School of Population & Global Health

Research projects
2021

Topics for Honours and MPH 24 point Dissertations
Research projects now available in the School of Population & Global Health (SPGH)

As a world-class research university, UWA offers research opportunities of the highest calibre. You will work closely with an expert supervisor on a specific research topic to produce a manuscript of significant academic scholarship.

Your initial research training can include completion of an Honours or a postgraduate coursework Master of Public Health (MPH) with a 24 point dissertation. This can lead to enrolment in a Master of Philosophy (MPhil) or Doctor of Philosophy (PhD).

As an honours or 24 point dissertation research student with us, you will develop, under supervision, a paper for publication in a scientific journal - this is the first step in your research career!

How does research training at SPGH work?

You will work with an academic researcher to investigate an important and topical area of public health. Responsible, conscientious students, who meet the eligibility criteria, with well-developed interpersonal and written communication skills are sought for these projects. Although some projects use linked data and require a high degree of analytical aptitude, there are many other projects that require different skills. Given the scope of projects available, a great project can be found to match your own interests and skills.

Want to know more?

If you’re interested in an Honours or a MPH 24 point dissertation
Contact our Honours & Dissertation Coordinator by email - karen.martin@uwa.edu.au
Research Areas & Centres at SPGH

Our research strengths include a strong evidence-based approach to services and health program evaluation. We have a proven record of achievement in preventative, clinical and occupational epidemiology and have been instrumental in setting world standards in population health databases through record linkage.

Cardiovascular Disease Epidemiology
Aims to reduce the burden of cardiovascular disease through research into trends and determinants of acute events, treatment, management and outcomes.

Centre for Health Services Research
Is a leader in its field through its work with linked medical and health data and the evaluation of health services, patient safety, surgical care and pharmaco-epidemiology.

Child & Adolescent Development and Health
Early influences on child and adolescent health significantly impact on health and development outcomes throughout life. Our research draws on the skills and experience of our teams’ multi-disciplinary backgrounds to engage with stakeholders and deliver high quality research with real world policy and practice implications.

Genetic Epidemiology Group
Aims to identify the genetic and environmental determinants of common human diseases, and explore ways of using this information to improve human health.

Global Environment and Health
Investigates the relationships between ecosystems, environmental and occupational agents and health, at local and global scales, in order to determine ways that we can improve global human health. We research disease outcomes resulting from occupational and environmental exposures, such as mining hazards, asbestos, air pollution, heat, noise and water. We are also investigating the positive impact of green and blue spaces on health, and a developing area of interest is health promotion in relation to global and environmental health

Health and Labour Economics
To improve resource allocation and decision making in the health sector through systematic evaluation and assessment, with an economic perspective.

The Raine Study - www.rainestudy.org.au/
The Western Australian Pregnancy Cohort (Raine) Study is one of the world’s largest successful prospective cohorts of pregnancy, childhood, adolescence and now early adulthood. These families have provided environmental, developmental and health information over the past 30 years offering a unique and valuable resource covering a wide range of health areas.

Neuropsychiatric Epidemiology Research Unit (NERU)
Focuses on psychiatric epidemiology, taking a cross-disciplinary approach to the study of psychotic disorders including schizophrenia and other severe mental illness.
**Vulnerable Groups**
Aims to improve health and social outcomes and reduce the disease burden among some of society’s most at-risk populations.

**Western Australian Centre for Road Safety Research (WACRSR)**
Has been established to conduct multi-disciplinary research, using a public health approach, into new and innovative approaches to road safety in Western Australia to reduce death and serious injury on Western Australian roads.

**Western Australian Centre for Rural Health (WACRH) - www.wacrh.uwa.edu.au/**
Aims to improve rural, remote and Aboriginal health through research, education, student support and community service activities. WACRH operates with funding from the Commonwealth Department of Health and support from the University of Western Australia but also works closely with numerous health organisations, on a local and national level.

**Contact information for SPGH Coordinating Supervisors (listed under each project title):**

- **Professor Angus Cook**
  angus.cook@uwa.edu.au
- **Professor Tom Briffa**
  tom.briffa@uwa.edu.au
- **Dr Hayley Christian**
  hayley.christian@uwa.edu.au
- **A/Professor Justin Denny**
  justin.denny@uwa.edu.au
- **Professor Colleen Fisher**
  colleen.fisher@uwa.edu.au
- **Dr Peter Franklin**
  peter.franklin@uwa.edu.au
- **Dr Michelle Fraser**
  michelle.fraser@uwa.edu.au
- **Professor Jane Heyworth**
  jane.heyworth@uwa.edu.au
- **Dr Siobhan Hickling**
  siobhan.hickling@uwa.edu.au
- **A/Professor Judith Katzenellenbogen**
  judith.katzenellenbogen@uwa.edu.au
- **Dr Matthew Legge**
  matthew.legge@uwa.edu.au
- **Dr Ian Li**
  ian.li@uwa.edu.au
- **Dr Karen Martin**
  karen.martin@uwa.edu.au
- **A/Professor Monica Moran**
  monica.moran@uwa.edu.au
- **Professor Vera Morgan**
  vera.morgan@uwa.edu.au
- **Dr Kevin Murray**
  kevin.murray@uwa.edu.au
- **Dr Lee Nedkoff**
  lee.nedkoff@uwa.edu.au
- **Professor David Preen**
  david.preen@uwa.edu.au
- **A/Professor Rohan Rasiah**
  rohan.rasiah@uwa.edu.au
- **A/Professor Paul Roberts**
  paul.roberts@uwa.edu.au
- **A/Professor Frank Sanfilippo**
  frank.sanfilippo@uwa.edu.au
- **Dr Julie Saunders**
  julie.saunders@uwa.edu.au
- **Professor Linda Slack-Smith**
  linda.slack-smith@uwa.edu.au
- **A/Professor Jennifer Stone**
  jennifer.stone@uwa.edu.au
- **Professor Sandra Thompson**
  sandra.thompson@uwa.edu.au
The Busselton Health Study

The Busselton Health study is a series of internationally recognised cross-sectional and longitudinal population health studies carried out on the population of Busselton, Western Australia which aims to provide a better understanding and management of disease and illness.

Research activities undertaken as part of the Busselton Health Studies are diverse and encompass a wide range of health conditions and measures. These have included cardiovascular disease, respiratory disease, diabetes and endocrine disorders, gastrointestinal, kidney and liver diseases, cancer, obesity, sleep disorders, cognition and genetic epidemiology.

Extensive information on demography, lifestyle and behaviour have also been collected at each of the surveys along with blood samples for biochemical measures and genetic studies.

Epidemiological data analysis driven projects are available for Honours and Masters students, and interested students should contact Dr Kevin Murray for details.

Projects under the Cardiovascular Research Group

State-of-the-Art Cardiovascular Disease (CVD) Research
Prof Tom Briffa

Background: CVD is costly and prevalent worldwide. Monitoring and reporting trends is a national priority health area and is a driver of health policy aimed at improving healthcare delivery and outcomes.

Outline: Various projects in specific areas are offered. These will involve examining the trends and models of care in CVD prevention, treatment and management and may consider clinical epidemiology, health outcomes, pharmacotherapy, prevention, cost-effectiveness and community engagement.

A range of topic areas include:
- Atherothrombotic disease across the vascular territories
- Busselton Health Study
- Monitoring coronary artery disease
- Management of CVD in the Indigenous population
- Diabetes and CVD
- Peripheral arterial disease
- Risk Factor Prevalence Study
- Coronary artery revascularisation
- Chronic kidney disease and CVD

Methodology: The Cardiovascular Research Group uses clinical data collected from cohorts in Western Australia together with person linked administrative data from hospitals and registers to examine influences, trends and epidemiology of CVD health outcomes.
Processing evaluation of the Healing Right Way trial
A/Prof Judith Katzenellenbogen

Background: This project is part of a process evaluation of the NH&MRC-funded randomised control trial (RCT) entitled ‘Enhancing rehabilitation for Aboriginal Australians after brain injury: Healing Right Way’ (HRW). This project is focused on providing culturally secure rehabilitation services for Aboriginal patients with acquired brain injury. HRW uses a randomised cluster step-wedge design of a complex intervention (consisting of culturally secure training (CST), and the introduction of an Aboriginal Brain Injury Coordinator (ABIC) role) in four metropolitan and four regional Western Australian hospitals.

We have designed and implemented a mixed methods process evaluation which is being undertaken both prospectively and retrospectively, enhancing the conduct and interpretation of the parent study.

Outline: To determine processes, barriers and facilitators that have influenced the implementation of the trial and ongoing partnerships with stakeholders during the first two years of the RHW.

Methodology: Qualitative study using data collected prospectively as part of the process evaluation.

Data collected includes minutes of meetings, interviews with project staff, surveys with participants of cultural security training in hospitals, review of communication with project partners.

Project Specific Requirements: Knowledge of evaluation frameworks, qualitative methods.

