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Ivanka Prichard Honours Program Coordinator
College of Nursing & Health Sciences
P: +61 8 8201 3713 | E: ivanka.prichard@flinders.edu.au
flinders.edu.au/study/apply/honours
**Supervisors**

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* Please note: this booklet contains example projects within the College of Nursing & Health Sciences for the Bachelor of Health Sciences (Honours) program. Also see [https://www.flinders.edu.au/caring-futures-institute/researcher-profiles](https://www.flinders.edu.au/caring-futures-institute/researcher-profiles) for overall research areas. Please contact the Honours coordinator (Ivanka.Prichard@flinders.edu.au) if you have an area of research interest that is not listed.

** Students are encouraged to contact potential supervisors to discuss Honours projects with them in more detail before submitting an Honours application.
Possible Honours Thesis Project Areas 2020

Bazargan, Maryam

http://www.flinders.edu.au/people/maryam.bazargan

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<td>Medicalised birth models for healthy pregnant women have become the dominant care model in Iran, with the second highest rate of Caesarean Section (CS) in the world. The average rate of CS is 62.0% and 92% in public and private hospitals, respectively. Policies that have been adopted in Iran's maternity system in the last few decades such as marginalising midwives’ roles in normal child-birth have changed the birth culture dramatically. Iranian woman has a fear of normal child-birth and believes that CS is safer than normal birth, and so prefers to give birth by CS. In recent years many women in childbearing ages have migrated to Australia and the number of Iranian women giving birth in South Australia has increase from 55 birth in 2011 (0.3%) to 126 birth in 2014 (0.6%). It is important to understand if this relocation would alter women’s perception towards normal birth. This study will use a mixed model approach. This study aims to explore the demographic childbirth data for Iranian women migrated to Australia in comparison with Australian born woman and to discover their approach/perception towards natural birth through midwifery led care.</td>
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Chakraborty, Ranjay

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<tr>
<td>Primary supervisor: Dr. Ranjay Chakraborty</td>
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<tr>
<td>Main area of research focus: Myopia (or short-sightedness) and eye growth in humans</td>
</tr>
<tr>
<td>Flinders website: <a href="https://www.flinders.edu.au/people/ranjay.chakraborty">https://www.flinders.edu.au/people/ranjay.chakraborty</a></td>
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| Secondary supervisor: Dr. Alex Jaworski |

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<td><strong>Effect of spectral composition of light on myopia in young adults</strong></td>
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<td>Outline: Myopia, short-sightedness, is the most common vision disorder among children and young adults. It currently affects around one third of the Australian population. Myopia, especially in severe cases, may cause irreversible vision loss due to associated eye complications. Using a light emitting device, this study aims to examine the effects of short-term exposure to red, green and blue ambient lighting on eye structures that are involved in the regulation of eye growth and myopia development.</td>
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Project fits well within the “Better Communities” theme of the CFI. Examining the link between spectral lighting and myopia will open a novel and exciting avenue for future research.

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Proposed Honours Project

**Exploring patients' experiences of avoidable hospital readmissions**

Brief outline: This project will explore, via in-depth interviews, people’s experiences of being discharged from hospital and readmitted unexpectedly and unnecessarily. This aim is to elicit patients’ perspective regarding why their readmission occurred and how it could have been prevented. Whilst avoidable readmissions have been the subject of much research, readmission rates continue to rise. Reducing these rates is a pressing concern in the current political climate: the Australian Government will no longer reimburse public hospitals for several common avoidable readmissions. A glaring omission in existing readmission research is understanding how fundamental care, that is, care for universal needs (e.g., mobility, nutrition), contributes to the likelihood that someone will experience an avoidable readmission. This project will fill this gap.

Suggested reading:

Alignment with Caring Futures Institute:
The project best aligns with the theme ‘Better Care’. Fundamental care refers to care needs required by everyone and which are vital for survival and well-being. Despite the universality of fundamental care and its centrality to health and well-being, such care is routinely neglected in care settings globally. Understanding how to improve the delivery of such care, in a consistent, person-centred manner, will have substantial benefits for, and be able to underpin, care delivery in all healthcare systems.

Additional information
We are currently seeking ethics approval for this project and will also take part in data collection and analysis. The project is not health discipline specific. If the student has some experience in qualitative analysis that would be beneficial, but it is not necessary.
Coveney, John

Supervision team
Primary supervisor: John Coveney, PhD
https://www.flinders.edu.au/people/john.coveney

Secondary supervisor: Karen Patterson, PhD

Proposed Honours Projects

**Eating alone together**
For older people, eating alone has consistently been found to be associated with increased nutritional risk and social isolation. This research will examine the health and social benefits of sharing mealtimes using 'virtual' communities. Specifically, the project will use standard iPad technology to join together people who would normally be eating in isolation with others who may also be isolated or may be sharing an eating event 'at the table'. The results will be of great benefit to organisations that have to cater to individuals who are not able to be present at mealtimes and would benefit from company through sharing 'virtually'. The research fits with the Better Care theme of the Flinders Caring Futures Institute.

References:

**Hard of hearing and social eating**
Current evidence demonstrates a relationship between increasing difficulties with hearing and withdrawal from social eating events. Individuals who are having increasing problems with hearing are more likely to remove themselves from shared eating events due to difficulties with conversation and easy social interaction. Research in this area will examine the nature of the relationship between hearing competence and social eating, especially to explore ways in which homes, cafes and restaurants may be more accommodating of hard of hearing people. This research fits with the Better Care theme of the Flinders Caring Futures Institute.

