from graphic design, digital design, service design and production. Ashlea is currently undertaking a Master of Design Research in the Faculty of Health, Arts and Design. Her thesis examines how workplace culture contributes to the experience of gender in the Australian communication design industry.

Gnatt, Inge

Eating disorders and trauma: and exploration of the role of compassion in recovery

Eating disorders and disordered eating are debilitating problems that significantly impact on the lives of those who endure them. Previous research has indicated a strong association

between traumatic experiences and subsequent eating difficulties. Furthermore, factors that influence the development and maintenance of psychopathology for posttraumatic and disordered eating symptoms have revealed some commonalities. Current evidence suggests that psychological interventions typically exhibit reasonable efficacy in the treatment of eating disorders, however, eating disorders can be chronic in nature with many individuals experiencing partial recovery and relapse. One factor that has been explored independently as an adjunct to treatments for both eating disorders and trauma is compassion focused therapy (CFT). CFT is a multimodal therapy, that builds upon other therapies and focuses on developing more helpful patterns of affect regulation, brain states and self-experiences that underpin the change process. The aim of the current study was to explore the relationship between eating disorder, and post-traumatic symptoms, together with levels of self-compassion in a sample of the general population. The results were then integrated into the design and delivery of a compassion focused group-based programme for individuals experiencing disordered eating with a history of trauma, currently being delivered at Swinburne University of Technology.

Inge Gatt is a PhD Candidate in the Faculty of Health Arts and Design, currently investigating how different factors influence the development and maintenance of disordered eating, and how these findings can be translated to clinical practice.

Greenberg, Keren

The 2014 Israel-Gaza Conflict in the Israeli Media:A Corpus-Based Critical Discourse Analysis

The Israeli-Palestinian conflict is one of the most intractable conflicts in the Middle East. Revolving around issues of land. borders and rights, it has involved clashes between Israelis and Palestinians in the West Bank and the Gaza strip. In recent years, the conflict has centred on the Gaza Strip between Israel and the Palestinian movement Hamas and has included several. rounds of violence. Societies embroiled in intractable conflicts often use the media to (re)produce and disseminate particular ideologies that, on one hand, help them handle the conflict and, on the other hand, contribute to the conflict's intractability (Bar-Tal, 1998). Media thus has the power to influence audiences' perceptions of the conflict's causes, events, participants, and possibilities of resolution. This research explores how the 2014 Israel-Gaza round of violence was represented in three English-language Israeli news websites. It investigates whether - and, if so, to what extent - the Israeli news outlets converged with/diverged from one another by examining both the language used to report the conflict and the production processes involved in its reporting. This paper will present the linguistic findings that contribute to the shaping of the conflict's representation in the Israeli media. More specifically, it will shed light on the degree to which Israeli news outlets "rallied behind the flag" in their coverage of the 2014 Israel-Gaza conflict.

Keren Murphy Greenberg is a PhD candidate in Linguistics in the School of Arts, Social Sciences and Humanities in Swinburne University. Her research interests lie in the intersection of Applied Linguistics and Media and Communication. She is particularly interested in the role language plays in media representations of conflict.

Guntur, Robertus

Progress in coverage of bet net ownership and use in Indonesia 2000 –2011: evidence from population-based surveys.

The use of insecticide-treated bed nets (ITNs) decreased the number of malaria cases globally. This study assessed the progress towards universal ITNs coverage in Indonesia from 2000 to 2011. Using ecological method, the authors used data from Indonesia Multiple Indicator Cluster Surveys 2000 and 2011, as well as Demographic and Health Surveys database 2007. Data on malaria cases used the WHO database. The trends over a decade were assessed by calculating percentage point change between 2000 and 2011. The study revealed that the proportion of households owning at least one ITNs increased significantly from 2007 to 2011 with the proportion of changes 31.96%, 95% CI (30.73%, 33.19%) nationally. The proportion of population sleeping under an ITNs also increased with the change percentage of 23.64%. Data indicated that the increased coverage of ownership and use of ITNs had been followed by the decreased of malaria prevalence. The increasing coverage of ITNs ownership and use has led to a decline in malaria prevalence.

Robertus Guntur is a Ph.D. student at the Department of Statistics, Data Science and Epidemiology FHAD Swinburne University of Technology Melbourne Australia, with a research interest in biostatistics.

Guy, Jessica

How real and virtual toys and games affect children's play and parent-child interactions

Digital media has changed the way children are playing, learning, and interacting with the world. Both language and joint attention are crucial for development (Tomasello, 1995). Previous research by Zosh et al. (2015) found differences in language between material and electronic play conditions. Our research examines verbal communication and joint attention in digital (tablet) and material game conditions. We expected verbal communication (measured by words spoken/per minute) will be lower in digital conditions compared to material play. Joint attention will be examined for differences between material and digital conditions. Participants are child-parent dyads (N=47) and children ranged between 5-7 years (M= 6.1 SD= .59). Four games and their closest available digital equivalents were used; Jenga, HotWheels, Crazy Gears, and Dolls. Participants were allocated to one of two conditions, digital or material, which determined which modality they played the games in first. Preliminary results suggest significantly higher levels of joint attention are seen in material play sessions compared to digital play sessions. Further, the same pattern was seen for words spoken between material conditions for children and parents compared to digital conditions for children and parents. The differences in words spoken were significant for children (p<.0001), and for parents (p=.001). These results have important implications in language and social development.

Jessica Guy is a third year PhD candidate. Her research focuses on digital play and young children. The main research questions of her PhD research focus on determining how children between 0–8 years old use technology, whether children can learn using technology, and how technology affects children's play and interactions.

Hackler, Friederika

Has Prison Design in Victoria changed from 1965 to present? A spatial analysis of the modern era of Victorian prisons.

Built environment can influence people's behaviour, a phenomenon known as Architectural Determinism (Canter, 1977). Even though design of prisons by itself may not prevent or allow good penal practices, research on built environment solutions for better rehabilitation practices has been neglected for too long (Fairweather and McConville, 2000). Increasing recidivism rates in Victoria suggest that prisons need to be improved. Prison practices and design solutions have been mostly based in the U.K. and more recently U.S. decisions. Appropriate studies to Australia have only been seriously considered in the last decade (Jewkes and Grant, 2015). Jewkes and Grant (2015) opened this discussion, explaining in general lines the prison design evolution in Australia, however without clearly analysing prison spaces and their evolution. This paper raises the flag about the importance of analysing prison spaces to understand whether modern prison design has evolved (if at all) since the birth of prisons, in the 18th Century. Using the space syntax science as base, from Hillier and Hanson (1989) this research investigates associations between the spatial layout of Victorian prisons and social behaviour. A list of thirteen active prisons originally designed as prisons will be investigated, and computer software will translate the findings into illustrated plans. This study can be used to reveal unseen opportunities and constraints to improve the current Victorian prison design.

Friederika Hackler completed a Bachelor of Architecture and Urban Planning from the Federal University of Bahia; a Master of Design from the Swinburne University of Technology and is currently a PhD student. Her interests include psychological factors determined by the architectural spaces, and her current research focus on the prison environment.

Hollamby, Jennifer

Shatter: Employing autoethnography to create an authentic dramatic representation of personal and familial trauma.

The impact of personal trauma, with a root cause in childhood abuse and family violence, can have lifelong consequences for an individual's sense of self and mental wellbeing. Trauma in the form of emotional and physical abuse, when encountered at a young age, will endanger the emerging self; the core of existence is assaulted and fragmented. The resultant self remains shattered and unable to function as a whole. If left unhealed, this damaged self then acts to splinter those who are close, often spouses and children, with the destructive ripple effect coursing through time. This research project (PhD by Artefact and Exegesis) is employing autoethnographic

methods to theoretically contextualise and dramatically interpret and represent the enduring intergenerational impact of a lived experience of abuse, family violence and mental illness. Personal medical records, including verbatim psychotherapy notes, coupled with memories and long-standing family 'mythologies' are being transcribed, re-examined and theoretically positioned to create the basis for a dramatic and authentic retelling of this experience. The resulting play script will vividly present this story of trauma and its enduring impact, using the transformative lens of a unique personal narrative to focus attention on a broader momentous societal issue.

Jennie Hollamby is a PhD Candidate (Artefact and Exegesis) at Swinburne University of Technology (FHAD). Jennie holds an Honours Degree in Science, a DipEd and an MA in Writing. Jennie's current research areas include autoethnography, trauma theory, drama theory, playwriting, and the causal relationship between family violence and mental illness.