Project Length: 24 point MPH only

Developing contemporary algorithms for monitoring myocardial infarction in Australia
Dr Lee Nedkoff

Background: Measuring population trends in myocardial infarction (MI) incidence and hospitalisation rates has been an important historical indicator of the effectiveness of coronary disease prevention. However, the use of new diagnostic biomarkers since the 2000s has impacted epidemiological monitoring of temporal trends in MI.

Outline: The study will quantify the impact of changes in cardiac biomarkers on trends in MI, and test the feasibility of linking cardiac biomarker data to population-level hospitalisation data for ongoing monitoring of MI in Australia.

Methodology: A linked dataset containing hospital, emergency department, mortality and pathology data for all coronary heart disease presentations in Western Australia since 2000 is available. Classification of MI and each coronary heart disease subtype will be made according to ICD-coding and cardiac biomarkers, and rates and trends compared across each classification group.

Project Specific Requirements: Knowledge of evaluation frameworks, qualitative methods.

Project Length: 24 point MPH only
The epidemiology and experience of rheumatic heart disease (End RHD in Australia: Study of Epidemiology – ERASE project)
A/Prof Judith Katzenellengbogen

Background: Acute rheumatic fever (ARF) and rheumatic heart disease (RHD) persist as significant sources of health burden among Indigenous Australians. End RHD in Australia: Study of Epidemiology (ERASE) Project aims determine the baseline burden of ARF/RHD in Australia and to develop further insights into the progression and outcomes of the disease as a basis for improved monitoring. Other areas of investigation include health system costs, hospital service utilisation, medication adherence and factors affecting the management of these conditions in primary care.

Outline: A number of potential projects associated with the ERASE project are available for students, including epidemiological analyses and analyses related to health systems. Translation of findings will occur through the End RHD Coalition as well as dissemination of results to communities.

Methodology: The project uses a multi-jurisdictional linked database from multiple sources (hospital, primary health care, deaths, RHD register) as well as qualitative data on primary care systems to support RHD management. Midwives data is currently being linked in as well. An appropriate methodology will be developed depending on the research question, available data and the level of skill/interest of the student.

Examples:
- Analysis of concurrent ARF/RHD and obstetric/pregnancy hospitalisations.
- Missed opportunities in the diagnosis of ARF in hospital (review administrative records of ARF/RHD diagnosed patients to identify whether ARF had not been diagnosed in previous emergency department and hospital encounters.
- Collection and analysis of ARF/RHD paediatric cardiology out-patient data over 20 years.
- Descriptive study of PHC data of patients diagnosed with ARF/RHD in NT.
- Development/evaluation of resources for dissemination of findings to Aboriginal communities (mixed methods).
- Qualitative studies of aspects of the management and experiences of ARF/RHD.
- Development of a standardized set of recommended data items that facilitate comparability of RHD-related information in pregnant women from varied sources and for various purposes (Delphi method).

Project Specific Requirements:
- For linked data analysis, competence in SAS; R or SPSS or preparedness to learn quickly.
- For evaluation and mixed methods research, preparedness to learn qualitative methods.
Pharmacoepidemiology studies using the 10% PBS sample
A/Prof Frank Sanfilippo

Background: We have applied to obtain a 10% sample of data from the Pharmaceutical Benefits Scheme (PBS) with linkage to deaths. The dataset will provide a longitudinal source of records for medicines dispensed in Australian pharmacies from 2012 onwards. This will allow various analyses on use of medicines in Australia.

Outline: To investigate the use of specific groups of medicines in a 10% random sample of patients receiving medicines through the PBS in Australia.

Methodology: The PBS data contains information on medicines dispensed from Australian pharmacies, including hospital pharmacies that are registered with the PBS (i.e. all private and some public hospitals). Variables include age, sex, name and strength of the drug, quantity dispensed, ATC code, PBS item code, date of supply, date prescribed, beneficiary status (concession card, general beneficiary) and date of death. The dataset will be supplied on approval by the Department of Human Services. It consists of linked data of PBS records and matching death record from a random 10% sample of people in Australia. Various analyses can be completed using these data, with specific examples including: (i) use of psycho-active medicines in the elderly; (ii) use of low dose vs high dose statins by patient characteristics; (iii) patterns of medication use before and during the COVID-19 period (e.g. supply of hydroxycholoroquine); (iv) use of medicines in the very old; (v) adherence of specific drug groups (e.g. anti-retroviral drugs, statins, beta blockers, antiplatelet agents).

Analysis will require identifying the specific drug groups of interest, applying multivariable regression methods, estimating medication adherence using the proportion of days covered (PDC) method, describing patient characteristics, and simple univariate and bivariate statistics. There is potential to publish the findings in a suitable journal.

Project Specific Requirements: Knowledge of medicines and therapeutics would be an advantage, although an interest in this area would be sufficient, with additional training provided. Analysis will require use of multivariable regression methods. The data are linked and some knowledge or understanding of how to handle these data would be useful.

Project Length: 24 point MPH only
Projects with the Centre for Health Services Research

**Linking for Life: Enhancing pathways to well-being for all Australians**  
*Prof David Preen; Dr Rebecca Glauert*

**Background:** The Linking for Life Project will identify pathways to wellbeing and better social outcomes across the life-course for high-risk/vulnerable individuals and their families to streamline service provision, improve outcomes and identify cost-efficiencies across government agencies. The work will expand cross-sectoral data linkage capability, enhancing research capacity to generate evidence-based policy to improve integrated service delivery across government.

The project involves the analysis of longitudinal, whole-population, genealogically linked data, across seven government departments in order to determine pathways (across individual, family, community and system levels) that reduce vulnerability to adverse outcomes including social disadvantage, child abuse and neglect, mental illness, poor educational attainment, justice system involvement, and restricted access to public services.

**Outline:** Research questions in this project are categorised under three intersecting domains: 1) Resilience and overcoming disadvantage; 2) Families and Intergenerational Effects; and 3) Aboriginal Wellbeing, with the primary aims of the current program being to:

1. Determine pathways that reduce vulnerability to adverse outcomes and restricted access to public services;
2. Identify critical transition points to target prevention and intervention strategies across government sectors; and
3. Identify factors associated with resilience in disadvantaged groups to improve intergenerational outcomes.

**Methodology:** The sub-projects developed under this program of work will utilise up to 40 years of whole-population, genealogically linked data, across seven government departments including the WA Dept. of Communities, Dept. of Justice, WA Police, Dept. of Education, Dept. of Health, Mental Health Commission and the Commonwealth Dept. of Education and Training.

Statistical analysis and multivariate modelling of these data will be undertaken using SPSS, Stata or SAS to address the above-mentioned research aims.

**Project Specific Requirements:**
- Knowledge of epidemiology and biostatistics.
- Completion of PUBH5785 Introductory Analysis of Linked Health Data or equivalent prior experience.
- Experience with writing statistical syntax to complete data analyses.

**Project Length:** 24 point MPH only

**Exploring the Mental Health and Emotional Wellbeing of Reception Prisoners**  
*Prof David Preen; Mr Craig Cumming*

**Background:** People who go to prison experience social disadvantage, mental illness and trauma at far higher rates than the general community. To investigate mental illness and emotional wellbeing in this group further 719 adults were recruited.
Projects under Child and Adolescent Health

**Children’s Physical Activity, Health and Development**  
*Dr Hayley Christian*

**Background:** This research forms part of the PLAYCE program of research – Places Spaces & Environments for Children’s Physical Activity. PLAYCE examines the longitudinal influence of the physical, social and policy environment on young children’s physical activity, sedentary behaviour, eating behaviour, weight status, sun exposure and development: at home, around the neighbourhood and whilst attending early childhood education and care (ECEC) or school. This research will provide information on how best to create healthy environments to support young children’s wellbeing and development.

**Outline:** To determine the patterns of movement behaviours (physical activity, sedentary time and sleep) in young children across early childhood (2-7 years) and the impact on weight status and developmental outcomes.

**Methodology:** Quantitative analysis of existing PLAYCE cohort data.

**Project Specific Requirements:**
- Ability to conduct quantitative research.
- Excellent writing skills.
- Statistical analysis (SPSS and/or SAS).
- Ability to work as part of a team.
- Good interpersonal communication skills.

---

**Physical activity policy for early childhood education and care–parent engagement**  
*Dr Hayley Christian*

**Background:** Daily physical activity is critical during the early years of life for facilitating children’s health and development. Only one in three Australian children aged 2 to 5 achieve the recommended level of three hours of daily physical activity. Early childhood education and care (ECEC) services are a key setting to intervene to increase physical activity. This research will provide information on how best to create healthy environments to support young children’s wellbeing and development.

**Outline:** The student will be part of a multi-jurisdictional NHMRC funded project and have the opportunity to work with eight partner agencies. The project will provide high-quality data that will assist in the planning and provision of mental health services to mentally disordered offenders both within the criminal justice system and in the community.