Reference:
- https://www.hearinglink.org/living/lipreading-communicating/hearing-loss-eating-out/

**Food responsibilities of the ‘sandwich generation’**
The so-called ‘sandwich generation’ comprises those people who are primary carers for their children and for their parents and sometimes grandparents. The term ‘sandwich’ here is used to signify the position of those carers who are ‘sandwiched’ and carry a double burden of responsibility including juggling time and resources to support the needs of the cared for groups. Much of the sandwich generation responsibilities concern food provisioning and associated responsibilities. This research will further define the experiences of people in the sandwich generation in relation to food provisioning, and consider ways to support carers. The research fits with the Better Lives theme of the Flinders Caring Futures Institute.

Reference:

**Sharing the load**
In many countries the burden of the tasks required for food provisioning for family meal fall to women. There is evidence that shared mealtimes can be stressful and difficult to arrange when the bulk of the tasks related to home cooked meals is not shared. This research will examine
ways in which the tasks of sharing the responsibilities for food provisioning in families may be shared. This could include the use of many recent developments in the hospitality industry, including food delivery systems (Deliveroo, Uber Eats, etc), ready to prepare meals and recipe box schemes (Hello Fresh etc). The research fits with the Better Lives theme of the Flinders Caring Futures Institute.

Reference:
- Mehta, K. Coveney, J. Strazdins L., Booth, S "Feeding the Australian family: Challenges for mothers, nutrition and equity” Health Promotion International July 2019 https://doi.org/10.1093/heapro/daz061

Additional information
No specific background, knowledge or skills are required to undertake this project

De Bellis, Anita

**Supervision team**
Primary supervisor: Dr Anita De Bellis  
Aged Care, Dementia Care, End of Life Care  

Secondary supervisor: Associate Professor Julian Grant  
Child and Family Health  

**Proposed Honours Project**

**Intergenerational rhythms of care: translating knowledge on the innovative co-location of a dementia aged care facility and a Montessori middle school**

Best fit would be under the Better Communities research theme in the Caring Futures Institute

Project 1: Undertake a narrative analysis of the history and development of the Kalyra Woodcroft and Montessori Middle School community co-location. This will involve interviewing the co-location steering committee members for an historical mapping and documentation of this innovative project as part of a larger study. Development of an understanding of dementia care and Montessori principles would be expected during the project, and it would involve an analysis of the interview data, an historical mapping and development of a publication. Further research skills can be gained through participation in the larger project.

Project 2: Undertake a systematic (or scoping) review of the literature into intergenerational programs involving adolescents and people with dementia. This will involve a systematic search of the literature on an international basis, determining inclusion and exclusion criteria for articles to review, tracking of the search, review, analysis and discussion of the findings leading to a publication. Further research skills can be gained through participation in the larger project.

**Additional information**
An interest in research and qualitative methods of data collection and analysis will be required. Experience in working collaboratively with healthcare and teaching professionals is desirable. Good organisational skills and the ability to undertake independent work under the direction of supervisors. The potential exists to be involved in the wider project on a research assistant basis.
**Dickinson, Kacie**

**Supervision team**

<table>
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<tr>
<th>Primary supervisor: Dr Kacie Dickinson</th>
<th><a href="http://www.flinders.edu.au/people/Kacie.Dickinson">http://www.flinders.edu.au/people/Kacie.Dickinson</a></th>
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**Proposed Honours Projects**

**Project 1: Clean eating**
Popular, unregulated claims that have evolved from social media, like “clean eating” are increasingly influential. For example, clean eating was the top diet people reported following in 2019 to lose weight. In addition, food manufacturers are now creating products to align with these claims. However, clean eating is not well defined and consumer perceptions about these types of claims is not well understood. This project will apply novel methods to analyse features of online content that influences perceptions of these types of claims.

**Project 2: Tools to look at credibility of influencers**
This project will explore whether the social media content of health and fitness influencers is consistent with evidence based-messages about food, nutrition, chronic disease prevention and physical activity. It will involve establishing frameworks for selection of appropriate influencers on various platforms and then utilise content analysis methodology to describe social media activity, engagement and image and caption content.

**Project 3: Supplements and disordered eat/muscle dysmorphia**
Discretionary nutrition supplements (vitamins, minerals and protein) are promoted for optimising “wellness” are now mainstream. This project will sample a series of the most popular supplements and review claims to characterise their nutrition composition and related claims. The project will also involve surveying regular users of these types of supplements and explore associations with disordered eating behaviours and poor body image.

**Suggested readings:**

**Additional information**

None
George, Stacey

**Supervision team**
Primary supervisor: Stacey George  
https://www.flinders.edu.au/people/stacey.george  
Research focus is improving participation outcomes in health services

Secondary supervisor: TBC

**Proposed Honours Project**

Two projects;
1. Systematic literature review of increasing participation in functional activities (occupations) for people with Osteo arthritis on wait list for orthopaedic review at Lyell McEwin Hospital.
2. Pre and post study of intervention for increasing participation in functional activities (occupations) and quality of life for people with OA on wait list for orthopaedic review at Lyell McEwin Hospital.

The project aligns with Better Systems- The current system at Lyell McEwin Hospital people is that people with OA are referred to orthopaedics and have 1-5 year wait with no intervention. This project will aim to investigate the literature and the effectiveness of an OT based intervention targeting function and community participation for this group on the waitlist. The OT intervention will be developed with the Senior OT in Orthopaedics and will involve assessment of function and education, information of how to promote independence, equipment provision and referral to existing community groups. Over 200 people are currently on this wait list for orthopaedic review so a snapshot at the time of recruiting can be included.