Iskandar, Sonya Veronica

Beyond Vision: Space Design for Individuals with Visual Impairments

We live in a visually biased world surrounded by spaces that are designed to be appreciated and experienced via the visual sense. The term 'visually engaging' is often used to describe an agreeable spatial design. This visual-centric design focus, though understandably prevalent, can negatively impact how individuals with visual impairment and blindness experience space. Australian accessible design standard AS1428.1 focuses on functionality and deals with quantifiable elements, such as dimensions, luminance contrasts, tactile indicator, braille sign, etc. However, the standard does not allow for any focus on how individuals with visual impairments and blindness perceive, interpret and experience space. This paper presents and discusses the early findings from my research on spatial perception, interpretation, and experience beyond the visual, with a focus on the role of sound. The paper will be in two parts. Firstly, I will discuss the powerful nature of the visual sense compared to the haptic sense (touch) and particularly auditory sense and consider how this can affect spatial experience and perception. In the second part, I will consider what a soundscape is, and how these can be meaningful for individuals with visual impairments in regard to their experience of space.

Sonya Veronica Iskandar is a PhD candidate at Swinburne University, having recently converted from Master by Research in March 2019, following her Confirmation of Candidature in February. Sonya has been working as Interior Designer since 2003, mainly involved in public accessed interior space design in the last five years. This is her first research project.

Karantonis, James

Validation of cross-diagnostic cognitive subgroups on the schizophrenia-bipolar spectrum

Recent cognitive clustering analyses on the schizophreniabipolar disorder spectrum have not been well-validated beyond the initial clustering variables. Thus, we conducted a hierarchical clustering analysis (HCA) on a cross-diagnostic sample of patients with schizophrenia (SZ), schizoaffective disorder (SZA) and bipolar disorder (BD) and compared the resulting subgroups on cognitive measures used in the clustering and non-clustering analyses. Speed of processing, verbal, visual, and working memory, and reasoning and problem-solving domain scores were used as clustering variables in a cross-diagnostic HCA of 86 patients with SZ (n = 30), SZA (n = 15) and BD (n = 41). Additional cognitive measures of estimated premorbid IQ, speed of processing, attention, working memory, verbal fluency and executive function were compared across the emergent clusters and healthy controls (n = 76). A three-cluster solution in the cross-diagnostic patient sample was most appropriate, with subgroups labelled as 'Globally Impaired', 'Selectively Impaired', and 'Superior/Near-Normal' based on performance relative to controls. With the exception of speed of processing and verbal fluency, the subgroups generally remained distinct when compared on additional cognitive measures. The findings provide further support for the subgrouping approach as a means of better understanding cognition in patients with a schizophrenia-spectrum disorder (SSD) or BD

James Karantonis is a full time PhD student, who in his spare time, is also a PhD student. He has a bachelor's degree in science and did his Honours in Psychology. His current research centres on cognition and brain structure in psychosis-spectrum disorders.

Keenan, Stephen

The effect of 12 weeks of intermittent fasting and resistance exercise on lean body mass.

Two thirds of Australian adults are overweight, or obese and more than half are considered insufficiently active. This has led to increasing levels of chronic disease and associated health costs. Weight loss and management in individuals appear to be complex and even though energy restriction and exercise are cornerstones of most lifestyle interventions aimed at inducing weight loss, these are generally successful short-term but are often followed by weight regain. This may partly be due to a concomitant loss in lean body mass and subsequent reduction in energy expenditure as a result of reduced basal metabolic rate. Resistance training and high protein intakes have been shown to spare lean body mass during periods of weight loss, though generally are unable to attenuate these fully. Whether different patterns of energy intake during restriction can further promote lean body mass retention is currently unclear. This study aimed to investigate whether 12 weeks of intermittent fasting combined with high protein intake and resistance training can improve lean body mass retention during a period of energy restriction when compared to a continuous energy restriction diet. Preliminary body composition data from this study will be presented.

Stephen Keenan is an accredited practising dietitian and sports dietitian. He completed his master of dietetics at Deakin University and is currently a PhD student at Swinburne with his research focusing focuses on the effect of intermittent fasting and resistance training on body composition, strength, gut microbiome and metabolic health.

Koch, Christoph Heinrich Walter

The future of industrial design and its role in Industry 4.0

The industrial design profession is on the verge of another manufacturing revolution. This revolution, commonly referred to as Industry 4.0 (I4.0), will influence the manner in which we produce products, e.g. mass customised and 3D printed products. Industrial design (ID) activity is intrinsically linked with manufacturing whereby industrial designers need to consider manufacturing constraints and restrictions to ensure a product is manufacturable. Today it is still unclear what design methods are required for manufacturing companies to adapt to this everchanging I4.0 environment. This provides a clear research gap, suggesting a need to focus on how ID has to change and adapt to stay relevant and provide value for manufacturing in this future environment that now connects the physical with the digital. This study will use a quantitative questionnaire followed by an ethnographic study to determine the current state of ID practice in Small-to-Medium (SME) manufacturers in Australia with an aim to identify areas for improvements, as well as opportunities for growth. Later the findings will be implemented in the redesign of a product for I4.0. The research also seeks to clarify and communicate the abilities and value of ID for the manufacturing sector in Australia.

Christoph Koch is a PhD candidate at Swinburne University of Technology. He graduated as an industrial designer in 2017 with first class honours. Prior to starting his undergraduate degree, he studied graphic and print design in Osnabrück, Germany. His current research is focussed on industrial design and Industry 4.0 and the future of product design.

Koh, Eugenia

Between meritocracy and a holistic education: Singapore kiasu parents' dilemma in an education reform

In Singapore, education is socially and culturally revered by many families. Starting from early childhood education, parents invest heavily through social, cultural and economic capitals in their children's academic success. While educators view school readiness to include both academic and life skills development, Singapore parents predominantly focus on their children's academic excellence. Despite efforts initiated by policymakers to reduce academic stress in support of a holistic education system, parents continue to invest heavily in shadow education for their children. This hothousing behaviour has been termed as 'kiasu parenting' in the Singapore local culture and media. The dissonance within these parents is predominantly caused by high stakes examinations and stiff academic competition faced in the formal schooling system. As the preliminary stage of my PhD research project, this presentation gives an overview of the ambivalence Singapore parents experience in an education reform that discourages academic competition within a meritocratic system. Drawing from scholarly articles, education policies, parliamentary speeches, newspaper reports and parent forums in Singapore, I discuss the possible causes of this social phenomenon.

Eugenia Koh has more than ten years of teaching experience in tertiary education and enjoys working with youths, educators and families. She is passionate about inclusion, playwork and parental involvement in children's learning and development. Eugenia has successfully co-authored two published chapters on Singapore's early childhood education, with her primary PhD supervisor, Professor Sivanes Phillipson. She is currently working on a new chapter with Professor Sivanes on tiger parenting in Singapore.

Kulkarni, Apurva

Exploring the Use of Advanced Digital Technology in Costume Design

Bollywood is among the largest film industries internationally. Indian studios also undertake significant CGI (Computer-Generated Imagery) work for overseas film companies, but Bollywood costume design is mired in convention, remaining tied to two-dimensional representations and physical mockups. Besides the capacity to make costume production more efficient and cost effective and less wasteful of materials, digital advancement could enhance the creativity of Indian costume design teams. The literature of costume design focuses on the history of costume design, the work of leading designers and basic practice handbooks. Few sources consider costume design as part of the industrial process of film production alongside the other practices that contribute to making a film. Several sources discuss the sociology of Bollywood filmmaking, revealing its different aspects to be developed largely separately and only brought together at the time of shooting, often with chaotic effects. This paper compares this lack of consideration of digital advancement in costume design with its significant discussion in the apparel industry to understand possible points of resistance to and acceptance of technology in design. It finds that although there has been noteworthy activity in the development and adoption of virtual prototyping in apparel, there have been some barriers to its ongoing implementation.

Apurva Kulkarni spent five years working in Bollywood as a costume designer prior to enrolling as a PhD candidate at Swinburne, principally on major historical dramas.

Lade, Rochelle

Changes in programming decision making factors at 3PBS and their effect on broadcast output

Much of the existing research about community media organisations assesses the value or success of stations in enabling public access and participation in the media making process. This paper discusses the programming decision making processes and the broadcast output that resulted from them at 3PBS, a specialist music community radio station broadcasting under-represented music in Melbourne since 1979. Drawing on the first large-scale research into PBS' almost 40-year history, this paper explores two significant events in the station's programming history: the 1989 Major Programming Review and 2005 'grid' or schedule changes. In both cases, the station's co-operative ethos, competition with other radio stations, the progressive nature of the music and the need

to raise money influenced the programming changes made. However, the impact on broadcast output was very different. The 1989 Major Programming Review had its greatest impact on the types of music broadcast. The 2005 programming changes made little change to the types of music but significant change in when they were broadcast. These two cases provide insights into programming decision making factors, how these have changed, and the effect on PBS's mission to broadcast under-represented music.