**Methodology:** Cross sectional survey data collected within one week of reception into prison.

**Project Specific Requirements:** Reasonable knowledge of biostatistics.
and parent-educator engagement around children’s physical activity.

This will involve exploring, identifying and better understanding the factors that strengthen the educator-parent engagement process to boost children’s physical activity in the home and ECEC environment.

**Methodology:** Literature review; Qualitative.

**Project Specific Requirements:**
- Ability to conduct quantitative/qualitative research.
- Excellent writing skills.
- Ability to work as part of a team.
- Good interpersonal communication skills.

---

**Increasing children’s physical activity through family dog walking and play**

*Dr Hayley Christian*

**Background:** This research forms part of the PLAYCE program of research – Places Spaces & Environments for Children’s Physical Activity. The PLAYCE PAWS Study aims to trial different methods of encouraging more physical activity in children through playing and walking with the family dog.

**Outline:** The aim is to see whether active play and walking with the family dog facilitates improved developmental outcomes in young children.

**Methodology:** Quantitative analysis of existing pilot study data.

**Project Specific Requirements:**
- Ability to conduct quantitative research.
- Excellent writing skills.
- Statistical analysis (SPSS and/or SAS).
- Ability to work as part of a team.
- Good interpersonal communication skills.

---

**Health benefits of natural outdoor environments**

*Dr Hayley Christian*

**Background:** Natural outdoor environments including blue spaces help reduce stress, promote physical activity and social connections, improve overall health and well-being, improve connection to place and reduce urban heat effects. The health benefits associated with exposure to blue space (oceans, rivers, lakes etc) likely follow similar pathways and mechanisms to those identified for green space.

**Outline:** This research will determine the health benefits of blue space. It will involve stakeholder interviews and or intercept surveys to investigate how Western Australians access and use different types of blue spaces in their community and what the health and wellbeing benefits are (and potential negative effects)?
Testing the capacity of an online tool to promote safe sun behaviours in teenagers

Dr Hayley Christian; Shelley Gorman (Telethon Kids Institute - shelley.gorman@telethonkids.org.au)

Background: In this project, we have developed and are testing a prototype app that aims to improve the knowledge and behaviours that young adolescents have around safe sun practices for vitamin D. Our rationale for developing this app, was that:
- A fun, educational online tool, when developed with adolescent ‘co-researchers’ would be useful and relevant;
- It would more likely be accepted by adolescents than currently available tools; and,
- It would help them make better decisions about their health needs for protection from excessive sun exposure and for sufficient vitamin D.

We first recruited young adolescent co-researchers for their input into the design of the app, along with other stakeholders, including those from Cancer Council WA, academics and eHealth technology developers. We then co-developed a digital wireframe which was first tested in a series of workshops with young people. We used feedback from these workshops, design guidelines of the wireframe (including basic information, format, strategy and language), and ongoing input from co-researchers and the research team to develop the prototype app. Finally, we conducted pilot studies to obtain end-user responses (‘process’: engagement, functionality, aesthetics and information quality) on the developed app, testing its capacity to improve the sunhealth knowledge and behaviours in an independent cohort of young adolescents (aged 12-13) via blinded placebo-controlled interventions.

We now have a dataset from these pilot studies that needs to be analyzed.

Project Aim: To pilot test a prototype app that aims to improve the knowledge and behaviours that young adolescents have around safe sun protection and exposure practices for vitamin D.

Methodology: In school- and community-based pilot studies, we will test end-user responses (‘process’: engagement, functionality, aesthetics and information quality) to using the app, as well as its capacity to improve their safe sun knowledge and behaviours.

Specific methodological approaches:
1. Assess responses to questionnaires on ‘process’ outcomes related to using the developed app;
2. Assess the knowledge gain related to sun health outcomes in response to using the app, compared with placebo control; and
3. Measure skin type, sun sensitivity and normal sun exposure patterns of participants and sun exposure behaviours.

Project Specific Requirements:
The student will help the research team to:
- construct databases of survey data; collate and clean datasets; perform statistical analyses; perform qualitative analyses of feedback; critically analyze findings; and, write a manuscript that describes and critically discusses study findings for publication.

We now have a dataset from these pilot studies that needs to be analyzed.

Project Length: 24 point MPH only
Reducing and preventing energy drink intake in children  
*Dr Siobhan Hickling; Dr Gina Trapp*

**Background:** Energy drinks have catapulted to popularity among young people. Whilst they are marketed to improve the body’s performance, they pose a significant health risk due to the high levels of caffeine, sugar, sodium and herbal stimulants they contain. In Australia, energy drinks are required by law to carry a warning statement that they are ‘not recommended for children’, however no restrictions are placed on who can purchase these drinks and they are widely available and accessible to children. More than half of energy drink consumers aged 12-17 years have reported experiencing adverse health outcomes following consumption, some serious enough to warrant seeking medical help. Despite growing community concern and evidence of health risks, Australian governments have not enforced age-specific restrictions on these drinks. Thus, there is a critical need to identify other ways to minimise harm to children.

**Outline:** The overall aim of this research is to develop knowledge-based interventions that could be effective in reducing and preventing children’s energy drink intake. Two student projects can be offered; (i) the development of a child-focused intervention and (ii) the development of a parent-based intervention.

**Methodology:** Focus groups with parents/children and development of intervention resources.

Project Specific Requirements:
- Excellent interpersonal, written and oral communication skills.
- Working with Children Check.
- Police Clearance.

Influence of the food environment near schools on children’s dietary intake  
*Dr Siobhan Hickling; Dr Gina Trapp*

**Background:** Many WA schools, especially in socio-economically disadvantaged areas, are surrounded by unhealthy food-outlets. Recent calls from the WA community for a ban on fast-food outlets near schools, further highlight the need for regulation addressing the location of unhealthy food-outlets, yet little is known about how often school children patronise food-outlets near schools, when and what they purchase. This lack of evidence means policies to manage food-environments near WA schools are currently non-existent and difficult to advocate for.

**Outline:** Several multidisciplinary and innovative research projects are available. These are aimed at:
- Longitudinally mapping, measuring and monitoring the food environment surrounding Perth schools.
- Investigating students’ patronage of food outlets near their school, including which food outlets they use, how often, when and what they purchase.
- Identifying differences in the dietary intake of students attending schools located in ‘healthy’ versus ‘unhealthy’ food environments.
- Undertaking natural experiments (before and after studies) to investigate how new food outlets opening near a
school impacts on the eating behaviours of children attending that school.
• Investigating student, school staff, the community and food business owners’ attitudes towards (a) unhealthy food environments near schools; and (b) potential policy and practice changes to improve food environments near schools.
• Co-developing a research translation tool for Local Governments to better manage food provision near schools.

Methodology: Depending on the project chosen, methodologies could include use of Geographical Information System (GIS) technology, direct observation, survey development (including an in-built interactive mapping activity), focus groups and interviews.

Project Specific Requirements:
• Excellent interpersonal, written and oral communication skills.
• Working with Children Check.
• Police Clearance.
• Data analysis and qualitative research skills (depending on the project chosen)

The Youth Mental Health team at Telethon Kids Institute is working on improving the mental health and wellbeing of LGTBIQA+ young people. We have several opportunities to conduct research and translation projects on the mental health of LGTBIQA+ young people and suicide prevention initiatives with LGTBIQA+ young people and their families.

Outline: The project can focus on a specific subgroup of LGTBIQA+ young people (e.g. trans young people), or LGTBIQA+ young people broadly. Students are able to work on one of the projects already underway in our team, or create a new project, depending on the specific degree requirements. The specific project will depend on the interest and skills of the student and our projects are flexible based on the student’s time frame.

Potential new projects are:
• Creating an intervention or enhancing understandings on how to decrease suicide risk in LGTBIQA+ young people
• Translating research to the real world through advocacy and policy change: for example, creating and piloting translational resources enhancing understandings of LGTBIQA+ young people, e.g. resources targeted towards peers, families or clinicians, or creating co-designed resources with trans young people on navigating health services
• Projects with parents or families of LGTBIQA+ young people, or clinicians who work with LGTBIQA+ young people
• A project within a broader longitudinal project underway that is looking at the mental health and wellbeing outcomes of trans people undergoing top surgery

Improving the mental health of LGTBIQA+ young people
Prof Angus Cook (in partnership with Penelope Strauss and Ashleigh Lin from the Telethon Kids Institute)

Background: LGTBIQA+ young people experience poorer mental health outcomes and higher rates of suicidality compared to their non-LGTBIQA+ peers. It is also known that LGTBIQA+ young people experience barriers in accessing health services inclusive of LGTBIQA+ identities.
Methodology: To be discussed based on the specific student and their interests and needs. Our team conducts quantitative, qualitative and mixed methods research.

Project Specific Requirements:
- Requires a Working with Children Check
- Undergraduate degree in health sciences.
- Ability to work with young people and passion for the mental health of young people.

