2020 HMNS Winter Research Projects

AN IMPORTANT NOTE

Please note due to disruptions linked to COVID-19, some projects are no longer been offered. Others are still under consideration. Thank you for your understanding,

HMNS Senior Research Administrative Officer.

Contents

Dr Tina Skinner

The relationship between body composition and inflammation in response to 12 months of HIIT training in cancer survivors

Project title:	**The relationship between body composition and inflammation in response to 12 months of HIIT training in cancer survivors**
Project duration:	3-4 weeks
Expected hours per week	30
Expected started date	13 July 2020
Number of scholarships available	2
Location	On campus only
Description:	Using 12 months of 4x4 HIIT training we will investigate the relationship of body composition changes and inflammatory markers in the blood in breast prostate and colon cancer survivors.
Expected outcomes and deliverables:	Please note due to disruptions linked to COVID-19, this may need to be adapted. - helping run supervised exercise sessions with people with cancer. - assisting with data collection and entry. - gaining experience with administration procedures within a randomized control trial study
Suitable for:	Essential: - Willing and able to attend early morning testing and training sessions. - Excellent communication skills - High level attention to detail Desired: - Previous experience working with individuals with cancer - Previous experience working with older adults in an exercise setting - Students who have completed an exercise science technical skills subject (or equivalent)
Primary Supervisor:	Dr Tina Skinner
Other info	Please contact the supervisor before applying at t.skinner@uq.edu.au

Dr Tina Skinner

The Effects of an Evidence-based Intervention ("Fit for Treatment") to Prevent Cancer Treatment-induced Toxicities in Cancer Patients

Project title:	**The Effects of an Evidence-based Intervention ("Fit for Treatment") to Prevent Cancer Treatment-induced Toxicities in Cancer Patients**
Project duration:	
Expected hours per week	
Expected started date	
Number of scholarships available	
Location	
Description:	Please note that due to disruptions linked to COVID-19, this project can no longer be offered.
Expected outcomes and deliverables:	
Suitable for:	
Primary Supervisor:	
Other info	

Dr Eimear Enright

Enhancing Feedback and Assessment Practices in University Courses through Pedagogical Partnership

Project title:	**Enhancing Feedback and Assessment Practices in University Courses through Pedagogical Partnership**
Project duration:	3-4 weeks (negotiable)
Expected hours per week	Minimum of 20 hours per week
Expected started date	13 July 2020
Number of scholarships available	1
Location	On campus only
Description:	University students at UQ and across the country report high levels of dissatisfaction with feedback received in courses. In 2020, funded by a UQ Teaching Innovation Grant, 50 students partnered with lecturers to rethink and redesign feedback and assessment practices in over 25 courses. A range of data have been captured to understand both the pedagogical impact and knowledge co-creation associated with this student-lecturer partnership approach to the enhancement of feedback and assessment practices.
Expected outcomes and deliverables:	The selected scholars will gain numerous benefits. You will, for example, have the opportunity to 1. enhance your research skills (specifically, your qualitative data analysis skills) 3. build capacity in collaboration and communication that will enrich how you interact with other people 4. contribute to high profile UQ project that will influence UQ policy and practice Outcomes could also include: 1. presenting findings to UQ community 2. co-authoring a conference talk or potential manuscript Activity for selected Winter Scholar: You will work with a group of students and staff to analyse qualitative focus group or interview transcripts or quantitative data sets (e.g., SECaT results), depending on your interest. Your expertise as a UQ student will be invaluable to make sense of the data. You will have a desk in the Learning Innovation Building (LIB, #17 on St. Lucia Campus) and engage with a friendly and supportive research group.
Suitable for:	Students who have an interest in enhancing feedback and assessment practices at UQ
Primary Supervisor:	Dr Eimear Enright
Other info	Please contact the supervisor before applying at e.enright@uq.edu.au