Rochelle Lade is a final year PhD candidate. Her research is the first study to document PBS' 40-year broadcast history, contributing a different, quantitative way to understand how a specialist music, community radio station has realised its goals of co-operative programming and broadcast of underrepresented music.

Licata, Lucas

Virtual Reality fidelity and its relationship to presence through gait analysis

Virtual reality is an immersive and interactive environment not only for games and entertainment, but also a powerful tool for research, training and therapy including medical applications such as post-stroke rehabilitation and intervention. With VR participants are not just looking at a picture of an environment on a screen, they have the potential to feel that they "really there" in the environment, sensation know as presence. This presentation will demonstrate the early experimental studies into three-dimensional computer graphics fidelity effects on the level of presence in VR. The research methodology is a mixedmethod approach collecting both qualitative and quantitative data to determine the impact that computer graphics fidelity has on presence. Qualitative measurements using questioners will determine if new quantitative gait measurements can detect presence. Using biomechanical measures of kinematic data, collected using motion capture of participants walking on a trend mill in VR environment under different fidelity conditions. The anticipated benefit is that by measuring subconscious changers in a person's gait we can determine the appropriate level of fidelity. Helping to informing VR designers to create better experiences that communicate directly with our human perceptual system. Contributing to new knowledge by developing qualitative measurements of presence in VR.

Lucas Licata is a digital media artist, design researcher and lecturer in 3D computer graphics researching designing for virtual reality environments. A PhD candidate looking at the impact that computer graphic fidelity has on the feeling of presence through motion capture data of a person's gait.

Little, James

Birds of A Feather: How Both Sides Of The Twitter Political Spectrum Act To Reinforce Whiteness

Since its launch in 2006, Twitter has gained a reputation for its political activism and for being the epicentre of the 'woke' movement. With its (nearly) global reach and open access, Twitter has given millions of people a global audience, including marginalised groups that may have been excluded

or underrepresented in traditional, Western media & political structures e.g. LGBT, women, and racial, ethnic and religious minorities. To investigate the political environment for some of these groups on Twitter, my study will conduct a thematic and content analysis of Twitter responses to four female political and social activist/commentators from a variety of ethnic and cultural backgrounds. While much of the scholarly and journalistic attention on this area has focused on conservative or 'alt-right' online attitudes towards marginalised groups, there has been little acknowledgement of the problematic aspects of liberal ideology. For a more comprehensive analysis of the Twitter political space, my work will draw heavily on another, often overlooked tenet of Critical Race Theory (CRT): critique of white liberal/progressive political attitudes. The analysis will consider how "allies" might be driven by political self-interest, and the how both (white) progressive and conservative ideologies work to reinforce whiteness across the political spectrum.

James Little completed a B.A (Hons) at Swinburne University in the Politics Department and is currently conducting a Masters project. His areas of interest include social media, race and critical studies

Lobo de Queiroz, Juliana

Taking advantage of disadvantage – precariousness, agency and subjectivity in refugee background women entrepreneurship.

Refugee protection is justified internationally through the logic of humanitarianism, calling on moral sentiments and compassion. Refugee settlement in host countries, however, is often referred to in terms of economic contribution. Refugee background women face many challenges to enter the labour market in re-settlement countries and starting a microbusiness can sometimes be the only alternative to engage in work that is meaningful and fulfilling. This paper presents the findings from ethnographic research on the livelihood building experiences of refugee background women. A presentation of the relationship between livelihoods and displacement will be provided followed by a discussion of themes of precariousness, informality and entrepreneurialism emerging from ethnographic data in Brazil and Australia. In addition, a discussion will be provided related to how women of refugee background come up with their own unique ways of building a livelihood, that combines multiple income streams and make use of what they have at hand. The individual experiences presented through this ethnography is anticipated to illuminate aspects of refugee background women's livelihoods that are not yet well understood in the field of refugee studies and entrepreneurship. Arguably, through entrepreneurship and informality refugee background women are building livelihoods that give them capacity to exercise agency and to shift power dynamics in their everyday lives.

Juliana Lobo de Queiroz is a PhD candidate at the Swinburne University of Technology. She holds a master's degree in Applied Anthropology and Participatory Development (ANU) and she has worked on microbusiness development programs with refugee background women in Australia for nearly a decade. Her PhD research meets the fields of refugee studies, anthropology and entrepreneurship.

Maguire, Rachel

The right to resist: theorising resident opposition to the Public Housing Renewal Program in Melbourne, Australia

The question of what to do with Melbourne's ageing public housing remains a persistent problem for policymakers attempting to address Melbourne's housing affordability crisis. International evidence demonstrates that contemporary practices of estate redevelopment often result in unequal outcomes for public and private residents, with resistance emerging worldwide in response to this form of neoliberal urban governance. Literature in this field primarily focuses on engagement with, or exclusion from, redevelopment processes but does not often examine how redevelopment processes themselves may shape the resistance that emerges and the ideologies underpinning the redevelopment agenda. It is in this gap that the current research is located with a significant contribution to knowledge made by bringing together analysis of both the macro-level policy program and micro-level estate experience. This research explores how neighbourhood context, spatial history, and community structures influence strategies of resistance and how resident resistance is enacted within processes of redevelopment by asking: what modes of resistance are emerging from public and private residents in response to the Victorian Government's Public Housing Renewal Program and how is this resistance enacted within, and potentially shaped by, redevelopment processes? This paper will present a comparative case-study analysis of three estates, including findings from in-depth interviews with residents and critical discourse analysis of policy documents.

Rachel Maguire is a 3rd year PhD Candidate with the Centre for Urban Transitions. Her field of research is inequality in urban environments with a focus on public housing and resident experience. Rachel also works as a research assistant on an AHURI-funded project focused on the evaluation of public housing urban renewal.

Mesa, David

Technology roadmapping as a decision-making tool for assisting scientific research commercialisation

Universities are expected to generate research impact that affects nations' economies. However, countries like Australia and England, with quality research outputs, still have low rates of research commercialisation. A reason for this low rate of research commercialisation is that scientific research groups in universities struggle to decide which technology application to develop. Scientific research groups typically do not possess the required business skills to identify commercial opportunities for their discoveries. Scientists' lack of understanding of market needs makes industry hesitant to invest in research and thus, university research groups don't have enough resources to develop technologies to a commercial stage. Technology roadmapping (TRM), a method for aligning market opportunities with the development capabilities of organizations, has become popular in companies that innovate with new

technologies; however, there is no evidence of this tool being used in universities. This research proposes to use TRM in universities to help scientists identify technology applications and decide which routes have more chances to attract funds for development. With a multidisciplinary workshop-based approach, this research presents evidence of how TRM can assist decision-making in scientific groups aiming to commercialise technologies.

David Mesa is a PhD candidate at Swinburne. He qualified as a product design engineer at EAFIT University, working for an engineering and design firm for more than 4 years developing innovation products before commencing his current research.

Milburn, Kerrie

Jekyll and Hyde: Public Relations and Propaganda

"If each, I told myself, could but be housed in separate identities, life would be relieved of all that was unbearable." Robert Louis Stevenson, The Strange Case of Dr Jekyll and Mr Hyde. Public relations has long struggled with its own definition. It has been confused with and sought to distance itself from propaganda. Over the past several decades, academics and practitioners have attempted to define or re-define public relations, concerned that the popular belief that public relations is a form of propaganda invalidates its purpose and destroys its credibility. This paper examines selected writings and work of the perceived father of modern public relations, American Edward Bernays and his contemporary, Nazi Propaganda Minister, Joseph Goebbels. If Bernays can be cast as 'Dr Jekyll' - the personification of 'good', respectable public relations and Goebbels as 'Mr Hyde' - 'evil', disreputable propaganda, does a comparison of their writing and work provide an insight into the distinction between public relations and propaganda? The findings add weight to the conclusion that despite attempts to distance and redefine public relations as an activity distinct from propaganda, both are "behaviours of self-presentation for attention and advantage" (Moloney, 2006, p. 4); that, like Jekyll and Hyde, they cannot be "housed in separate identities", relieving public relations "of all that is unbearable ... no longer exposed to disgrace by ... the extraneous evil" [of propaganda]. The findings raise questions about truth, transparency and accountability for public relations, both as an academic discipline and a profession.

Kerrie Milburn is a PhD Candidate and lecturer in Dept of Media and Communication. Her research interests include propaganda, persuasion, ethics and PR history. She has two Arts degrees including a BA (Hons) (German Studies), and diplomas in Languages and Professional Writing. She has had a highly successful professional practice career and is an elected Fellow of the Public Relations Institute of Australia.