Projects under the Genetic Epidemiology Group

The Genetic Epidemiology Group (GEG) is home to a highly-skilled team of genetic epidemiologists, statisticians and epidemiologists who are committed to identifying the genetic, epigenetic and environmental determinants of common human diseases, and exploring ways of using such information to improve human health.

The GEG team undertake research into a wide spectrum of human trait and disease areas, as well as methodological research into the techniques required to conduct successful projects. We work closely with clinical and academic collaborators locally, nationally and internationally.

Research topics include:
- Breast cancer
- Melanoma
- Mesothelioma
- Cardiovascular disease
- Sleep disorders
- Burns and scarring
- Autism
- Lipidomics
- Statistical research methods
- Appreciation and acceptance of diversity and equality of all people, regardless of age, gender, sexuality, race or religion.
- Excellent written and verbal communication skills.
- Demonstrated ability to work both independently and as a member of a team.

Projects with a genetic focus will use statistical methods of genetic and genomic analysis, utilizing bioinformatics and high throughput ‘omics’ technologies to unravel the genetic and environmental contributions to human disease.

Other projects involve high-level statistical analysis of “big data” from large data linkage projects or population-based databases that focus more on (non-genetic) clinical outcomes, integral to primary prevention as well as early detection of chronic human disease.

Projects are available for both Honours and Masters level projects. Previous biostatistics training is preferred.

Interested students should contact A/Prof Jennifer Stone for details and to be put in touch with relevant GEG team members and project supervisors.
Projects under Global Health

In addition to the projects listed there may also be opportunities to get involved with research projects in northern Thailand. One potential topic is a SinLek rice project which is a placebo-controlled cross-over trial of a heritage black rice vs a white rice in a primary school in Chiang Rai, Thailand. Any students interested in undertaking a project in this area please contact A/Prof Justin Denny.

Chronic kidney disease in Sri Lanka

Prof Jane Heyworth in collaboration with Dr Tanuja Ariyananda (Lanka Rain Water Harvesting Forum) and Dr Gayan Bowatte (University of Peradeniya)

Background:
There are approximately 70,000 estimated CKD/CKDu patients in 6 of the 9 provinces in Sri Lanka. Despite many studies conducted in this area, the risk factors for this disease are still uncertain (thus “u” in CKDu). According to studies carried out to date, CKDu maybe a result of drinking water contamination.

In the Northern province, a preliminary survey conducted of CKDu patients in households with rain water harvesting system installed in the northern province indicated that the patients “feel healthier” after drinking rain water and that their condition remain stable. However, further research is needed to confirm these findings and to identify differences in the constituents of harvested rainwater and other drinking water.

The Lanka Rain Water Harvesting Forum (LRWHF) has installed over 500 RWH systems in households Northern & Uva province.
Migration widows: The impact of the international migration of workers on those who stay behind

Dr Julie Saunders; Prof Jane Heyworth

Background: Nepal has a long history of labour migration with an estimated 3.5 million Nepalese working abroad (Simkhada et al 2017). Labour migrants from Nepal are predominantly males; 15% of all economically active males (aged 15 years and older) compared with 2% of Nepali females (Maharajan, Bauer, Kner, 2012). The majority of these males are from agricultural backgrounds.

Despite research into the health risks for those who migrate for work, there is little research on the health and wellbeing impacts for those who stay behind. However, an understanding the contextualised impact on women and families left behind is important.

Outline: To estimate the extent of social, health and gender impacts of the international migration of male workers from Nepal on the women and families left behind.

Specific objectives are to:
- Develop a questionnaire based upon the results of recent qualitative research.
- Pilot the questionnaire with 100 women in the Central (Kathmandu) and Western (Pokhara) Development Regions in Nepal.
- Undertake a reliability study with a sub-sample of this population.
- Estimate and compare the prevalence of key impacts among those left behind with those whose partner has not migrated for work.

Methodology: We have undertaken qualitative research with women whose partners have migrated for work and the current study will build upon those findings to develop a questionnaire.

A quantitative survey of 100 women who have a child aged under 5 will be undertaken. The sample will be stratified on the basis of whether a partner has migrated for work in the past 12 months. A sub-sample of 50 women will participate in a test-retest reliability study completing the questionnaire on two separate occasions, two to three weeks apart.

The student will be supported by a local research assistant to recruit the sample and administer the questionnaire. The student will analyse and interpret the data and write up these findings. The student will prepare a report the findings to be provided to the NGOs, prepare a video of the key messages of this research and a conference abstract.

The student will analyse the transcribed interviews, undertake thematic analyses, and interpret and write up these findings. The student will prepare a report the findings to be provided to the NGOs, prepare a video of the key messages of this research and a conference abstract.

Project Specific Requirements:
UG: Completed PUBH2203 and PUBH3305 (or their equivalent) with a Distinction or High Distinction grade.

PG: Completed PUBH4401 and PUBH4403 (or their equivalent) with a Distinction or High Distinction grade.
Developing an mHealth intervention to promote antenatal health and immunisation

Dr Julie Saunders; Prof Jane Heyworth

Background: mHealth initiatives are becoming more prominent in low and middle income countries as a means of engaging residents in public health activities. The Kaski District Public Health Office (DPHO), located in Pokhara, Nepal, wish to develop more effective ways of delivering health reminders around antenatal care and vaccinations to persons living in rural Nepal. Mobile phones are commonly used in Nepal, thus mHealth initiatives may be an efficient method of reaching families living in rural areas. DPHO and Kanchan Nepal, our partner organization, will provide advice on the local context, including antenatal care and immunisation schedules.

Outline: To develop a culturally relevant mHealth intervention to convey specific health messages to rural Nepalese women.

Specific objectives are to:

- Review the literature on the use of mHealth interventions for health messaging.
- Determine the messages that might be most effectively conveyed by this approach.
- Develop culturally appropriate and engaging messages with input from the local community.
- Pilot and evaluate the health messages for the app among the local community.

Methodology:
The student will work with DPHO and Kanchan Nepal to determine the schedule for delivery of health messages and seek their input into the appropriate style of message. The project may include interviews with staff of the DPHO and community health posts as well as focus groups with rural community members. The student will prepare a project plan for the mHealth intervention that includes recruitment, access, messages and ongoing or longer-term evaluation.

Project Specific Requirements:

UG: Completed PUBH2216 or PUBH3302 (or their equivalent) with a Distinction or High Distinction grade.

PG: Completed PUBH5754 or PUBH5805 (or their equivalent) with a Distinction or High Distinction grade.
Health risk assessment of artisanal brick kilns in low-and middle-income countries

Prof Jane Heyworth

Background: The artisanal brick kiln industry is an important source of air pollution in low to middle income countries. In addition brick workers are among the most marginalized of unskilled workers and the industry is in need of urgent environmental, occupational health and safety interventions. There are over 300,000 highly polluting brick kilns throughout low- and middle-income countries, emitting over 890 million tonnes of CO2 each year as well as high levels of PM 2.5, sulfur dioxide, carbon monoxide and black carbon. These emissions are responsible for serious impacts on human health in workers and residents of surrounding areas.

This project will involve describing the global artisanal brick industry and the associated risks to human health, and estimating the potential reduction in health risks with the implementation of ‘improved’ kilns that have been developed to reduce adverse environmental emissions. A case study of post-earthquake brick kiln reconstruction in Kathmandu valley will be undertaken.

Outline:
1. Describe the artisanal brick kiln industry from a global perspective;
2a. Identify the hazards associated with artisanal brick kilns and the associated health and environmental outcomes for particular levels of exposure;
2b. Identify the exposed population and the potential for prevention;
3. Investigate the changes in hazards and exposure levels with the implementation of ‘improved’ kiln technologies; and
4. Investigate the implementation of ‘improved’ kiln technologies in the Kathmandu Valley since the Nepal earthquake of April 25, 2015.

Methodology:
The project will require you to:
• develop, prepare and submit a research proposal;
• review the literature on artisanal brick kilns in low-middle income countries;
• conduct a qualitative health risk assessments based on analysis of the available literature;
• obtain and compile available information on brick kiln reconstruction in the Kathmandu valley since April 2015;
• prepare manuscripts for publication.

Project Specific Requirements:
Well-developed literature searching and reviewing skills.
Health effects of air pollution
Prof Jane Heyworth

Background: Air pollution (AP) patterns have changed as technological advances and pollution controls have led to reductions in concentrations of pollutants such as lead and sulfur dioxide (SO2). However, urbanisation with its associated increase in motor vehicles, industrial processes and energy requirements, are overtaking the advances made in AP control over the past two decades. The AP health burden is substantial; there is evidence from Europe that ~50% of adult mortality resulting from AP is attributable to traffic emissions. Significant sources of AP in the Perth metropolitan area are motor vehicles and domestic wood heaters (25% of households have wood heaters). The aim of this study is to investigate the long-term effects of air pollution, specifically PM10, PM2.5, NO2, CO and ozone, on cancer outcomes in a cohort of older men in Perth.