**Additional information**
OT background would be useful but not essential

Gordon, Sue

**Supervision team**
Primary supervisor: Sue Gordon  
https://www.flinders.edu.au/people/sue.gordon  
Secondary supervisor: Bec Watt, Registered Music Therapist, Arts in Health, Flinders Medical Centre

**Proposed Honours Project**

**Evaluation of Music Therapy in the Acute Medical Setting**

Music has been considered as medicine for centuries. Music Therapy has shown to improve health and well-being through various neurochemical pathways that control pain, pleasure, stress and immunity. Arts in Health at Flinders Medical Centre (FMC) provides a range of music and arts therapies to patients, aligning with Better Care in the Caring Futures Institute.

Research question: “Does Music Therapy intervention improve patient mood and self-reported wellbeing?”

Design: Music Therapy intervention compared to usual care
Two sites of Geriatric Evaluation and Management service; one intervention site (FMC); one control site (Noarlunga Hospital)
Pre- and post-validated questionnaires (Profile of Mood States (POMS) or Geriatric Depression Scale (GDS); Quality of Life (SF-36))

Recommended reading:

Additional information
Basic understanding of empathic communication, health systems and research methodology is needed.

Supervision team
Primary supervisor: Sue Gordon https://www.flinders.edu.au/people/sue.gordon

Secondary supervisors: Steve Flatman, Allied Health Team Leader, Geriatric Evaluation and Management (GEM), Southern Adelaide Local Health Network (SALHN); Nicky Baker, PhD candidate, College of Nursing and Health Sciences

Proposed Honours Project

**GEM discharge process**

Geriatric Evaluation and Management (GEM) Units provide specialised care to older South Australians. GEM services are staffed by a multidisciplinary team who minimise patients’ disability and reduce the need to seek residential care. This research partnership between Flinders University and Southern Adelaide Local Health Network (SALHN) investigates if discharge from GEM meets the Australian National Safety and Quality Health Standards (ANSQHS) for hospitals Clinical Governance, Partnering with Consumers, Comprehensive Care and Communicating for Patient Safety as part of ‘Better Care’ in the Caring Futures Institute.

Research question: “How do discharge processes address person centred care and meet the ANSQHS standards?”

Recommended reading:

Additional information
Basic knowledge of health systems, interprofessional communication and research methodology is needed.
Reducing Delirium with the 'Eat Walk Engage' Program

Brief outline
This project is part of a larger study that aims to implement an effective evidence-based non-invasive delirium-prevention intervention, *Eat Walk Engage*, in Flinders Medical Centre. Delirium is a serious medical condition affecting up to 30% of older hospitalised patients. Characterised by disturbances of consciousness, attention and perception, delirium is a distressing experience for patients and carers that significantly increases the risk of mortality, falls, and dementia. There is no effective treatment for delirium, hence prevention is critical. *Eat Walk Engage* involves implementing a ‘package’ of evidence-based clinical intervention activities tailored to patient needs and local resources to improve nutrition/hydration, mobility and cognitive stimulation for older adults. To ensure the program is appropriately tailored, it is crucial to first assess the local context in which the program will be implemented. This project involves undertaking an audit within Flinders Medical Centre to assess local context needs and identify local barriers/enablers, providing crucial evidence to support the implementation of *Eat Walk Engage* within the hospital.

Suggested reading

The project best fits with the Better Systems and Better Care research themes.

Additional information
The project incorporates physiotherapy, occupational therapy, nutrition/dietetics and nursing. The student can choose to focus their project within their specific discipline.
Supervision team
Primary supervisor: Sarah Hunter
Main area of research focus: Knowledge Translation, Fathering and Masculinities
Profile: https://www.flinders.edu.au/people/sarah.hunter

Secondary supervisor: Rebecca Feo
Main area of research focus: fundamental care and men’s health
Profile: https://www.flinders.edu.au/people/rebecca.feo

Proposed Honours Project

Understanding how and why fathers seek support for parenting online

Brief outline
This project explores the ways in which men from diverse groups, including those who are widowed, separated, stepfathers and/or taking on the primary caregiving role, seek support for parenting through online forums. Help-seeking has typically been seen as a contradictory to traditional masculine ideals, accounting for men’s lower rates of health service use and poorer health outcomes, particularly for mental health, in comparison to women. Recent research, however, has provided a more nuanced perspective, showing that some men do indeed seek help, but often through different platforms, particularly those that provide anonymity, such as online discussion forums. Research has begun to explore how men seek help for fathering online but, as yet, there is a dearth of research examining how men who might not be part of a traditional nuclear family engage with these types of support services. This work is crucial for developing evidence that can support all fathers to be better engaged in their parenting, ultimately improving health outcomes for both men and their children.

Suggested reading
• Fletcher, R., & StGeorge, J. (2011). Heading into fatherhood—nervously: Support for fathering from online dads. Qualitative health research, 21(8), 1101-1114.

How project aligns with Caring Futures Institute
The project best fits with the Better Lives and Better Care research themes.

Additional information
None

Jackson, Kathryn

Supervision team
Primary supervisor: Dr Kathryn Jackson
Secondary supervisor: Dr Joyce Ramos

Proposed Honours Project
Hydration status with high sodium sports drink use in non-endurance exercise.