Miles, Stephanie

Cognitive rigidity, rumination and perfectionism in females with a past or current diagnosis of anorexia nervosa

Anorexia nervosa (AN) is a serious mental illness characterised by significantly low body weight, an intense fear of gaining weight and disturbances in how one experiences their body weight or shape (American Psychiatric Association, 2013). In Australia, the estimated lifetime prevalence of AN is 1.9 - 4.3% for women and less than 50% of sufferers achieve long term recovery (Steinhausen, 2002; Wade, Bergin, Tiggemann, Bulik, & Fairburn, 2006). Cognitive inflexibility - an inability to effectively adapt to environmental changes and/or changing task demands (Deák, 2003) - may play a role in the maintenance of AN and act as a barrier to recovery (Roberts, Tchanturia, & Treasure, 2010). This study aims to clarify how perfectionism and rumination interact with cognitive inflexibility and contribute to the maintenance of AN. Thirty acute AN patients, 30 patients who have partially or fully recovered from AN and 30 healthy controls are participating in the study. All participants complete a battery of measures assessing cognitive flexibility, perfectionism and rumination, and AN participants take part in a qualitative interview discussing flexible thinking and rigid behaviours. Preliminary findings investigating the differences in cognitive flexibility, perfectionism and rumination between participants with acute AN and those who have recovered from AN will be presented.

Stephanie Miles is in the second year of her PhD at Swinburne University of Technology. Her research focuses on the role of cognitive flexibility in anorexia nervosa. Stephanie hopes that the findings of her research will contribute to the development and improvement of treatments for eating disorders in the future.

Misiakos, Giannis

Co-designing a Sexual and Reproductive Health Educational App with Adolescents with Cancer

When adolescents are diagnosed with serious chronic disease, mental and emotional development can be interrupted. Adolescents with cancer are a vulnerable group who are at greater risk of sexually transmitted infections and unintended pregnancies in comparison to their healthy peers. To manage these challenges requires age-appropriate information and access to sexual and reproductive health advice in a format that is easily understood. Most young people have access to mobile phones and are confident navigating mobile apps. Therefore, we propose to develop an app prototype for the provision of sexual and reproductive health information. To Identify needs and develop a prototype for an educational mobile app that can support and educate adolescents with cancer. The app will aim to support the practical needs of clinicians and provide adolescents with cancer sexual and reproductive health information that is easily accessible. Co-design is an approach that promotes the involvement of all participants in the design process. This method explores opportunities and identifies outcomes that would not be acknowledged otherwise. Collecting and analysing of data using a qualitative approach, using codesign workshops and fun hands on art and craft material to allow participants to tell their stories and explore their creativity.

Giannis Misiakos is a PhD Student at the Swinburne University of Technology. He has a background in science, and industry experience as a communication designer. His research interest focuses on inclusive and participatory design and co-creation with young audiences and other stakeholders in healthcare settings.

Nankivell, Madeleine

CoQ10 and Cognition a Review and Study Protocol for a 90-Day Randomized Controlled Trial Investigating the Cognitive Effects of Ubiquinol in the Healthy Elderly

Increasing age is associated with cognitive decline in memory and processing speed starting in our 20's and 30's. Changes in these cognitive domains are often subjectively experienced from our 50s. Research has attempted to understand the relationship between changes in cognition with age and modifiable age associated biological processes. Interventions that target some of these processes, such as antioxidants (e.g, CoQ10), have previously been shown to improve areas of cognition by targeting these biological processes. However, there are methodological issues associated with these studies that make it hard to draw definitive conclusions. It is hypothesised that 90 days of CoQ10 supplementation improve cognitive function in healthy elderly participants. This is a 90-day randomised, double blind, controlled trial. Healthy participants aged 60 years and over, consume either Ubiquinol (200mg/day) or a matched placebo every day for 90 days. An estimated 128 Participants will complete tasks looking at memory, cardiovascular function, physical endurance, oxidative stress, mood, and liver function at four time points; baseline, 30-, 60-, and 90- days. Data will be analysed using repeated measures analysis of variance (ANOVA). With the financial burden increasing for providing care to those who suffer from age-related cognitive decline, this study will provide an important insight into the potential benefits of using CoQ10 to prevent its further progression.

Madeleine Nankivell completed her Bachelor of Health Science with Honours at Swinburne University, and is currently in her second year of her PhD in Psychopharmacology. She aims to combine her knowledge and experience with paediatric patients and the elderly to conduct research into supplemental effects across the human lifespan.

Papadopoulos, Matthew

The structural integration of empathy and comedy for the screenwriter in a feature film romantic comedy screenplay.

My artefact and exegesis PhD project consists of a romantic comedy screenplay and an accompanying exegesis. My screenplay, The Real Thing, explores and examines how empathy and comedy for the screenwriter are structurally integrated in my feature film romantic comedy screenplay and attempts to blend both elements in a successful manner. Although theoretical work has considered empathy and comedy in genre filmic texts, there is little work regarding the structural integration of these two elements in romantic comedy screenplays. But given that the backbone of romantic

comedy screenplays is the romance element, through a cognitivist perspective I show that in order for this element to work successfully the reader must empathize at various points with the protagonist – despite comedy's non-empathic or distancing effect. In examining the 3-Act classical Hollywood structure of screenplays and the seven turning points of a romantic comedy screenplay, I discuss the relationship between empathy and comedy elements at these structural points and offer correlations. My presentation and discussion of these correlations and the framework that I construct from them, adds to technique for the screenwriter in integrating these two elements successfully in the romantic comedy screenplay.

Matthew Papadopoulos is a doctoral candidate at Swinburne University of Technology with a research interest in feature film screenwriting in the Romantic Comedy genre. He holds a B.A. and M.A. (Philosophy) from the University of Melbourne.

Peñafort, Lucas Rafael Ivorra

Building trust relationships between small organisations, in plastic waste management systems: An instrumental case study in Colombia and the role of complexity.

In Colombia, approximately 30,000 tons of waste reach landfills every day. Out of that amount, Colombia only recycles 15-20%, with plastic waste an area of increasing concern. Dealing with plastic packaging waste has become a major priority for the Colombian government. For example, Resolution 1407/2018 aims to improve efficiency in managing packaging waste, by addressing the obligations of different stakeholders. This is a complex challenge however, due to the inequality of their capacities to address market and legislative challenges, as well as variable levels of trust operating between them. The literature suggests the development of shared values and motivations is essential to build this trust, and in turn to get greater efficiencies in this area of the economy. My research supports the Centre for Design Innovation's (CDI) program Waste to Opportunity and is about understanding how stakeholders can establish trust relationships in Medellín (Colombia) in environments of uncertainty and inequality and where collaboration is expected to happen. This paper will report on a range of activities conducted on the project to date: the development of two workshops, three visits to Medellín and a first literature review. All these show evidence of shared values and motivations that could help industry level engagement.

Lucas Rafael Ivorra Peñafort is an industrial designer, MSc in Environmental Management and certified as Project Management Professional. Lucas is a lecturer at Pontificia Universidad Javeriana (Colombia) and a PhD Student at Swinburne. His research interests are Sustainable Production and Consumption and Circular Economy. He has worked as a consultant.

Philip, Hana

Exploring the relationship between Healthcare and Design, a review of current barriers to effective interdisciplinary collaboration

With the rise of an ageing population and chronic disease,

current health care systems are becoming increasingly strained to meet changing demands globally. With the evolution of Design Thinking and User Centered Design (UCD), there is increasing exploration of how designs may reduce this strain on the healthcare system. To understand the relationship of healthcare and design and possible barriers to collaboration. A literature review using a synthesis matrix was completed to identify and collate recurring themes over disparate articles to understand opportunities and barriers to the integration of UCD in a healthcare paradigm. Issues facing the health care system met the criteria of a wicked problem. By re-defining health issues as such, there may be enhanced understanding of the impact of design within a healthcare paradigm. The literature highlighted the parallels of current paradigms of thought for both health and design, particularly from the Person-Centered Care models (prevalent model in healthcare) and UCD. Nonetheless, there were significant barriers identified, with issues such as language and interdisciplinary communication being the foremost obstructions to true interdisciplinary collaboration. This review demonstrated there may be mutual benefit in interprofessional collaboration within the healthcare setting and highlighted the need for an ongoing study.

Hana Philip's background is in Occupational Therapy, with an interest in adults and disability. With broad experience within the public and private health sectors, her interests include adaptive technology and environments. This led to a PhD in understanding how design principles may improve the utility of aids and improve personal independence.