Outline: Does exposure to air pollution at the concentrations observed in Perth lead an increased risk of cancer.

Methodology:
Quantitative methods. AP exposure metrics have been developed and linked each participant in the Health in Men Study (HIMS), a cohort of 12,201 men aged 65 years and above. These men were recruited in 1996 and were followed up to 2016. Using cox proportional hazard regression models, the hazard ratios and 95% confidence intervals for the impact of different pollutants and cancer outcomes will be estimated.

Project Length: 24 point MPH only

What is the impact of vegetation on air quality?
Prof Jane Heyworth; Ania Stasinska; Dr Natasha Pauli (School of Agriculture and Environment UWA)

Background: There is emerging evidence that green space is associated with health and wellbeing. Some of the mechanisms by which this might occur include: increased physical activity, reduced stress, improving air quality and reducing urban heat effects. Vegetation may be both beneficial and harmful for air quality as trees can filter out particulates in air, but some may also produce volatile organic compounds or pollens. In order to plan greening in urban areas to improve health more in-depth knowledge is needed regarding the specific settings and greening characteristics that will maximize benefits.

Outline: To understand the relationship between green space and air pollution in Australian urban environments.

Methodology: Literature review.

Project Specific Requirements: Good analytical and writing skills
Health and well-being impacts of interactions with green space: Does perception of biodiversity influence outcomes?

Prof Jane Heyworth; Dr Natasha Pauli (School of Agriculture & Environment UWA)

Background: Perth is within a global biodiversity hotspot, with a high proportion of endemic species coupled with a dramatic reduction in total area covered in native vegetation. There exists a broad body of literature detailing the links between green space and impacts on physical and mental health and wellbeing. However, there is a relative lack of information on how the biodiversity of green spaces is a) perceived by the general public and b) is linked with health and well-being.

Emerging research has shown some potential correlations between access to areas with higher biodiversity, respiratory health and allergic conditions. However, the degree to which people’s perception of biodiversity influences their use and opinion of green spaces with varying levels of native biodiversity has been little explored in the Australian context.

This research project will use a mixed methods approach to explore perceptions of a cross-section of the community to a spectrum of green spaces that could be used for recreation, highlighting the likely impacts on wellbeing and physical activity.

Outline: To understand variation in the perception of biodiversity; and to assess whether people’s views on biodiversity are linked with differential impacts on health and well-being.

Methodology: Literature review, questionnaires, focus groups, qualitative and/or quantitative data analysis.

Project Specific Requirements: Good analytical and writing skills. Ability and willingness to interact with members of the public and/or key external stakeholders.

Modelling 20 years of noise in WA mines: have noise levels reduced?

Dr Peter Franklin; Prof Jane Heyworth

Background: Prolonged exposure to high levels of noise can result in permanent and irreversible damage to hearing (noise induced hearing loss – NIHL). Noise exposure is prevalent in mining and is a generic hazard, to a greater or lesser extent, to all operations within mining. The mining industry has long been known to have one of the highest rates of occupational NIHL. A 2004 SafeWork Australia report used compensation claims (1998/99 to 2001/02 data) for NIHL to determine incidence of claims for different industries. Mining had the highest incidence of deafness claims (343/100,000 employees in 2001/02). In Western Australia (WA) there is a regulatory requirement for specific action to be taken when people are exposed to either an average noise level of more than 85 dB(A) for an eight-hour working day (LAeq,8h) or a peak noise level in excess of 140 dB(lin).

The WA Department of Mines, Industry Regulation and Safety (DMIRS) have a guideline for the management of noise in WA mining operations.

Despite this, noise measurements above the exposure standard were recorded for 93% of underground production employees, 73% of surface production employees, and 68% of ore treatment employees in mines between 1996 and 2009.
Outline: The aim of this study is to investigate noise levels in WA mines between 1996 and 2016 to determine: 1) the main contributing factors to elevated level and 2) if there have been reductions in noise over that 20 year period.

Methodology: Noise data has been collected by DMIRS since 1996. We will initially model the determinants of exceedance of the full-shift workplace noise exposure limit (LAeq,8h≥85 dBA) using logistic regression analyses. Models will include the type of mine, place of collection (eg surface or underground), and activities conducted during collection. Trends over time will then be calculated.

Project Specific Requirements: Statistical competency (ideally biostats II)

Health effects of mining exposures?
Dr Peter Franklin

Background: Mining activities are associated with exposure to harmful dusts and gases. Studies on mining cohorts have advanced scientific knowledge on causal relationships between these exposures and chronic respiratory diseases (e.g. pneumoconiosis and lung cancer). This has influenced regulatory changes over the past decades with improved respiratory health outcomes. However, ongoing assessment is required to determine if these changes are sufficient in protecting miners’ health.

The WA miners’ cohort includes over 150,000 miners who worked and lived in WA between 1996 and 2012. Their occupational histories have been decoded to assign quantitative exposure metrics for diesel and silica, two of the most common mining exposures. The cohort has been linked with administrative health records allowing assessment of various health outcomes. The overall aim of this study is to investigate the short- and long-term health effects of modern-day mining exposures, specifically silica and diesel.

Outline: Are current mining emission regulations sufficient to preserve miners’ health?

This project offers potential students the opportunity to choose from a variety of health outcomes (e.g. cancer, pulmonary, cardiovascular, renal, etc.). The scope of a project will be tailored to suit the candidate’s goals.

Candidates will gain hands-on experience of applying core epidemiological concepts and understand how epidemiological evidence is generated and used to inform policy and planning of occupational health standards and guidelines.

Methodology: Students will undertake a comprehensive literature review on their chosen research question and develop a research proposal, followed by quantitative analyses of large linked datasets including the cohort’s occupational and health histories. Analyses will include generation of disease frequencies, general population comparisons, time trends, estimation of risks and dose-response relationships, etc. Scientific manuscripts for peer-reviewed publication will be prepared.

Project Specific Requirements: Good literature reviewing skills and statistical knowledge, e.g. Biostatistics II essential.

Project Length: 24 point MPH only
Building a robust Nursing workforce

Dr Ian Li; Mr Rory Watts

Background: The nursing workforce is an important component of the health workforce. However, research into the nursing workforce has been hampered by a lack of rich, representative data. At the same time, prior literature indicates that Australia is likely to face a lack of nurses to meet demands for the future. More recently, media reports suggest that newly qualified nurses are unable to secure appropriate employment within Australia, and have had to pursue nursing careers overseas. Shortages in the nursing workforce and the inability to secure appropriate employment, has come to be known as the ‘nursing workforce paradox’.

It is thus imperative that more research is conducted into the education-work transition of nurses, from universities into the workplace.

Prior research looking at underemployment of nursing graduates over 2008-2015 has tackled some of these issues, however, this research has only focussed on short-term outcomes post-university completion. The proposed program of study will examine longer term outcomes.

Outline: The aim of the study is to examine labour market outcomes for nursing graduates from Australian universities. A time-series of data is available, and hence trends in the following research objectives can also be explored.

These outcomes include unemployment, earnings, underemployment, and contract type.

1. To examine the unemployment and underemployment rate of nursing graduates, and the transition from unemployment to employment in the longer term
2. To examine employment contract and permanency for nursing graduates
3. To examine earnings of nursing graduates in the short and long term, as well as the distribution of earnings.
4. To examine whether employment outcomes differ for nursing graduates with an undergraduate qualification, as opposed to a Masters entry-to-practice type qualification

Methodology: The analyses for this study will be primarily quantitative in nature. The analyses will utilise a national survey of Australia graduates available from 2010-2017, which also includes longitudinal follow-up of the survey respondents.

Project Specific Requirements:

Essential
- Excellent report writing skills and proficiency in English.
- Biostatistics I or equivalent.

Desirable
- Biostatistics II or equivalent.
- Competent in SPSS, Stata or equivalent.
How do unhealthy behaviours influence employment outcomes

Dr Ian Li

**Background:** Unhealthy behaviours and lifestyle factors are areas of focus for health policy. Thus far, most studies looking at these factors have focussed on their impacts on diseases and health outcomes. It has also been hypothesised that unhealthy lifestyles could also have further reaching impacts on employment outcomes. Consideration of the costs of adverse employment consequences would lend further policy weight in tackling unhealthy behaviours and lifestyles.

**Outline:** The aim of this study will be to look at several unhealthy behaviours derived from the literature and examine the causal impact of these behaviours with several measures of employment outcomes.

**Methodology:** This study will use data from a nationally representative, longitudinal dataset called the Household Income and Labour Dynamics Australia (HILDA) study. The HILDA study commenced in 2001 and has an annual follow up, with the 17th wave of data being made available recently. Longitudinal analytical regression techniques will be used for this study.

**Project Specific Requirements:**

- **Essential**
  - Excellent report writing skills and proficiency in English.
  - Biostatistics I or equivalent

- **Desirable**
  - Biostatistics II or equivalent.
  - Competent in SPSS, Stata or equivalent.