Aim: To compare the effectiveness of three different hydration beverages (low sodium beverage (eg. plain tap water); regular sodium sports beverage (e.g. Gatorade Perform®); &
high sodium sports beverage (Hydralyte Sports™) on hydration status of male and female A-Grade cyclists in laboratory-regulated conditions.

Background: Sodium ingestion during exercise has several roles in the prevention of hypohydration. Sodium ingestion is an effective means to maintain the thirst sensation, which assists in voluntary consumption of fluids while exercising. Sodium ingestion assists in promoting both whole body and compartmental fluid retention, while the uptake of glucose and sodium in the small intestine via the Na+/glucose co-transporter (SGLT1) promotes more rapid absorption of water, via active transport, compared to water alone.

Historically, the efficacy of high sodium sports beverages has been shown in endurance cyclists, but efficacy in short-term competitions such as Criterium races (~1 hour) is unknown. This study will test the hydration efficacy of 3 beverages of varying sodium concentrations during a simulated Criterium race in controlled heat & humidity conditions in an exercise-physiology laboratory.

Key References:

This project best-fit is in the Better Lives theme of the Caring Futures Institute. It also fits in the SHAPE Research Centre sports nutrition research space.

Knowledge of the use of FoodWorks dietary analysis software.
Basic understanding of statistical analyses using SPSS software.

Jaworski, Alex

Supervision team
Primary supervisor: Dr Alex Jaworski
Research focus – Myopia, optical coherence tomography, optical coherence tomography angiography, education (https://www.flinders.edu.au/people/alex.jaworski)

Secondary supervisors:
Dr Mallika Prem Senthil: Ocular diseases, patient-reported outcome measures, quality of life, Rasch analysis, artificial intelligence
Dr Chris Delaney: Peripheral arterial diseases

Proposed Honours Project

**Investigate the role of optical coherence tomography angiography in peripheral arterial disease**

Peripheral arterial disease (PAD) is a common circulatory condition in which narrowed arteries reduce blood flow to the limbs. Currently there is no ideal biomarker to screen for PAD, to risk stratify patients with PAD or to monitor therapeutic response to revascularisation procedures. PAD has shown to reduce the blood velocity in the ophthalmic and central retinal artery and evaluation of the retinal vasculature can provide important information about the early microvascular damage in PAD. Optical coherence tomography angiography (OCTA) is a non-invasive technique for imaging the retinal and choroidal vasculature of the eye. This study aims
to compare the OCTA parameters between patients with PAD and age matched controls to see if OCTA can be considered for serving as a biomarker of PAD.

Reference

This study aligns with the Caring Futures Institute research theme of technology.

Specific background, knowledge or skills a student would need to undertake this project
As this study involves ocular examination and imaging, some experience in optometry, vision science or patient interaction is preferred, in addition to good communication skills.

Jorissen, Robert

Supervision team

Secondary supervisors: Prof Maria Crotty, Professor and Director of Rehabilitation Medicine. Prof Crotty leads a multidisciplinary research group who focus on how to implement best and promising care models and practices within health and aged care settings (https://www.flinders.edu.au/people/maria.crotty)

A/Prof Maria Inacio, Epidemiologist with a focus on population health surveillance systems (i.e. registries) (https://portal.sahmriresearch.org/en/persons/maria-inacio)

Proposed Honours Project

**The effect of frailty on the outcomes of surgically treated osteoporotic fractures in residents of permanent residential aged care and those receiving home care packages.**

Frailty is the decreased intrinsic capacity for older people to return to health after every day or acute stressors such as physical injury. Osteoporosis and fracture after falling are more common in older people. In this project, the student will analyse data from the Registry of Senior Australians data registry to examine how pre-fracture frailty is related to the outcomes of interest in osteoporotic fracture patients such as mortality and functional limitations.

Caring Futures research themes: Better systems, better care

Suggested reference:

Additional information
The student would ideally have some knowledge of epidemiology and statistics, plus some experience analysing health data using multivariate regression methods.
Khadka, Jyoti

Supervision team
Primary supervisor: Dr Jyoti Khadka
Research Fellow with expertise in healthy ageing, patient-reported outcomes, and the application of psychometric methods to develop quality of life assessment instruments.

Secondary supervisors:
Prof Julie Ratcliffe, Matthew Flinders Fellow and Professor of Health Economics, with research interests in health and quality of life outcomes, and the economic evaluation of interventions.
(https://www.flinders.edu.au/people/julie.ratcliffe)

A/Prof Maria Inacio, Epidemiologist with a focus on population health surveillance systems (i.e. registries) (https://portal.sahmriresearch.org/en/persons/maria-inacio)

Proposed Honours Project

The effect of frailty on the utilisation of aged care services- a population-based evaluation

Frailty is estimated to be prevalent in 18-49% of older Australians, and this project will evaluate the effect of frailty on the utilisation of aged care services on the ROSA cohort from 2003-2014. It will describe how frailty levels have changed over the study period and how this affects utilisation of aged care services. Frailty will be measured using the ROSA Frailty Index, and aged care service utilisation by type of services received. Understanding the epidemiology of aged care services in frail people will inform the preparation of the aged care system regarding resource allocation, workforce preparation, and policy development.

Caring Futures research themes: Better systems, better care

Suggested reference:

Trends in eye disorders, eye health care utilisation and ophthalmic medication use among people accessing Australian aged care services.