Dr Brendan Keane

Influences of reward and action history on motor behaviour

Project title:	**Influences of reward and action history on motor behaviour**
Project duration:	3- 4 weeks (negotiable)
Expected hours per week	25
Expected started date	13 July 2020
Number of scholarships available	1
Location	On campus only
Description:	Success in every task that we face in life requires two things: a good decision about what to do, and an accurate movement to implement that decision. We know a great deal about how decisions regarding WHAT to do are influenced by factors such as the precision of a stimulus, advanced priming information, and our past experience. Much less is known about how such factors affect the details of the physical movements that must implement decisions, yet movement execution is just as important in determining how successful we are. This project seeks an integrated understanding of how our past history of movement, and the rewards associated with past movements, affect subsequent movement execution. In so doing, the work will provide theoretical foundations needed to improve human-machine interfaces, and training approaches to enhance motor skills in industry, rehabilitation, and sport. This research will take advantage of cutting-edge motion-capture technology, and may include recording the electrical activity of the brain (using electroencephalography, or EEG) and/or muscles (using electromyography, or EMG). **An important note:** If the research team cannot access participants to collect new data due to disruptions linked to COVID-19, the project can be modified to focus on analysing and writing up data already collected on this project.
Expected outcomes and deliverables:	Students can expect to gain skills in data collection and analysis, and use of motion-capture hardware and software. Students will be expected to present a summary of their work toward the end of the project, and contribute to publication of experimental results where appropriate. Students will be given the opportunity to learn programming skills, giving them a substantial advantage with future Honours projects and research activities (e.g., PhD, and research assistant positions).
Suitable for:	This project is open to application from students with an undergraduate background (having completed at least 2 years) in psychology or human movement studies. This project is best-suited to students with an interest in learning to use advanced experimental technologies, including motion-capture and EEG/EMG, advanced analytic techniques, and programming in MATLAB.
Primary Supervisor:	Dr Brendan Keane
Other info	Please contact the supervisor before applying at b.keane1@uq.edu.au

Dr Michalis Stylianou

Health behaviours in LGBTIAQ+ populations

Project title:	**Health behaviours in LGBTIAQ+ populations**
Project duration:	3-4 weeks (negotiable)
Expected hours per week	25-30
Expected started date	13 July 2020
Number of scholarships available	1
Location	On campus only
Description:	Behaviours such as physical activity participation, sports participation, sedentary behaviour and sleep have been identified to be associated with various health outcomes. Accordingly, relevant guidelines have been developed targeting these behaviours by governments worldwide as well as the World Health Organisation. Health-promoting factors have been highlighted as a priority in the process of understanding and addressing health disparities associated to sexual orientation by the US institute of Medicine (National Research Council, 2011), and there have been calls for LGBTIQ+ specific research strategies in the area of health (e.g., Gorczynski & Brittain, 2016). Several countries and/or states have developed or are in the process of developing LGBTIQ+ focused action plans, including in the space of physical activity and sports participation (e.g., in the UK, Australia, etc.). Examining physical activity and sports participation of LGBTIQ+ individuals is critical as they often report negative experiences in physical activity contexts and several studies suggest that they are less likely to engage in physical activity and sport compared to cisgender individuals, which is an area of concern given the well-established health benefits of PA. Further, LGBTIQ+ individuals tend to experience higher rates of depression and anxiety than cisgender people, and health promoting behaviours have been demonstrated to positively influence such outcomes. This project includes (a) a systematic review that aims to synthesise study findings in this area and provide direction for future research, and (b) working with relevant data from epidemiological studies. Sedentary behaviours and sleep behaviours have also been included in this review as secondary outcomes given their associations with health outcomes and calls for a focus on time use over a 24-hr period that involves behaviours along the movement continuum (i.e., physical activity, sedentary behaviour, sleep).
Expected outcomes and deliverables:	The selected scholar will gain skills in (a) conducting a systematic literature review, which involves searching different databases, screening articles for inclusion, extracting information from articles, and evaluating the quality of articles, and (b) managing data from epidemiological studies. The student may also have the opportunity to generate presentations for local or national conferences, or work towards a paper for publication with the supervisors. During this project, the student will be supervised by a multi-disciplinary team of supervisors from the School of Human Movement and Nutrition Sciences, School of Health and Rehabilitation Sciences, and Institute for Social Science Research.
Suitable for:	This project would be suitable for 3rd and 4th year or Master students with a background and/or interest in health behaviours.
Primary Supervisor:	Dr Michalis Stylianou
Other info	Please contact the supervisor before applying at m.stylianou@uq.edu.au