Pineda, Melissa Pinto

Mapping ecological injustice hotspots in cities

To identify and map environmental injustices, many innovative methods and tools have been developed. These tools have mainly focused on justice for humans due to cases of unequal distribution of environmental impacts. These tools, however, have not addressed issues of ecological justice or justice for nature. Ecological justice is an emerging field that argues for non-human agency, socioecological awareness, recognition of nonhuman capabilities, and participation in decision-making processes. Drawing from existing methods and tools, this paper's aim is to develop a novel methodology to define, identify and map ecological injustices in urban landscapes. This methodology operationalises the main dimensions of ecological justice, into a set of indicators that when mapped together reveal ecological injustice hotspots. Its applicability is tested in the urban region of Melbourne, Australia, by mapping context-specific indicators. Melbourne, as many other urban landscapes, is burdened with socio-economic pressures that negatively impact nonhuman life and ecosystems. Developing and applying this methodology will be a systematic and effective way in which urban planners and decision-makers can identify and target ecological injustice hotspots. This can also be an empowering tool for citizen scientists to provide input, recognise hotspots and collectively take informed actions that are driven by systematic, participatory, and inclusive processes.

Melissa Pineda is a PhD student at Swinburne with a Master of Environment from the University of Melbourne. Mel is an

architect with experience in the private and not-for-profit sectors in Costa Rica and internationally. Mel's interests focus on sustainability, environmental urban planning, ecological justice, and animal welfare.

Qureshi, Muhammad Adnan

Why is Pakistan lagging in the promotion of HIV/AIDS education among its population?

Westernised populations appear to be making substantial claims of having controlled the HIV/AIDS disease. This type of claim is not true for other parts of the world e.g. in Pakistan where a rapid increase in newly HIV infected individuals has been observed over last decade. The 2018 UNAIDS report claims there are more than 163000 HIV infected people in Pakistan. In contrast, the National AIDS Control Program of Pakistan claims to have only 25000 registered persons, with only 15000 of this sub-group registered as taking antiretroviral therapy (ART). Accepting the finding of the UNAIDS report, this suggests that approximately 140000 HIV infected people are either unaware of their HIV infection or refuse to accept it. This may be due to cultural 'pressure and stigma'. HIV/AIDS studies conducted in Pakistan have found that both Government and NGOs have failed to adequately promote the seriousness of the problem. My research aims to explore the barriers of HIV/AIDS campaigns e.g. social, cultural, economic, religious factors. This will be done by conducting interviews among Pakistan's male graduates and HIV/AIDS stakeholders (Government and NGOS) to assess the issues and problems. The research findings will assist in informing future HIV/AIDS's social awareness campaigns, with a focus on Pakistan.

Muhammad Adnan Qureshi is a PhD candidate at FHAD with research interests in Sexually Transmitted Infections (HIV/ AIDS), Queer Studies, Media and Anthropology. Qureshi holds an M.Phil in Anthropology and double masters in Anthropology and English Literature. He has served health related national and international philanthropic organizations since 2008.

Rangarajan, Vimalkrishnan

The Role of Emotion in Conceptual Graphic Design: A Study of Design Students

All design endeavours, after a series of iterations in the initial phases, culminate in a creative outcome. In such initial phases, known as conceptual design, the iterations performed by designers involve engagements with different kinds of inspirational sources. These sources of inspiration include material such as visual images and prior examples, all collated into a corpus known as a mood board. During engagements with such mood boards, the emotions of designers can significantly influence the quality of their creative inspiration as well as their outcomes. But major research studies on design creativity and inspiration largely focus on the cognitive aspects of designing while tending to ignore the designers' emotions. This research project investigates the emotional aspects of design creativity and inspiration, specifically in a graphic design context. This is done by comparing how new media formats like virtual reality and traditional mood board components such as photographic images influence the emotions of design students as they solve a graphic design problem. Through a combination of methods which record descriptive phenomenological accounts, physiological changes, sketching videos and retrospective verbal protocols, the study explores the role of emotions in conceptual graphic design.

Vimalkrishnan Rangarajan has a background in mass communication and he is currently pursuing a joint PhD. with Indian Institute of Technology Hyderabad and Swinburne University of Technology. His research focuses on the role of affect in design creativity, design inspiration and the design process.

Scott, Anne

A PhD thesis title: Chicken or egg?

When should you choose your project title? What is the function of the title in relation to the developing thesis, and to the final product? What is likely to induce a reader to actually read your abstract, and then follow on by reading the full account of your project? In reality, we are asking, "Which comes first, the title or the thesis?" Effectively we aim to determine how a title which has been devised, adopted and settled can affect the nature and contents of the research. Conventionally, there will be no dust jacket or illustrated book cover; so, can the completed research be summarized by a title of one brief pithy phrase? In this short paper some general principles for title development are proposed, before my own project title is considered as an example. The connotation and significance of each word is considered. Even the use of imagination in the methodology is included. In the absence of cover illustration, implied word pictures are presented. It is made clear that much thought has been given to choice of words and to the use of the title as a reference point in carrying out the project. Finally, the question "Which comes first?" is answered.

Anne Scott is completing a lifetime of learning and teaching as an educator, primarily in mathematics, the sciences, and computing, but now as a PhD research student in Philosophy at Swinburne University of Technology. Her interests include ageing and aged care, politics, her family, and her current research related to artificial intelligence.

Sharifi. Farahnaz

Urban Greenspace and Residents' Subjective Wellbeing

Given rapid population growth, and resulting urban growth in Australia, there is an increasing trend towards heterogeneity of suburbs with regards to access to greenspace. In this growth context, this study aimed to understand the potential impacts of unequal access to greenspace on residents' wellbeing in the context of Metropolitan Melbourne. In doing so, a hedonic model of residents' subjective wellbeing was developed. The research was conducted in two steps. First, distances to all greenspaces, obtained from GIS network analysis, were used in a gravity model to develop indices of greenspace accessibility. Second, the panel data regression of Household, Income and Labour Dynamics in Australia Survey (HILDA) dataset over 2001-2017 was used, to control both individual and neighbourhood effects, and obtain the effect of interest. The results supported the existing literature on the positive

effect of greenspace access on subjective wellbeing. The effect of greenspace on subjective wellbeing was significant in outer suburbs, but not in inner ones. It was shown that this can be accounted for in differences in the size of greenspaces in inner and outer suburbs, where it was found that access to only large greenspaces has a significant effect on subjective wellbeing. The implications for urban planning and policymaking will be discussed.

Farah Sharifi's experience as an urban planner is the foundation of her research in urban spatial analytics with a focus on quantifying urban amenities accessibility and assessing their impact on social issues. She is particularly interested in understanding the spatial distribution of urban amenities; its transition; and its effect on residents' well-being.

Shittu, Olamide

Emerging sustainability concerns and policy implications of urban household consumption

The Sustainable Development Goal 12 emphasises the importance of households in achieving sustainable consumption before 2030, especially in urban centres. However, since its adoption in 2015, no study has sought to synthesise the scholarship conducted around the emerging urban household consumption challenges that could inhibit the achievement of Goal 12. Through a systematic literature review, this paper assesses these challenges while critically examining related policy implications for achieving sustainable consumption. The review notes that in recent years, researchers have explored a range of issues including energy consumption, sustainable lifestyles, consumption footprints and class relations in urban household consumption through models and social perspectives. The urban household challenges identified include, inter alia: intensifying household consumption; rising commodification of household activities; continued reliance on unsustainable energy sources; low levels of sustainability education; high costs of sustainable lifestyles; and class differences in sustainable consumption patterns. In addressing these problems, the literature suggests some strategies such as greening urban infrastructure, involving households in intervention programmes and promoting sustainable education, among others. Furthermore, to achieve Goal 12, future research and policy initiatives should consider the impact of materiality in household consumption, explore the interlinkages of household consumption with wider socio-cultural institutions and be more practice oriented.

Olamide Shittu is a PhD candidate at the Centre for Urban Transitions. Previously a Management Scholar at Lagos Business School, he has consulted for Oxford Policy Management Limited and published in peer-reviewed journals such as *Resources*. Olamide's research interests include sustainability, development studies and strategy.

Sousa, Amandia Braga Lima

Primary health care in rural and remote territories: An analysis of the similarities and differences between Australia and the Brazilian Amazon.

Australia and Brazilian Amazon present common challenges regarding health services in rural and remote areas. These include a considerable portion of its population living in small nuclei with difficulties in access to urban centres, the presence of significant community and geographical diversity and, also, more impoverished health conditions in rural and remote areas when compared to populations living in urban areas. This study aims to examine the government health policies proposed in both countries to (i) determine the extent to which these policies address rural issues, (ii) identify those countries priorities in acting in rural and remote areas and (iii) describe the models they adopt in Primary Health Care in rural and remote regions, problems identified and solutions presented. Critical discourse analyses will be used to document and explore the concepts found in these policy documents, with a focus on the inclusion of the diversity in these localities in the planning and organization of health services. This study expects to increase service knowledge and contribute to rural and remote health policies in the respective countries.

Amandia Braga Lima Sousa is a PhD student at University of São Paulo (Brazil) and currently she is a visiting research student at Swinburne University of Technology. She has a Bachelor of Psychology, a graduate degree in anthropology, a Masters in public health and is a researcher at FIOCRUZ (Brazil).