Age-related eye disorders are leading causes of visual impairment and blindness in older Australians, and ~70% of eye disorders (e.g. cataract, refractive error) in this age group are treatable or correctable. Visual impairment is associated with increased risk of adverse outcomes such as falls, fractures, poor quality of life, and early institutionalisation. Using a population-based cohort captured by the Registry of Senior Australians (ROSA), we aim to explore the burden of eye disorders and eye health service utilisation in the Australian aged care population, informing a future study to address unmet eye care needs among older Australians.

Caring Futures research themes: Better systems, better care

Suggested reference:
Factors associated with transition of care from home to residential aged care services in Australia

Many older Australians rely on support provided through home care packages to live at home for longer. For some, transition from home to residential care is an inevitable consequence of their deteriorating condition—this is often associated with emotional impact, cost to individuals/families, and significant public expenditure. Using the Registry of Senior Australians (ROSA) historical cohort, this project will explore factors that lead to transitions into residential aged care. It aims to identify interventions that might help older Australians stay at home and avoid/delay transition to residential aged care, and use economic modellings to quantify costs associated with care transitions.

Caring Futures research themes: Better systems, better care

Suggested reference:

Specific background, knowledge or skills a student would need to undertake this project

Background: Health or Medical Sciences
Knowledge: Basic knowledge of mixed methods and/or population health research
Skills: Ability to develop and express research questions, research hypotheses, aims appropriate research methods and some experience using statistical software (SPSS/STATA/SAS/R)

Lange, Belinda

Supervision team
Primary supervisor: Associate Professor Belinda Lange
Research Area: Digital Technologies for Health and Well-being
belinda.lange@flinders.edu.au
https://www.flinders.edu.au/people/belinda.lange

Secondary supervisor: Dr. Sebastian Koenig
Research Area: Design and development of functional training and assessment tools in virtual reality https://www.katanasim.com/

Proposed Honours Project

Usability evaluation of a virtual office scenario for clinicians and individuals with brain injury

Traditionally, cognitive and physical assessments are performed using standardized tools that assess individual domains separately. These tests are often abstract and both clinicians and clients have difficulty extrapolating the results to real-world function. Wonderworks was developed to improve the quality of brain injury assessment and rehabilitation through the use of real-world functional tasks to assess and train cognitive tasks in a more complex, realistic integrated scenario – undertaking realistic tasks within a virtual reality office. The application was developed by a technology company- Katana Simulations in collaboration with researchers at the Kessler Foundation in New Jersey to support the cognitive assessment of people with brain injury. In this proposed Honours project, a sample of 10 health professionals and five people with brain injury will be invited to participate in one-on-one usability evaluations to provide feedback on the use of the Wonderworks application.

Suggested reading related to this topic:

This project aligns with the Caring Futures Research Them: Better Lives

Can dynamic difficulty adjustment be used in a virtual reality kitchen task?
Cognitive assessments are usually performed with standard tools that assess individual domains separately and clinicians have difficulty extrapolating results to real-world function. The Virtual Kitchen delivers cognitive assessments through real-world functional tasks within a virtual kitchen using the HTC Vive virtual reality system. Dynamic difficulty adjustment involves the automatic changing of parameters of a game in real time based on user performance and is often used in computer games.

This project aims to evaluate the feasibility of completing a functional task in a virtual kitchen scenario with dynamic difficulty adjustment compared to completing a standard virtual task in a sample of 10 people with brain injury. Participants will be interviewed about the usability, perceived level of challenge, difficulty, and enjoyment using the system.

Suggested reading related to this topic:

This project aligns with the Caring Futures Research Them: Better Lives

Additional information
There are no specific skills required to undertake this project. Training and support will be provided to learn how to use the virtual reality system.

Supervision team
Primary supervisor: Associate Professor Belinda Lange
Research Area: Digital Technologies for Health and Well-being
belinda.lange@flinders.edu.au
https://www.flinders.edu.au/people/belinda.lange

Secondary supervisor: TBD

Proposed Honours Project

Barriers and facilitators to improving activity levels in the inpatient setting
The Australian National Stroke Foundation guidelines recommend that rehabilitation should be structured to provide as much scheduled therapy as possible. Based on current evidence, a minimum of three hours of scheduled therapy per day with at least two hours of active task practice is recommended. A recent scoping review found limited activity levels patients of in inpatient rehabilitation during therapy and non-therapy time. Therapy duration ranged from 31 to 64 minutes and participants engaged in moderate-high therapeutic activity for only 22-66% of the time during therapy sessions. No time was spent in moderate-high therapeutic activity during non-therapy time. This study aims to monitor activity levels of people receiving care in the inpatient setting in two Hospitals in South Australia and explore the barriers and facilitators to increasing activity levels through interviews with health professionals and patients.

Suggested reading related to this topic:
• Natalie A. Fini, Anne E. Holland, Jenny Keating, Jacinta Simek, Julie Bernhardt, How Physically Active Are People Following Stroke? Systematic Review and Quantitative
This project aligns with the Caring Futures Research Them: Better Lives

Additional information
There are no specific skills required to undertake this project. Training and support will be provided to learn how to use the smartwatch system.