The undergraduate public health student: Where do they come from? Where will they go?

Dr Ian Li, Mr Rory Watts

**Background:** Historically, the public health degree in Australia has been a Master of Public Health (MPH). However, much of the public health education taught is now at an undergraduate level, either through specific public health degrees, or through majors and units in other degrees (e.g. health science).

Similarly, most research about public health students is focussed on the MPH, leaving an important research gap about the outcomes that undergraduate public health students attain, and the value they add to the workforce.

**Outline:** The research project aims to answer the following questions about undergraduates of public health:

1. What are the employment rates in terms of underemployment, unemployment, part-time and full-time work, hours worked and contract type
2. In which jobs and industries do public health graduates work and do they feel this is a good-fit?
3. If undergraduates go on to further study, what do they study?
4. How have these changed over time?

**Methodology:** The analyses for this study will be primarily quantitative in nature. The analyses will utilise a national survey of Australia graduates available from 2007-2018, which also includes longitudinal follow-up of the survey respondents. Linear and binary outcome regression techniques will be used in the analysis of the data.

**Project Specific Requirements:**

- **Essential**
  - Excellent report writing skills and proficiency in English.
Disentangling the influences on well-being on young lives in developing countries

Dr Ian Li and Dr Ishita Chatterjee (UWA - Business School)

Background: Well-being has been recognised as being an important measure for individuals, and encompasses various dimensions, including human function, mental health, meaning in life and life satisfaction. Well-being has also gained increasing importance in the perspectives of policy-makers, with many countries now prioritising well-being of their populations as a policy objective.

There have been substantial research efforts dedicated to the assessment of a plethora of outcomes for children in low and middle income countries, including assessments of their health status, educational attainment and cognitive ability. Much less research has been devoted to an examination of the influence of the well-being of children in developing economies. This is mainly due to a lack of quality data.

However, the holistic and multi-dimensional encapsulation of outcomes from examining well-being is of policy importance, and disentangling the factors that lead to improved well-being is of utmost importance.

This program of research will use longitudinal data on children from four low-income countries (Ethiopia, India, Peru and Vietnam) to examine the determinants of well-being. Other secondary outcomes that can be researched include self-efficacy, aspirations and hopes for the future.

Outline:
There are several research questions that can be examined:

1. How does changes in the economic situations of household influence well-being of the children in the household? Further, does the permanency of the changes in finances (i.e. one-off shocks contrasted with permanent income changes) have an effect on well-being?
2. How do childhood circumstances (including health and educational attainment) influence well-being in young adulthood?
3. How do major life events – such as natural disasters – influence well-being?
4. Other research questions can be developed in consultation with the Dr Li and Dr Chatterjee.

Methodology:
This study will use a multi-country, longitudinal survey of children and households called the Young Lives study. The analyses for this study will be quantitative in nature. Linear and quantile regression techniques that permit utilisation for the analysis of panel data will be used in this study.

Project Specific Requirements:

Essential

- Excellent report writing skills and proficiency in English.
- Biostatistics I or equivalent.

Desirable

- Biostatistics II or equivalent.
- Competent in SPSS, Stata or equivalent.
Projects under the Neuropsychiatric Epidemiology Research Unit

**Survey of High Impact Psychosis (SHIP) projects**

*Prof Vera Morgan*

The SHIP survey took place in 2010 and is one of the largest and most comprehensive face-to-face assessments of psychotic disorders undertaken in Australia and internationally. Its main aim was to collect prevalence and profile data on a representative Australian sample of men and women with psychotic illness in contact with public mental health treatment services and NGOs.

Over 1500 data items were collected from 1825 participants covering, among others: education, housing, employment, income; psychopathology; cognition; functioning and quality of life; service utilisation; medication use; and physical health (including fasting blood tests). Students interested in undertaking epidemiological projects using the SHIP data should contact *Prof Vera Morgan* for details.

**The Raine Study**

The Raine Study is a longitudinal pregnancy birth cohort and a rich resource for the study of genetic, phenotypic, behavioural, environment and social factors that affect health and development. 2,900 pregnant women were recruited between 1989 and 1991 and their offspring formed the Raine Study Gen2 cohort. Information was collected on the pregnant mother and subsequently both parents and the child. The Gen2 cohort participants have been assessed at birth, and then at 1, 2, 3, 5, 8, 10, 14, 20, 22, 27 and 28 years of age. Today the Raine Study has data on four generations of participants – Gen0 (grandparents of the main cohort), Gen1 (their parents), Gen2 and Gen3 (their children). Information available includes questionnaire data (demographic, developmental, psychological), clinical assessment information (anthropometry, DXA, physical fitness), genetics (GWAS, EXOME, EWAS) and biological sample analysis.

Information collected over the last 30 years has been utilised to obtain an understanding of how events during pregnancy, childhood, adolescence and adulthood affect health and development.

The Raine Study information can be used to examine complex causal pathways associated with health and social outcomes. Information has been prospectively collected 12 times over the life course of the Gen2 participants and provides a unique opportunity to examine longitudinal data to answer important research questions.

A range of research opportunities are available for utilising the Raine Study Dataset. Data is available on research areas including genetics; cardiometabolic; respiratory, immunology and inflammation; hormonal and reproduction; musculoskeletal; psychological; senses; bio; perinatal; built environment and social environment; and education and work. Detailed information on questionnaires and data collections are available on the Raine Study website rainestudy.org.au.

**Enquiries:** Aggie Bouckley - aggie.bouckley@uwa.edu.au
Projects under Vulnerable Groups

Family and Domestic Violence
Lit Colleen Fisher

There have been a number of research projects related to family and domestic violence that have been undertaken in the past, from exploratory research to program evaluation. We have also undertaken research with participants across the lifespan (from childhood to older age) and with mainstream and CaLD groups, including those from a refugee background.

There is opportunity to develop a research project in the area of family and domestic violence. This might be examining issues related to experiencing or using this kind of violence, human service, legal and health responses, policy development, prevention, or program intervention. There is also opportunity to undertake research on projects with relevant non-government agencies.

Projects are available at MPH and Honours levels. Interested students should contact Prof Colleen Fisher.

Dental care in a community setting
Lit Linda Slack-Smith; A/Prof Angela Durey; Julie Saunders

Background: For many people from marginalised groups, attending dental services and maintaining oral health is challenging—however it can make a life changing difference. Services are often costly or have long waiting lists. We are interested in whether providing dental care in environments responsive to the needs of disadvantaged community groups increases their access to care and confidence to manage their oral health. This project will explore one aspect of dental care in community settings. For example provide community centred care for Aboriginal adults OR perspectives of volunteers in such settings.

Outline: One or more projects to investigate important aspects of dental care in community settings, building on previous work.

Methodology: Qualitative interviews or online survey – may include policy searches, literature searches etc

Project Specific Requirements: Appropriate skills to work in community settings.
Perceptions and/or portrayal of sugar and/or oral health in the community and media
Prof Linda Slack-Smith; A/Prof Angela Durey

**Background:** Sugar has long been associated with poor oral health and obesity, yet it remains a common part of our diet. This project will conduct qualitative interviews to investigate community perceptions and/or investigation of the role of the media in promoting sugar despite evidence of its relationship to significant health problems.

**Outline:** Potential aims may include
- a Literature Review to determine context in which sugar/oral health is portrayed in the media using quantitative and qualitative approaches (frequency of use, terminology used, contexts, related terms in text);
- determining community perceptions about the role of sugar in diet and meanings associated with it e.g. rewards in various groups such as parents/older adults/refugees etc (perceived risks, role in health etc);
- conducting a comparative analysis of similarities and differences between groups.

**Methodology:** There are options to undertake simple content analysis of news media or to undertake qualitative interviews depending on skills and preferences of students. News media would be analysed using Factiva or similar approaches.

**Project Specific Requirements:** Qualitative interviews will require suitable skills such as ability to debrief. Analysis of media articles requires appropriate quantitative skills.

Stakeholder perspective on oral health for people in the community with mental health disorders
Prof Linda Slack-Smith; A/Prof Angela Durey

**Background:** We have undertaken research on dental professional and mental health worker perspectives on oral health for those with mental health disorders but it is really important to gain perspectives of broader stakeholder and consumer groups.

**Outline:** To determine stakeholder and consumer perspectives on oral health care for people in the community with mental health disorders.

**Methodology:** Qualitative.

**Project Specific Requirements:** Appropriate skills to undertake qualitative work in the community.
Projects on child dental admissions

Prof Linda Slack-Smith

**Background:** Poor oral health results in significant morbidity, particularly for the marginalised and underserved populations. Particularly vulnerable groups include young children and older adults.

See:


**Outline:** There are a range of potential projects investigating dental hospital admissions for children in Western Australia.

**Methodology:** Epidemiology of linked data.

**Project Specific Requirements:** Student needs appropriate background for these projects, statistical skills – likely at least Biostatistics 2.