Stockdale, Thomas

The Art of Combat: Exploring the function of the film fight director and their role as an author

Authorship is a complex topic that permeates many creative industries, but the necessary collaboration of filmmaking complicates this concept further. Although films are made through the collaboration of dozens, or even hundreds of people working together, the director is sometimes called the author or Auteur of the entire creative process. Auteur-like directors, such as Quentin Tarantino or Alfred Hitchcock, are frequently mentioned in relation to filmmaking, but it is rarer to have the term used to describe professionals in other filmmaking departments. Due to the way in which many film scripts are written, fight sequences are often not described in any detail. It becomes the job of the fight director to write and choreograph these sequences from basic set-ups, so they fit into the narrative and aesthetics of the rest of the film. Although they work with the film's director, can the fight choreographer be considered the author of the combat sequences they create? This paper approaches this question by observing the function of the fight director alongside theories drawn from the topic of authorship to examine if the term 'author' can be applied to the role. Additionally, a detailed analysis of how fight sequences are produced is explored along with examples drawn from prominent fight directors, such as Bob Anderson, to give context to the study.

Thomas Stockdale is a 3rd year PhD candidate at the Swinburne University of Technology. With almost a decade of experience in the film industry as being a fight instructor, he is studying the performance art of Fight Choreography and its relation to cinematic narrative and character.

Suhendra, Fanny

The role of graphic design in Indonesia's Revolusi Mental campaign

Indonesia's ongoing Revolusi Mental campaign — a national project initiated by President Joko Widodo - addresses a perceived regressive mentality in Indonesian society in relation to issues ranging from corruption and intolerance of difference to littering. Such behaviours are seen as barriers to Indonesian social and economic advancement. The campaign addresses Indonesians at all levels of society. However, despite significant funding and other forms of government support, it is generally agreed that the campaign has not been successful in engaging its audience. Against the background of Indonesia's complex history of authoritarianism and colonialism, this paper analyses Indonesian citizens' online responses to the visual components of the Revolusi Mental campaign. Thematic analysis of this material shows a general neglect of fundamental graphic design principles as well as a surfeit of didactic and infantilising imagery. A lack of meaningful and engaging visual content has failed to resonate with Indonesia's complex, multicultural and social stratified society. This analysis correlates strongly with the unenthusiastic response of Indonesian citizens on social media, which suggests a wholesale neglect of the campaign's messages. The campaign's lack of clarity and consistency in its content has seen online respondents turn to citizen journalism and blog posts to express their interpretations and critique of the campaign.

Fanny Suhendra is a PhD candidate in Swinburne University of Technology researching the use of graphic design in governmental social and political campaign.

Tan, Linus

Reconsidering design reflections as an act of tacit knowledge production

This research arose from an existing problem in design practice concerning how design activities are acknowledged as knowledge creation activities by design clients. In other words, clients do not realise designing also involves research, reflecting, learning and creating new knowledge. This research investigates how knowledge management theory can build a framework that captures and communicate design reflections as knowledge in the architecture discipline. The research offers architects a framework to capture their reflections from the design process as knowledge and communicate this knowledge to their clients. Additionally, this framework offers architecture practices a method to capture and retain knowledge from their employees before they exit the firm. The research is built on a foundation of Polanyi's notion of tacit knowledge (Polanyi, 1966) and re-examines the concept of the Reflective Practitioner (Schon, 1983) with the Socialise, Externalise, Combine & Internalise Model, commonly referred as the SECI model (Nonaka & Takeuchi, 1995; Nonaka, 2000). Schon elaborates on how reflections are used by designers to self-teach and selflearn design. However, the mechanisms remain abstract and the knowledge learnt from reflection are often non-transferable between designers. When these reflections are considered

an act of tacit knowledge production, Nonaka's SECI model becomes a potential framework that captures reflections as knowledge. Simply put, a model seeks to capture personal reflections as explicit and comprehensible information for others to learn from.

Linus Tan's research focuses on how to communicate the value of design expertise clearly to win projects. Currently, he creates bespoke competitive strategies for firms to leverage team expertise in winning new projects. He also teaches design and entrepreneurship at Swinburne University of Technology.

Thorne, Natalie

Investigating therapeutic pathways targeting autism spectrum disorders using nanoparticles

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition affecting approximately 1 in 100 Australian children. Although the exact cause of ASD remains unknown, singlegene variants (monogenic causes) of ASD have been identified. Such genes allow researchers to investigate the molecular pathway disruptions causing the diversity of symptoms associated with the disorder. One example of a monogenic cause of ASD is PTEN, with PTEN mutations known to cause a number of severe neurological deficits in developing children. Reduced PTEN in the brain during neurodevelopment causes uncontrolled cell survival and growth which is thought to result in neural-circuit disruptions that may be responsible for the social and communication difficulties observed in ASD. One method to prevent such growth pathway disruptions during neurodevelopment would be to increase functional PTEN levels in cells. This study aims to investigate methods for increasing the level of PTEN during development through the use of nanoparticles called exosomes. Exosomes containing functional PTEN protein will be delivered to PTEN-ASD patient-derived fibroblasts and to an ASD-like Pten deletion mouse. I hypothesise that delivering PTEN protein to cells/ mice with PTEN mutations will increase cellular abundance of functional PTEN thus inhibiting the dysregulation of the growth pathways under the control of the gene. Findings from this study will identify potential therapeutic pathways to improve the development of children with PTEN-ASD.

Natalie Thorne has completed her Bachelor of Biomedical Science (Molecular Life Sciences) at Deakin University and Honours in Health Sciences at Swinburne University. She is currently completing her PhD in Neuroscience at Swinburne University and has special interests in molecular pathway disruptions in Autism Spectrum Disorder with macrocephaly.

Tjung, Caroline

A case study of co-designing a technologybased speech learning app with parents for young children

While designers have traditionally relied on their creative intuition to solve clients' problems, more recently they have trialled a variety of end-user methods to include audience preferences. Co-design is one of these methods and has been used in other design fields, however it is not commonly used by graphic designers. This research aimed to understand

how including a variety of audiences in the graphic design process influences the translation of paper-based education materials into a technology interface for young children with speech delays. An iterative co-design method was used with 12 Masters of Design students, 14 parents of young children, two childcare workers and two speech pathologists in four phases of co-design workshops. The findings were categorised using a thematic analysis method, revealing insights into how including a variety of audiences in the design process influenced the design outcome. This paper presents three significant findings for designing a speech learning technology interface: i) supporting parents' interactions with their children, ii) using animation to keep children engaged, and iii) having a story for children to relate to. I argue codesigning with a variety of audiences leads to design outcomes that are well suited to audience preferences.

Caroline Tjung is a PhD candidate at the Swinburne University of Technology. She holds a Masters Degree in Communication Design from Swinburne University of Technology (Australia) and Bachelor Degree in Visual Communication Design from Tarumanagara University (Indonesia). Her research interests include co-design, interactive games and designing for children.

Tran, Vincent

Exploring Early Shared Universes: Construction, Continuity and Consistency in Asimov's Foundation

Recently, the narrative device of the "shared universe" has arisen in both academic scholarship and popular criticism. Built around the notion of tying together multiple texts and stories into one unified, coherent story space, the success of franchises such as the Marvel Cinematic Universe (MCU), a 20 plus film shared universe, has seen other cinema franchises follow suit. This has also seen a parallel emergence of dedicated research into the MCU. Much of this scholarship in this area, however, has been concerned with cinematic or comic book shared universes. Very little research exists outside of those media, such as within literary fiction. Furthermore, the few literary texts that have been explored in the field eschew historical antecedents, with most of the shared universes scrutinized being from the last few decades. This paper will examine the early shared universe of Isaac Asimov's speculative fiction novel series Foundation and detail its inception and maintenance over its 90-year lifespan. The paper will draw comparisons between how Asimov (and subsequently the Asimov estate) built Foundation and the development of modern-day shared universes. The aim here is to identify some fundamental motifs and patterns that exist throughout all shared universes as well as points of divergence among them. The overall objective of the analysis is to work towards a framework to analyse shared universes, one that is both media agnostic and historical.

Vincent Tran is currently a PhD candidate at Swinburne University in Media and Communication. His doctoral research is into the history, rise and proliferation of the shared universe from 19th century literature to current day. His investigation looks into building a framework to classify the shared universe and its many different permutations.

Uddin, Mohammed Nazim

Further validation of psychometric evaluation of the modified seven-item Kessler Psychological Distress Scale (K7) and 19-items World Health Organization Quality of Life (WHOQOL-BREF) questionnaire in rural Bangladesh using Rasch Analysis: A cross-sectional study.