Dr Tina Skinner

The acute influence of exercise intensity on the blood-biomarker and immune response in healthy adults aged ≥50 years old

Project title:	**The acute influence of exercise intensity on the blood-biomarker and immune response in healthy adults aged ≥50 years old**
Project duration:	
Expected hours per week	
Expected started date	
Number of scholarships available	
Location	
Description:	Please note that due to disruptions linked to COVID-19, this project can no longer be offered.
Expected outcomes and deliverables:	
Suitable for:	
Primary Supervisor:	
Other info	

Dr Veronique Chachay

Personalised in nutrition: does personalisation make weight loss more successful and pleasureable?

Project title:	**Personalised in nutrition: does personalisation make weight loss more successful and pleasureable?**
Project duration:	
Expected hours per week	
Expected started date	
Number of scholarships available	
Location	
Description:	Please note that due to disruptions linked to COVID-19, this project can no longer be offered.
Expected outcomes and deliverables:	
Suitable for:	
Primary Supervisor:	
Other info	

Dr Veronique Chachay

Variation in lutein and zeaxanthin concentration in selected Australian foods, and outcome of daily intake

Project title:	**Variation in lutein and zeaxanthin concentration in selected Australian foods, and outcome of daily intake**
Project duration:	
Expected hours per week	
Expected started date	
Number of scholarships available	
Location	
Description:	Please note that due to disruptions linked to COVID-19, this project can no longer be offered.
Expected outcomes and deliverables:	
Suitable for:	
Primary Supervisor:	
Other info	

A/Prof Associate Prof Nicholas Gilson

Active Choices: A Stepped-Down Physical Activity Program for Service Veterans

Project title:	**Active Choices: A Stepped-Down Physical Activity Program for Service Veterans**
Project duration:	3-4 weeks
Expected hours per week	25
Expected started date	13 July 2020
Number of scholarships available	4
Location	On campus only
Description:	Please note that due to disruptions linked to COVID-19, this project may no longer be offered. The research team is considering options. Active Choices is a research initiative led by the School of Human Movement and Nutrition Studies at The University of Queensland (UQ). The initiative is funded by the Department of Veterans' Affairs and aims to link and empower DVA clients towards group-based physical activity opportunities. The purpose of the research is to collect information on best practices that may help DVA clients transition to active lifestyles that are socially connected to local communities. DVA clients who can safely undertake physical activity without supervision participate in three 1-hour consultations at UQ over a 24-week period. During these visits and across the initiative, clients are linked to local activity opportunities, recieve educational resources, and implement an evidence-based goal setting and self-monitoring program that encourages group based physical activity choices.
Expected outcomes and deliverables:	Applicants will be involved in 1) delivering the behavioural support program to clients; 2) collecting, entering and analysing a range of quantitative and qualitative data, 3) preparing progress reports and organising project logistics
Suitable for:	This project will suit advanced level sport and exercise students, with knowledge and understanding of motivational theory, and the role self-managed physical activity can play in health promotion. Interest in the transition of clients from supervised to self-supervised exercise will be valuable, as will well-developed people skills and experience of dealing with clients in a health and fitness environment.
Primary Supervisor:	A/Prof Associate Prof NIcholas Gilson
Other info	Please contact the supervisor before applying at n.gilson1@uq.edu.au