Projects investigating health or oral health in older Australians

Prof Linda Slack-Smith

**Background:** Aged care has attracted a lot of attention with both the Royal Commission and COVID-19 pandemic but the issues are complex and significant research is needed to guide improvements.

**Outline:** There are a variety of important projects. Understanding family needs in navigating aged care for their older adults, change in services in entry to aged care, ageing in the community, dental services for aged care, domiciliary care.

**Methodology:** Opportunities for qualitative, quantitative, translational, policy and health economics projects in residential aged care and community settings or using existing data.

**Project Specific Requirements:** Will depend on project
Projects in oral health and inequities

Prof Linda Slack-Smith; A/Prof Angela Durey

Background: Good health including oral health is often unfairly distributed among different populations. Poor oral health results in significant morbidity, particularly for the marginalised and underserved populations. Especially vulnerable groups including young children and older adults. Our focus is on health inequities generally with a particular interest in viewing such inequities through the lens of oral health.

Outline: There are a range of potential projects investigating and addressing oral health and health inequities across the lifespan (including child or older adult) and in various groups: Aboriginal Australians, people with disability, people with mental health issues, young children, the aged, those in residential aged care refugee and migrant groups, rural Australians, homeless and those with co-morbidities.

Methodology: Project approaches include systematic reviews, quantitative, qualitative and policy/translation (including models of care).

Project Specific Requirements: Student needs appropriate background for particular projects, for example statistical skills for quantitative projects.

Exploring school staff responses to student reports of bullying

Dr Julie Saunders; Dr Jacinta Francis (Telethon Kids Institute - jacinta.francis@telethonkids.org.au)

Outline: Bullying has been recognised as a major public health concern, with approximately 1 in 6 students in Australia bullied at least once a week and victimisation peaking at age 10 and during periods of school transition. Peer bullying and aggression are associated with physical and mental health problems, such as anxiety and depression, increased risk of self-harm, attempted or completed suicide, poor academic performance, and criminality and delinquency. Many school bullying interventions encourage bullying victims to seek help from school staff. However, students often fear that reporting bullying incidents will worsen their situation. School staff have also requested additional training to adequately address bullying behaviour. This qualitative study will explore school staff responses to student reports of bullying behaviour by 8-10 year old students attending Western Australian primary schools. The research plan includes a rapid review of the published literature and interviews with school staff from Catholic and Independent primary schools. Findings will inform the development of resources to equip school staff when responding to witnessed or reported incidents of bullying and to support the students involved. issues, young children, the aged, those in residential aged care refugee and migrant groups, rural Australians, homeless and those with co-morbidities.

Project Length: 24 point MPH only
Evaluation of risk factors for delirium in people towards the end of life

Prof Angus Cook (in partnership with Dr Felicity Hawkins)

Background: Delirium is an acute disturbance in attention and awareness with fluctuating severity and associated cognitive disturbance. Delirium occurs in many individuals with advanced illness at the end of life and is associated with significant morbidity and increased hospital stay. The condition is also very distressing to the patient, their families and health care providers.

However, numerous studies have shown that delirium arising at the end of life is frequently unrecognised, and management strategies are lacking. Delirium can be reversible in palliative care settings, and can be prevented if risk factors are accurately identified and addressed.

Outline: The primary aim is to develop and evaluate an assessment tool for potential risk factors for delirium in people towards the end of life. The student will review clinical data to determine the prevalence of delirium and related symptoms, associated risk factors, and other aspects of the clinical trajectory (including evidence of reversibility).

This project seeks to improve the care of people with late-stage illness through improving the understanding and identification of delirium at the end of life, reducing associated adverse outcomes and leading to more effective prevention and management strategies in this population.

Methodology:
The project will involve two stages:
1. Development of an evidence-based assessment tool for late-stage delirium. Items used in the assessment will be selected based on a review of previous literature and expert consultation.
2. Review of historical patient charts and implementation of the delirium assessment tool at a major palliative care service in Perth.

Summary statistics and basic predictive modelling will be used to evaluate any associations between risk factors and emergence of delirium in the study population. Further analyses will be used to evaluate patterns of delirium by broad age category, principal diagnosis (oncological versus non-oncological), the presence/absence and stage of associated dementia, and whether admission was ended by death or discharge to home or residential aged care facility.

Project Specific Requirements:
Requires basic biostatistical knowledge

Project Length: 24 point MPH only
Trauma-informed practice in Australian Schools
Dr Karen Martin

Background: The Thoughtful Schools Program https://thoughtfulschools.org.au/ is a trauma-informed practice promotion intervention comprising; 1) trauma-informed practice principles and associated Thoughtful Schools Checklist; 2) evidence and expert-informed strategies to support each principle, and 3) professional learning and coaching for schools. Our research team is implementing and evaluating the program in a sample of metropolitan and regional WA schools. There is the opportunity for a student to participate in an aspect of the Thoughtful School Program evaluation or in research related to the trauma-informed practice. See below for example aims.

Outline:
Examples of potential research objectives include:
1. To determine teachers’/leaders’ perspectives of the Thoughtful Schools Program;
2. Identify barriers and facilitators to the uptake and implementation of the Thoughtful Schools Program;
3. To identify staff perceptions and use of trauma-informed practice;
4. To determine changes in the trauma-informed environment at schools participating in the Thoughtful Schools Program;
5. To identify the impact of the Thoughtful Schools Program on messaging to school community;
6. To identify the impact of the Thoughtful Schools Program on the school policies.

Methodology: We have numerous opportunities for data collection and analyses in relation to the Thoughtful Schools Program or more broadly trauma-informed practice. Thus there is flexibility in creating a research opportunity around a student’s interest, skill set and desired experience. The student’s project can be qualitative or quantitative and incorporate data collection from a variety of sources (for example teachers, principals, children, parents websites/newsletters).

Project Specific Requirements:
A Working with Children Check may be required. An understanding of the impact of trauma on children would be beneficial.
Evaluation of a therapeutic drumming intervention in Kimberly Indigenous communities

Dr Karen Martin

Background: DRUMBEAT is a therapeutic drumming intervention developed by Holyoake aiming to build participants’ social and emotional skills and reduce stress. DRUMBEAT has been evaluated in school, prison and veteran-based settings with positive results. Recently it has been adapted to be culturally appropriate for Indigenous populations and is being pilot tested in WA. The student can choose to undertake one evaluation component; 1) pre-post quantitative or 2) qualitative. There is an opportunity for the student to travel for immersion and interviews as part of this project. Note: travel is dependent on University and Western Australian government policy relating to COVID-19.

Outline: Project objectives may include:
1. To measure changes in Indigenous Drumbeat participant mental health outcomes pre and post program attendance,
2. To explore perceptions of the Indigenous Drumbeat program by participants and program facilitators; and
3. To identify program attributes contributing to the program’s impact.

Methodology: Students will be able to choose to complete the quantitative or qualitative component of the evaluation. The program will be run in multiple settings within three locations; Broome, Derby and Halls Creek.

Quantitative data to be collected on: mental wellbeing, relationships, and stress symptoms. This will involve administration of questionnaires to participant’s pre and post the ten-week program (with assistance from DRUMBEAT facilitators).

Qualitative data: semi-structured interviews to be completed with a sample of DRUMBEAT participants and facilitators. These will be done face to face and/or via zoom depending upon travel restrictions and within the project budget.

Project Specific Requirements:
Preferable that the student has experience working with Indigenous communities. Working with Children Check may be required (which will be funded by the project budget). The student must have high initiative and maturity. Aboriginal and Torres Strait Island peoples are encouraged to apply.
Projects with the WA Road Safety Centre

A Naturalistic motorcycle study in Vietnam  
Prof Lynn Meuleners

**Background:** Motorcycle users in Vietnam are highly vulnerable to road traffic injuries. They are involved in more than 70% of road traffic crashes and make up more than half of crash-related casualties and injuries (Hanoi School of Public Health, 2003; Truong, Nguyen, & De Gruyter, 2016). Despite this, there is limited evidence on risk factors as well as the nature of motorcycle crashes in Vietnam. It is expected that the findings from this study will contribute substantially to motorcycle safety by providing recommendations for road safety policies in HCMC, Vietnam. As a result, the burden of injuries may be reduced in the future.

**Outline:** This study aims to gain a better understanding of risk factors as well as motorcyclists’ behaviours during everyday trips in Ho Chi Minh City (HCMC), Vietnam.

**Methodology:** A naturalistic study of motorcyclists will be undertaken. A video camera with a GPS data logger will be used to observe in real time 50 motorcyclists over a period of six hours. Multivariate modelling, depending upon the outcome of interest, will be applied to determine road environment-related risk factors for unsafe events and behaviours.