Globally, one out of every four individuals is influenced by psychological distress at some point in their lives. Their quality of life (QOL) is affected by many components that incorporate physical prosperity, psychological and emotional states, social associations, individuals' feelings and connection. Early diagnosis of psychological distress combined with QOL has been essential to measurement to ensure effective and targeted interventions among people suffering from a variety of diseases. This investigation expected to approve the psychometric properties of the K7 and WHOQOL-BREF in a different population, where it may have prospective application in clinical settings in rural Bangladesh. This study collected information from 300 adults aged 18-85 years using a mobile data collection tool (CommCare). Using Rasch Analysis both the K7 and the WHOQOL-BREF showed adequate internal consistency, reliability, unidimensionality, as well as similar functioning for different age, sex, educational attainment, and socio-economic conditions. Further, validation in different populations confirmed that both scales could be used as a routine measure of psychological distress and QOL screening instruments. Moreover, future research should test the tools in different clinical settings within other representative rural areas of Bangladesh. The researcher can then better determine a valid cut-off score for assessing the severity of psychological distress and for measuring the effectiveness of health related QOL assessments for people suffering from chronic or other diseases.

Mohammed Nazim Uddin is a final year PhD candidate at the Department of Statistics, Data Science and Epidemiology, Swinburne University of Technology. This presentation will focus on a particular chapter of his work. His specific interest in developing models using advanced statistical tools and models, such as factor analysis, path analysis, Rasch Analysis and data mining.

Vasan, Shradha

Investigating the cardiovascular and metabolic profiles of young adults with loneliness and social anxiety

Loneliness has increasing been recognised as a major public health issue. Chronic loneliness has been associated with increased mortality, poor physical health symptoms and a number of cardiovascular diseases (e.g., hypertension, coronary heart disease, stroke). However, majority of the research investigating the impact of loneliness on cardiovascular health has focused on either older adults or used animal models. Missing in the literature is the exploration of the impact of loneliness on cardiovascular health in other populations which are vulnerable to loneliness (i.e., young adults), as well as the influence of other co-occurring mental

health symptoms which may exacerbate feelings of loneliness in young adults, such as social anxiety. The aim of this study will be to investigate the cardiovascular and metabolic profiles of young adults with and without chronic loneliness and social anxiety. In order to address this question, we will assess the participant's loneliness and social anxiety levels as well as test for a number of early markers for cardiovascular diseases, including endothelial function, arterial stiffness, heart rate, cardiac output, stress response, and sympathetic nervous system activity. We expect to start recruiting participants for this study in August 2019.

Shradha Vasan completed her honours in Psychology at Swinburne University in 2018. She is currently undertaking a Doctor of Philosophy in Health Sciences at Swinburne University and hopes to continue research in Psychophysiology after finishing her PhD.

Vik, Chris

Musical instrument design for virtual reality

Virtual Reality (VR) is now a consumer-priced hardware platform that places the user within a 3D virtual space and allows for intuitive interaction through gestural control. Unfortunately, the few currently available VR music instruments rely on reusing non-VR-based musical interface design principals. These traditional 2D interface paradigms neglect two of VR's most important contributions: 3D-space and gestural input. Until we consider these elements in the design of new interfaces, the full potential of will VR as a platform for creating music will not be realised. This paper follows my creative practice research, which underlines the challenges involved in VR-based virtual musical instrument design. I present a set of non-VR-based instruments and highlight their limitations when used in VR. I also demonstrate a series of virtual musical instruments n real-time during the presentation, which have been designed from the ground-up to make better use of VR. Finally, I provide a summary of the development process and introduce a typology for designing VR-based music instrument interfaces. The research findings show the limitations of applying non-VR music interface design within VR environments, introducing a novel approach to creating music in VR and highlighting considerations for future research.

Chris Vik completed his B.A. (Fine Art) at RMIT in 2013, then established himself as a media artist, music interface designer and software developer. His research interests include music gesture, virtual reality, motion capture and human-computer-interfaces. Chris is currently teaching Interactive System Design at RMIT and is an iPhD candidate at Swinburne.

Vilagosh, Zoltan

Practical Computer Models for the Study of the Interaction of Terahertz Frequencies with Human Skin

Terahertz (THz) radiation encompasses frequencies of 0.1-10 x 1012 Hertz (Hz). The most useful THz band is 0.1-1.5 THz (wavelengths 0.15-3.0 mm). THz is being developed

for industrial, security and imaging purposes. Computer based modelling of the interaction of THz with human skin is necessary due to poor technical capability for direct in-vivo and in-vitro study. An understanding of the predictions any computer model makes rests on a compromise between signal duration, bandwidth, computer capability, sensor choice and placement, meshing size, simulation, number and size of time-steps. The study of THz and human skin interaction also has unique challenges; the skin is a multilayered broad sheet, thousands of wavelengths wide but only 0.2-2.0 wavelengths thick. The absorption and transmission (dielectric) properties of skin components change with hydration levels, frequency and temperature. These properties are poorly documented, and thus rely on elaborate statistical estimates, based on limited and indirect data. Before this project, no precise computational model existed. The multi model simulation methods needed to be largely developed de novo. They encompass models of thick and thin skin, hair, sweat ducts and nevi delivering a resolution of 0.01 mm.

Zoltan Vilagosh is a 3rd year PhD candidate. He received the MBBS from the University of Melbourne, the MSc from Swinburne, and the MPH and Tropical Medicine from James Cook University. His research involves computational modelling physical effects of THz radiofrequency radiation on the skin and the application of THz for imaging and therapeutic purposes.

Water, Jeff

"There is a bunch of us 'maturies'": identifying success strategies of mature age students in their first year at university

In recent decades, Australian universities have actively promoted diversity in the student population. One of the main beneficiaries of this shift has been mature age students, which is generally recognised as those over the age of 21. Research has established that mature age students face particular challenges when commencing their studies, and each of these challenges have the potential to influence them to discontinue their education. Previous research on mature age students has shown that their successful integration into tertiary study is influenced by factors such as engagement, motivation and notions of success. This paper will provide findings from a longitudinal study that was undertaken looking at mature age students over their first year of university studies. Drawing attention to notions of success and utilising Bourdieu's Cultural Capital and Habitus as a theoretical framework, this research aims to uncover strategies that assist mature age students overcome challenges. This research sought to uncover some of the successful strategies employed by mature age students and identify using cultural capital theory why these strategies were successful. Of particular importance is understanding what universities can do to better support their mature age student cohort successfully complete their studies.

Jeff Waters is a PHD candidate at Swinburne University. He completed a B. Soc Sci, and B.A. (Hons) at Swinburne and a Grad Dip. Ed. at RMIT. His areas of interest are Learning and Teaching. His current research focus is the mature age student

experience at University. Moving from "talking to" towards "learning with": Stories of private schools' partnership with parents in Hong Kong.

Webster, Sandra

Moving from "talking to" towards "learning with": Stories of private schools' partnership with parents in Hong Kong.

International schools in Hong Kong face unique challenges, encompassing a wider definition of family, and a transient school community. When schools and families work together, learning outcomes are improved. Despite Government support, little has changed over time to make this partnership a reality. Moving the family-school partnership from theory into the life of the school has been a difficult transition. This study sought to understand the perceived reality of the family-school partnership as a lived experience. Building on the work of Epstein, it asks: How do parents and schools interact to form a family-school partnership in the setting of international schools in Hong Kong? Using questions based on Epstein's (2011) Model of Overlapping Family and School Spheres of Influence, semi-structured interviews were conducted with parents and teachers. The results both support and disrupt existing research. While the concept of 'education' and 'schools' has expanded over time, schools' interaction with parents has not evolved in a similar way. Rather than a programme or policy, partnership with families is a willingness by schools to share power with parents; to move away from constantly "talking at" them, towards an inclusive approach where all family members' input is valued and their voice is heard.

Sandra Webster, originally from New Zealand, is a PhD student and currently a principal of a large international school in Hong Kong, a position she has held for over 13 years. The area of family-school partnership has been of enduring interest to her over a variety of settings and roles.

Widyastuti, Dewi

Identity Expressions in EFL Creative Writing In Indonesia

Identity and language learning are interlinked because the learners' perception of themselves may influence the way they study the target language. The learners' identities can be developed through classroom practices, for example, through creative writing. While previous studies have reported on the applicability of creative writing classroom practices for identity expression, most are in the first language or second language context. This may not be applicable in the Indonesian context where English is a foreign language. In Indonesia, although creative writing has started to flourish, only several studies have been generated in this field. This presentation offers a review of the literature on creative writing, placing it in the context of identity expression in EFL learning in the Indonesian classroom. The literature reveals that studies on creative writing in Indonesia explore the perception of creativity, promoting creativity and character building through creative writing. Out of these studies, only one discusses identity. The anticipated research findings will be used to help classroom instructors

better understand how creative writing techniques, practices and instructions can be utilized for identity formation of EFL learners to elicit more positive learning attitudes.