Supervision team
Primary supervisor: Associate Professor Belinda Lange
Research Area: Digital Technologies for Health and Well-being
belinda.lange@flinders.edu.au
https://www.flinders.edu.au/people/belinda.lange

Secondary supervisor: TBD

Proposed Honours Project
**Can early detection of changes to heart rate reduce the incidence of anxiety related behaviours for people with cognitive impairment?**

Challenging behaviours of older adults with cognitive impairment and dementia may manifest in a variety of ways and can have a negative impact on the individual, their family and people responsible for caring for individuals with cognitive impairment or dementia. The link between people with cognitive impairment and anxiety has been established, with as many of 50% experiencing anxiety leading to changes in behaviour. For people with cognitive impairment living in residential care, there are often limitations in communicating changes to their emotional wellbeing. Escalation in anxiety for people with cognitive impairment can result in incidents of both physical and/or verbal aggression. Understanding early signs of physiological arousal has the potential to allow staff to address changes prior to increases in anxiety being visually evident. This research project will test a smartwatch to monitor older adults in residential aged care for anxiety. The smartwatch measures anxiety through heart rate and body movement. If anxious behaviour is measured, the smartwatch sends a message to the caregiver who can support the older adult to decide which steps to take to reduce anxiety.

Suggested reading related to this topic:

This project aligns with the Caring Futures Research Them: Better Lives

Additional information
There are no specific skills required to undertake this project. Training and support will be provided to learn how to use the smartwatch system. This project would be particularly suitable for a student with a Nursing background or experience working in residential aged care (although not essential).

Supervision team
Primary supervisor: Associate Professor Belinda Lange
Research Area: Digital Technologies for Health and Well-being
belinda.lange@flinders.edu.au
https://www.flinders.edu.au/people/belinda.lange
Proposed Honours Project

**Health In Motion: Pilot trial of an online exercise program to improve activity and engagement in older adults living in residential aged care**

A recent observational study (Lewis and Lange 2019) demonstrated that people living in residential aged care facilities spent a large amount of time sedentary, a small amount of time engaging in light physical activity, and a very small amount of time in moderate-vigorous physical activity. The use of an online individualised exercise program has potential to improve self-management and engagement of older adults receiving aged care services. Blue Marble Health has developed ‘Health in Motion’, an evidence-based Fall Risk Assessment and Fall Prevention Program, which uses Internet-enabled tablets to instruct clients to undertake tailored strength and balance exercises and collect relevant outcomes. The aim of this study is to determine if the use of an online individualised exercise program can improve balance, activity levels and engagement in older adults living in residential aged care.

Suggested reading related to this topic:
- The system is currently being evaluated in the USA: [http://preventamillionfalls.com/](http://preventamillionfalls.com/) - this is a protocol for a different tablet based program but provides good background information supporting the relevance of this project: Hager AG, Mathieu N, Lenoble-Hoskovec C, Swaneburg J, de Bie R, Hilfiker R. Effects of three home-based exercise programmes regarding falls, quality of life and exercise-adherence in older adults at risk of falling: protocol for a randomized controlled trial. BMC Geriatrics volume 19, Article number: 13 (2019)

This project aligns with the Caring Futures Research Them: Better Lives

Additional information

There are no specific skills required to undertake this project. Training and support will be provided to learn how to use the Health in Motion app.

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**Lewis, Lucy**

**Supervision team**

Primary supervisor: Dr Lucy Lewis [https://www.flinders.edu.au/people/lucy.lewis](https://www.flinders.edu.au/people/lucy.lewis) (Physiotherapist, physical activity and sedentary behaviour researcher)


**Proposed Honours Project**

**Modified sports to increase physical activity in community-dwelling older adults – can walking football really increase physical activity?**

Physical inactivity is associated with risk of chronic disease such as heart disease, diabetes, and cancer, and is the 4th leading cause of mortality world-wide. Only one third of Australian adults currently meet the physical activity guidelines and physical activity decrease as we age. Australians are living longer than ever before, and it is important that we investigate interventions to facilitate healthy and active ageing. Physical activity in older adults is
associated with increased physical and mental health, social connectedness and improved wellbeing.

This project aims to investigate the use of modified sports such as walking football or soccer to increase physical activity in older adults (50+ years). Anecdotally, modified sports are reported to increase activity and participation in older populations, as well as provide opportunities for socialising and community participation.

This project aligns with the Better Lives theme of the Caring Futures Institute in the College of Nursing and Health Sciences.

Additional information

This project would suit a student with good interpersonal communication, and with an interest in physical activity and health. This project provides a unique opportunity for the student to work with three Supervisors from diverse backgrounds (Physiotherapy, Psychology and Exercise Science) with a mutual interest in investigating ways to encourage people to move more and sit less.

**Supervision team**

Primary supervisor: Dr Lucy Lewis  
(Physiotherapist, physical activity and sedentary behaviour researcher)  
http://www.flinders.edu.au/people/lucy.lewis

Secondary supervisor: Dr Ivanka Prichard  

**Proposed Honours Project**

**Mums on the move: physical activity and sitting behaviours in mothers of primary school-aged children**

Not getting enough moderate-to-vigorous physical activity is associated with detrimental health, including increased risk of chronic disease, poor mental health, and mortality. The time that we spend sitting has also been shown to be associated with chronic disease risk, and mortality. Australian guidelines recommend that adults accumulate 150 to 300 minutes of at least moderate intensity physical activity a week. Over half of all Australian adults are not meeting these recommendations.