Dewi Widyastuti is an offshore student currently pursuing her Ph.D. in TESOL (Teaching English to Speakers of Other Languages) at Swinburne Sarawak. She is in the early of stage of candidature. Prior to her study, Dewi taught in the Department of English Letters, Universitas Sanata Dharma, Yogyakarta Indonesia.

Wijewardhana, Udani

A statistical model for the persistence of threatened birds developed using citizen science data: Systematic Review

Due to risk factors such as climate change, habitat destruction, human population growth, pollution, bird extinctions are now occurring at a rate that far exceeds their speciation rate. There are no robust indicators of biodiversity conservation that can be used to complement existing national indicators of economic and social health. This systematic review includes statistical methods to model and evaluate the persistence or extinction risk of threatened bird species using citizen science data. Adhering to PRISMA guidelines, this review systematically searched for relevant journal articles which were published between 1900 and January 2019 in the three databases ProQuest Central, Scopus and Web of Science. Only the journal articles which used a statistical model, predictive model or trend analysis in analysing persistence or extinction risk of threatened bird species which were developed using citizen science data were included in this study. Bird species in near threatened or least concern categories that are declining in population/range are also included. This systematic review was able to identify 39 unique articles for this purpose. A quality assessment tool was created in order to evaluate these articles. Generalised linear models were the most popular methods used for the analysis followed by linear mixed models, machine learning models and persistence probability models respectively. The review findings suggested several strategies such as occupancy models, abundance models and persistence probability models to measure the persistence and extinction risk of threatened bird species.

Udani Wijewardhana is a PhD candidate at the Swinburne University of Technology. She holds a first-class special BSc (Hons) degree in Computational mathematics and statistics from University of Colombo, Sri Lanka. Her background is in data science with experience in private practice. Her research interests include statistics, ecology and data science.

Wykes, Katie

The effects of visual imagery vividness on perceptual rivalry

Visual illusions such as binocular rivalry and the motion after effect have been used as a mechanism to probe visual imagery vividness in an objective manor in recent times. Several studies have indicated that visualising an object, colour, or motion can influence your perception when viewing a preceding image. Furthermore, how vividly an individual can visualise the object

correlates with the perceptual change. However, there has been no research to investigate if this priming occurs in both the dorsal and ventral visual pathways. The study used a perceptual rivalry stimulus to investigate whether visual imagery could prime a visual stimulus either viewed with global form or perceived with local details. We hypothesised that visual imagery vividness would prime both local and global percepts, however, the effects would be stronger on the global percept. As we expected, there was a significant correlation between vividness scores and percept priming, however contrary to our expectations, this was stronger in the global percept condition. This suggests that 'visual priming' with the use of visual imagery may be stronger for global perception rather than perceiving local details.

Katie Wykes completed a BA in psychology and psychophysiology, and an honours year (BHSc) specialising in cognitive neuroscience at Swinburne and is now a PhD candidate. She is specifically focussing on visual imagery, and its relationship with visual processing and perception. This includes projects using methods such as psychophysics and EEG.

Yolland, Caitlin

Antioxidants, Cognition and Schizophrenia

Schizophrenia is a debilitating psychiatric illness that comprises of both positive and negative symptoms, in addition to impaired cognitive function. Oxidative stress has been implicated both in schizophrenia and in other disorders where cognitive impairment is a primary symptom. N-acetylcysteine (NAC) has therefore been suggested as an adjunct antioxidant treatment for the negative and cognitive symptoms of schizophrenia. A systematic review and meta-analysis were conducted to investigate randomised placebo-controlled trials that had explored the efficacy of NAC in schizophrenia patients. We undertook pairwise meta-analyses of NAC vs placebo for psychosis symptoms and cognition. Seven studies met inclusion criteria for the pairwise meta-analyses. Negative symptoms and total score on the Positive and Negative Symptom Scale were significantly improved in the NAC group after 24 weeks of treatment. The cognitive domain of working memory also improved with NAC supplementation. Evidence supports the notion that NAC may be a useful adjunct to standard treatment for the improvement of schizophrenia symptoms, as well as the cognitive domain of working memory. Treatment effects were observed at the later timepoint (≥24-weeks), suggesting that longer interventions are required for the success of NAC treatment.

Caitlin Yolland completed her Bachelor of Arts (Drama)/
Bachelor of Science (Psychology) (Hons) at Deakin University.
She is currently a PhD Candidate at Swinburne, with a focus on cognitive function in chronic Schizophrenia. Caitlin is passionate about science communication, with a view to grow understanding mental health conditions in the general population.

Young, Lauren

Diet and Brain Function: Relationships between Diet Quality, Cognitive Function and Mood into Older Age

There is substantial research showing modern Western diets are insufficient in essential nutrients which can lead to poorer mental health outcomes in the long term. Essential micronutrient intake is required to support many metabolic processes within the brain. Insufficiencies and bioavailability of micronutrients may result in one or many of these processes to be disrupted, and ultimately compromise cognitive processes and mental health. Previous research has tended to focus on participants from clinical groups with existing co-morbidities or with more optimal nutrient status. This may limit the ability to observe improvements in behavioural outcomes. There is little research examining the effect of diet quality and nutrient status on cognitive and mood outcomes in non-clinical populations. The present study recruited a cognitively healthy sample with optimal and sub-optimal diets to investigate associations between diet quality, cognitive function and mood outcomes. This presentation will report preliminary findings from baseline analysis as part of a larger clinical trial. This research will strengthen our understanding of the relationship between diet, cognition and mood into older age, and how diet may offer a promising modifiable risk factor to prevent or slow the aetiology of these brain disorders and diseases.

Lauren Young is a PhD candidate from the Centre for Human Psychopharmacology. She has a background in psychology and linguistics, and her work investigates the relationship between dietary habits, cognition and mood in an ageing population. She is also interested in health communication.

Zhang, Zhi Qing

Understanding the barriers and motivators for older adults in engaging with local government e-services

E-government, also known as electronic government, digital government or online government, is the use of information and communication technology (ICT) to conduct a wide range of interaction with citizens, yet research shows that although their implementation is usually accompanied by ambitious goals, citizens' use of these systems is often temporary, with egovernment services having a high failure rate. At the local government level, significant funds and effort are invested in engaging with older people online and in providing e-services. However, data provided by the Australian Bureau of Statistics shows a lag in the uptake of e-government services by people over the age of 65 in comparison with their general engagement with the digital world. This disparity is worrying given Australia's rapidly ageing population and that older adults are a group highly reliant on government services. The egovernment literature recognises this lag in older citizens' uptake of e-government services, but why age influences resistance to use has received limited attention. To provide rich. contextualised insights into this issue, this study will use an exploratory case study on the 'Over 55s', a dedicated website

provided by Boroondara City Council for its older residents. The study expects to discover the barriers and motivators for them when engaging with local e-government service by utilising Dijk's four successive kinds of access to digital technology model. The results will be formed as a set of service design guidelines for supporting local government to facilitate their e-government services for older adults.

Zhi Qing Zhang is a second year PhD student at Swinburne University of Technology researching e-government services and older Australians. Zhi Qing Zhang is particularly interested in exploring the barriers and motivators for older Australians engaging with e-government services at a local government level

Zwack, Clara

Exploring the Cardio-Metabolic Health Profile of Young Adults with Intellectual Disability

Young adults with Intellectual Disability (ID) are at higher risk of premature death, and experience increased prevalence of chronic diseases than the general population. Yet, this population has typically been excluded from research, or have been studied retrospectively through health records or death registries. This paper explores the cardiovascular health profile of people with ID aged 18-45 years with the aim to understand whether this population is more pre-disposed to display early signs of cardiovascular disease (CVD) compared to the general population, and to identify whether their environment may contribute to their condition. Clinical data is collected through non-invasive cardiovascular assessments, blood sample analysis and questionnaires (relating to lifestyle and wellbeing). Preliminary results indicate that the ID cohort have increased prevalence of overweight/obesity, increased cardiac autonomic neuropathy risk, reduced community integration and poorer diets compared to their age-matched counterparts, all of which have been demonstrated to contribute to CVD risk. This study argues that health screening in the young ID population could prove a useful tool in early detection of CVD risk. It is of utmost importance to provide young individuals living with an ID with the means to improve their health and wellbeing, and to minimise inequalities in health.

Dr Clara Zwack is a PhD candidate at Swinburne University of Technology. Her research focus is cardio-metabolic health in vulnerable populations. She also holds a Bachelor of Science and a Doctor of Physiotherapy from the University of Melbourne. Alongside her doctoral studies, Clara is working as a physiotherapist with people who have a cognitive impairment.