Mums of primary school-aged children are typically busy, with minimal discretionary time in which to be physically active. Research has shown that health behaviours established in early and mid-adulthood carry through to later life, and can predict quality of life, the development of chronic conditions and longevity. Women in their late 30s and 40s are also typically entering perimenopause, which is associated with weight gain, fatigue, anxiety and difficulties with sleep. Regular physical activity has been shown to improve mood, sleep and help regulate weight gain. Therefore, it is important for Mums of young children to be physically active. This study aims to use activity monitors to objectively-measure activity levels in a cohort of women with children in primary school, as well as assess knowledge and attitudes toward physical activity. The findings will have important implications for the development of an intervention to increase physical activity in this group.

Additional information

None
### Milte, Rachel

<table>
<thead>
<tr>
<th>Supervision team</th>
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<tbody>
<tr>
<td><strong>Primary supervisor:</strong> Dr Rachel Milte, Health Economics, <a href="https://www.flinders.edu.au/people/rachel.milte">https://www.flinders.edu.au/people/rachel.milte</a></td>
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<tr>
<td><strong>Secondary supervisor:</strong> Professor Julie Ratcliffe</td>
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<th>Proposed Honours Project</th>
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<tr>
<td><strong>Measuring quality of care: Developing methods to involve people with dementia</strong></td>
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<td>This project aims to provide vital evidence to inform the implementation of meaningful assessment of quality of residential aged care from the perspective of the consumer and improve quality of care for Australians. The project will involve researching innovative ways of communicating quality of care concepts with people with dementia living in residential aged care, and applying these methods to create an easy-ready questionnaire for this group. The project will be nested within research projects undertaken by the team of researchers within the Health and Social Care Economics group investigating quality of care and life of people receiving aged care services.</td>
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<tr>
<td><strong>Suggested reading:</strong></td>
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<tr>
<td>This project aligns with the Better Systems theme of the Caring Futures Institute, as well as contributing to the Health Economics building block which cuts across the four themes.</td>
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<tr>
<th>Additional information</th>
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<tr>
<td>Willingness to work with older people with cognitive impairment essential.</td>
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### Muir-Cochrane, Eimear

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<th>Supervision team</th>
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<tr>
<td><strong>Primary supervisor:</strong> Eimear Muir-Cochrane <a href="http://www.flinders.edu.au/people/eimear.muircochrane">http://www.flinders.edu.au/people/eimear.muircochrane</a></td>
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<td><strong>Secondary supervisor:</strong> TBA</td>
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<th>Proposed Honours Project</th>
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<tr>
<td><strong>Absconding, psychiatric patients running away from hospital is a major concern as patients can be at risks or themselves or others and their recovery is delayed due to the time away from hospital. This project will examine the dynamics of an absconding event and provide new understandings to inform clinical practice to reduce this phenomenon.</strong></td>
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<td><strong>Reference:</strong></td>
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<tr>
<th>Specific background, knowledge or skills a student would need to undertake this project</th>
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<tr>
<td>Interested in research and the lived experience of people with mental health problems.</td>
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Prem Senthil, Mallika

Supervision team
Primary supervisor: Dr Mallika Prem Senthil (Ocular diseases, patient-reported outcome measures, quality of life, Rasch analysis, artificial intelligence)
https://www.flinders.edu.au/people/mallika.premsenthil

Secondary supervisor: Dr Ranjay Chakraborty (Myopia and refractive error, eye growth and vision) https://www.flinders.edu.au/people/ranjay.chakraborty

Proposed Honours Project

Evaluate the relationship between refractive error and vision-related quality of life

Refractive error is one of the most common ocular conditions and uncorrected refractive error is a major health problem. Uncorrected refractive error is the leading cause of vision impairment and the second leading cause of blindness in the world. Refractive errors can cause structural changes in the eye that could lead to blinding complications such as retinal degeneration, macular hole, retinal detachment, cataract and glaucoma. Studies have shown that quality of life is compromised in individuals with refractive error but the relationship between the visual function in refractive error and quality of life is poorly studied. A validated refractive error-specific questionnaire will be used to study the relationship between the refractive errors and quality of life.

Suggested reading:

This study aligns with the Caring Futures Institute research theme of better care.

Additional information
Please indicate any specific background, knowledge or skills a student would need to undertake this project

As this study involves ocular examination, some experience in optometry or patient interaction is preferred, in addition to good communication skills.

Prichard, Ivanka

Supervision team
Primary supervisor: Dr Ivanka Prichard
www.flinders.edu.au/people/ivanka.prichard

Secondary supervisor: TBA

Proposed project

My current research interests lie in the area of health psychology and body image, with a particular focus on physical activity, food consumption and body image. This year I am interested in supervising Honours projects that examine how fitness inspiration (e.g., #fitspo) messages communicated via social media influence body dissatisfaction and exercise behaviour or eating behaviour.
Suggested readings:


Specific background, knowledge or skills a student would need to undertake this project

An interest in body image and social media research

**Supervision team**

Primary supervisor: Dr Ivanka Prichard

Secondary supervisor: A/Prof Zali Yager
Victoria University

**Proposed Honours Project**

**Promoting healthy body image and health behaviours in mothers and non-mothers**

Pregnancy and the postpartum period are a time of significant life, identity, and body changes for women. As such, this life stage is one that warrants intervention to improve body image and wellbeing (Rallis, Skouteris, Wertheim, & Paxton, 2007). It is critical to understand the relationship between body image and health behaviours in both mothers and non-mothers to help guide interventions specific to mothers.

This study will involve the completion of an anonymous online questionnaire that will provide background information on the relationship between body image and health behaviours in mothers and non-mothers. The questionnaire will consist of a range of pre-existing, standardised measures including measures of functionality appreciation and body appreciation, dietary restraint, reasons for exercise, social comparisons, self-compassion, and role modelling of positive body image.

Reading:


Specific background, knowledge or skills a student would need to undertake this project

An interest in quantitative research and postnatal health/wellbeing.

**Radcliffe, Julie**

**Supervision team**

Primary supervisor: Prof Julie Ratcliffe, Matthew Flinders Fellow and Professor of Health Economics, with research interests in health and quality of life outcomes, and the economic evaluation of interventions. ([https://www.flinders.edu.au/people/julie.ratcliffe](https://www.flinders.edu.au/people/julie.ratcliffe))
Secondary supervisor: A/Prof Maria Inacio, Epidemiologist with a focus on population health surveillance systems (i.e. registries) (https://portal.sahmriresearch.org/en/persons/maria-inacio)

Proposed Honours Project

Do the professions of assessors for aged care services eligibility affect the reporting of medical conditions and functional limitations and which services are recommended for older people in Australia?

In Australia, individuals undergo an assessment with an Aged Care Assessment Team (ACAT) before receiving government-subsidised aged care services. ACAT professions vary from medical practitioners and health professionals, to social welfare professionals, and this may influence the clinical judgement of whether to conduct clinical assessments, or ability to refer to a specialist. Currently, it is unknown whether this affects what is recorded during an assessment, or the services recommended. This project will use data from the Registry of Senior Australians (ROSA) historical cohort to examine associations between ACAT professions and the medical conditions and functional limitations reported, and services recommended.

Caring Futures research themes: Better systems, better care

Suggested reference:

Additional information
Background in health/medical sciences with experience in working with data is needed.

Rahja, Miia

Supervision team
Primary supervisor: Miia Rahja
https://www.flinders.edu.au/people/miia.rahja

Secondary supervisors:
Catherine Hughes and Kate Laver

Proposed Honours Project

GenPlay: An intergenerational program for inpatients

GenPlay is an intergenerational play-based program that is delivered with Flinders Medical Centre and Noarlunga Hospital, and nearby Child Care Centres. It is a hospital play-based program where children from the child care centres attend the hospital once a week for one hour of group based session together with the inpatients. These types of programs have shown to be effective in the community.

This honours project will explore the acceptability of the program from the children’s parents’ and/or guardians' perspective. Additional components to the project also exist and can be negotiated with the student.

Reading:

### Additional information

The ideal candidate will have some knowledge about qualitative research methods, including theories and interviewing techniques. Knowledge of NVivo is not essential, but the student is expected to use this for their data analysis. The student must be comfortable talking to people over the phone.

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### Ramos, Joyce

#### Supervision team

Primary supervisor: Dr Joyce Ramos  


#### Proposed Honours Project

**Interindividual central arterial stiffness response to acute and chronic reduced exertion high-intensity interval training versus traditional moderate-intensity continuous training in healthy physically inactive adults**

Central arterial stiffness elevates one’s risk of developing hypertension and subsequent cardiovascular disease (CVD) such as stroke. Strategies to prevent CVD and thus promotion of ‘healthy ageing’, should therefore consider therapies targeting the reduction of central arterial stiffness. High-volume high-intensity interval training (HIIT) intervention has recently shown to better improve central arterial stiffness relative to the traditional moderate-intensity continuous training in physically inactive adults. However, time constraint is still the most often reported barrier to exercise adherence. There is also evidence to suggest that different exercise modalities have different effects on central arterial stiffness, limiting our understanding of the chronic effects of exercise. This project will therefore investigate the acute and chronic effect of a time-efficient reduced exertion high-intensity interval training (REHIT, 10min/day, 2 days/week) compared to the traditional moderate-intensity training (30min/day, 5 days/week) on central arterial stiffness over a 12-week program in healthy physically inactive adults.

#### Reference

- Ramirez-Velez et al. (2019) Effectiveness of HIIT compared to moderate continuous training in improving vascular parameters in inactive adults

#### Additional information

The successful candidate will be required to undertake onsite intensive training on vascular assessment via the SphygmoCor system.
Zarnowiecki, Dorota

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<th>Supervision team</th>
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<tr>
<td>Primary supervisor: Dr Dorota Zarnowiecki</td>
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<tr>
<td>Research focus – childhood obesity prevention, nutrition, knowledge translation</td>
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| Secondary supervisor: Ms Brittany Johnson |
| Research focus – behaviour change, nutrition, childhood obesity prevention |

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<th>Proposed Honours Project</th>
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<tr>
<td><strong>Understanding perspectives of child and family health nurses about early child obesity risk screening in primary health care</strong></td>
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Parents frequently access primary health care services in early childhood, providing an opportunity to incorporate early life obesity prevention screening initiatives that would reach a large portion of the population. This project will use nominal group technique workshops (NGT) with nurses to understand the barriers, facilitators and opportunities for embedding early childhood obesity risk in child ‘well-health’ practice of child and family health nurses. NGT workshops will identify and priorities strategies for embedding obesity prevention in child ‘well-health’ practices, which will directly inform an implementation plan.

This project aligns with the ‘Better Lives’ theme of the Caring Futures Institute.

Suggested reading:


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<tr>
<td>This project would be best suited to a student with understanding of the role of child and family health nurses and/or understanding of early childhood obesity prevention.</td>
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The student will need to be confident to conduct the nominal group technique workshops, with supervisory support. Experience with qualitative data collection techniques would be beneficial, but is not essential as training can be provided.