**Project Specific Requirements:** Good analytical skills.

**Project Length:** 24 point MPH only

Relationship between fatigue and inattentional blindness  
A/Prof Paul Roberts

**Background:** Many motorcycle and bicycle crashes are characterised by a ‘looked but didn’t see’ experience (inattentional blindness) on the part of the at fault driver. Even though it is generally agreed that fatigue is likely to affect the appropriate deployment of attention while driving, looked but did not see crashes have rarely been hypothesised to be fatigue crashes.

**Outline:** This project will begin to investigate to what extent looked but did not see crashes can be the result of fatigue.

**Methodology:** The project will utilise established computer-based measures of inattentional blindness relevant to the road safety context. Participants in the study will be asked to complete an online experiment incorporating these measures of inattentional blindness. Fatigue will be assessed via a standardised sleepiness measure and by assessing the gap between obtained sleep on the night prior to testing and sleep requirement.

**Project Length:** Honours only
Investigating the association between road traffic crash severity and remoteness
Dr Matthew Legge

**Background:** Severely injured trauma patients tend to have better outcomes if the time between injury and definitive medical treatment at a trauma centre is minimised. However, in Western Australia this can be difficult to achieve because of the vast distances (up to 2,400 km) that may need to be travelled if referral to a trauma centre is required. However, much of the literature is based on information from the urban setting and little is known about the applicability of this experience in the rural and remote areas of Western Australia.

**Outline:** This project will use distance and remoteness measures as proxies for time to treatment and will investigate:
- If an association between road traffic crash severity and the location of the crash exists, particularly within rural and remote areas of Western Australia; and
- Whether crash outcomes tend to worsen as the remoteness of the crash increases, while taking into account known crash risk factors recorded in the Police reported crash data.

**Methodology:** WA Police crash data extracted from the Main Roads Western Australia (MRWA) Integrated Road Information System (IRIS) will be the primary data source for this project. This data set records the location of crashes. After geocoding the locations distance and remoteness indices can be calculated and used as proxies for time to treatment.

This can then be used in a statistical and/or spatial analysis to investigate the association between location of the crash and crash severity.

The project has the potential for a mapping and the use of geographic information systems (GIS), spatial and statistical analyses.

**Project Specific Requirements:**
- The project requires knowledge and competency in statistical software and regression modelling.
- Familiarity with GIS software and spatial analysis would be advantageous.

**Project Length:** Honours only
A bicycle simulator evaluation of safer cycling routes
Dr Michelle Fraser

Background: Cycling is being promoted in Australia in response to rising congestion, and to encourage more physical activity. Safe and connected cycling routes are essential for encouraging cycling participation. Recently, ‘bicycle boulevards’ have been trialled in Perth. These involve quiet local streets, with speeds reduced to 30 km/h and incorporate a variety of other safety measures e.g. single lane slow points, narrow street widths and lane markings to encourage cyclists to claim the lane. A bicycle simulator study would allow the impact of these safety measures to be examined under safe and controlled conditions, which is impossible to achieve on-road.

Outline: The objectives of this study are to:
1. Assess bicycle simulator performance (lane position, bicycle speed and distance to motor vehicles) when navigating through a street with safer cycling infrastructure measures, compared to a standard street.
2. Determine cyclist acceptability and understanding of the different safer cycling infrastructure measures.

Methodology: This laboratory-based experimental study will utilise a bicycle simulator. The bicycle simulator consists of a bicycle, headset and PC. Users are able to pedal, steer and brake the bicycle. The system also uses a head-mounted display providing an immersive virtual scenario for the participant. The system is controlled and outputs recorded by an attached PC. A convenience sample of 50 cyclists aged between 18 and 80 years will be recruited. A questionnaire and a bicycle simulator assessment will be undertaken by each participant. The simulator scenario will consist of sections of road with safer cycling infrastructure measures (single lane slow points, narrow street widths, lane markings to encourage cyclists to claim the lane) and sections without these measures. The speed, lane position and distance to other vehicles of cyclists will be compared between the sections of road. At the conclusion of the simulator assessment, participants will be asked about their opinions on the new infrastructure designs.

Project Specific Requirements: Good people skills and basic competency with technology.

Project Length: 24 point MPH only
The challenges of career development for health professionals in rural/remote locations

A/Prof Monica Moran; A/Prof Rohan Rasiah

Background: The health workforce in remote WA is a particularly transient one and the turnover of health personnel has a significant negative impact on service provision for communities in remote areas. In addition the cost of a rapid turnover of health professionals introduces an additional financial burden on health services. Finally for health professionals themselves the upheaval of taking up and then leaving a position in a short period of time has many negative connotations.

Much has been written about the factors that impact on health professionals’ reasons to stay or leave a remote position. Concerns regarding limited opportunities for career development in remote settings are frequently identified.

Outline: This study will involve the generation, development, implementation and analysis of an on-line survey to health professionals across a large remote area of WA. The survey will explore the perceived career development needs of these health professionals including needs for mandated continuous professional development, needs for education and training specifically related to remote practice contexts, and needs for advanced education to support career advancement. The results will be used to inform health services’ managers and education providers regarding specific strategies to enhance the sustainability of the remote health workforce through the development of a comprehensive postgraduate educational program.

Methodology:
This project will require you to:
- review the literature related to Australian health workforce in the context of rural/remote practice areas;
- generate and deploy an online survey for health professionals;
- develop, prepare and submit a research proposal and application for ethics approval;
- analyse data, compile results, and prepare manuscripts for publication.

Project Specific Requirements:
- Sound knowledge and skills in survey development.
- Interest in rural/remote health workforce and service delivery.

Disability and disaster management in the Pilbara

A/Prof Monica Moran; A/Prof Rohan Rasiah

Background: The Pilbara region of WA is well known for the frequency and ferocity of its weather related natural disasters. While such events pose significant risks for all residents in the times before, during and after the crises, evidence from other similar geographic locations suggests that the risks for people with physical disability are likely to be elevated.

A recent systematic review suggested that the voices and need of people with disability are rarely considered in emergency planning, disaster management and post disaster recovery activities.

Outline: This study will involve a desktop audit of governance, policy and procedure documents of public and private agencies funded to support the lives of people with...
physical disability in the Pilbara region of Northern WA. The audit will focus on identifying the specific strategies already in place to support and empower people with physical disability to prepare for, manage and recover from the impacts of weather related natural disasters. The results will be mapped against best practice recommendations both nationally and internationally. Based on outcomes of the audit and the mapping with best practices a set of specific recommendations will be generated for the Pilbara with strategies for disaster response and recovery that are tailored to meet the needs of people with disability.

**Methodology:**
The project will require you to:
- review literature related to disaster management and disability;
- become familiar with the range of service providers engaged with people with disability and involved in disaster management across the Pilbara;
- develop an audit tool and conduct a detailed review of service documentation related to disaster management contingencies for people with disability;
- develop, prepare and submit a research proposal and application for ethics approval; and
- analyse and synthesise data to generate best practice guidelines and prepare manuscript for publication.

**Project Specific Requirements:**
- Sound literature searching skills.
- Commitment to empowering people with disability.

---

**Experiences of families with children with disability in remote locations during a global pandemic**

*A/Prof Monica Moran; A/Prof Rohan Rasiah*

**Background:** The City of Karratha and Town of Port Hedland in the Pilbara region of Western Australia are amongst the most remote towns in Australia. Since early 2020 the world has been in the grip of the Covid19 pandemic. Despite their remoteness people living in these towns have been exposed to the same restrictions as more urban areas including social distancing, reduction in face to face health services and shortages in essential products. Emerging evidence from across the world suggests that children with disability and their families are experiencing increased disadvantage and challenges in accessing therapeutic, educational and primary health services during this time. The project focuses on an exploration of the experiences of these families living in Karratha and Port Hedland during this time.

**Outline:** This study will involve a qualitative exploratory investigation of the lived experiences of remotely located families who have a child/ren with disability during the social restrictions associated with the Covid19 pandemic. The study will provide a detailed picture of the challenges they experienced and the support mechanisms available to them in maintaining their usual lives, including access to education, healthcare needs, social connection and community access.

Results of the study will contribute to the scant body of knowledge regarding the experiences of children with disability. Recommendations will be co-designed with families using an appreciative inquiry, strengths based framework.
Methodology:
This qualitative study will draw on interview transcripts collected during the project. Participants will also be invited to take part in a Photo-story methodology where they will help select images to reinforce, elaborate or clarify their experiences. Analysis will be conducted using a narrative lens to develop stories that reflect the lives of participants during the social restrictions associated with the Covid19 pandemic.

Project Specific Requirements:
• Working with Children Check.
• Basic knowledge of qualitative research approaches.
• Literature searching skills.
• Good communication skills.
• Ability to work collaboratively with families of children with disability.

Experiences of adults with disability in remote locations during a global pandemic
A/Prof Monica Moran; A/Prof Rohan Rasiah

Background: The City of Karratha and Town of Port Hedland in the Pilbara region of WA are amongst the most remote towns in Australia. Since early 2020 the world has been in the grip of the Covid19 pandemic. Despite its remoteness people living in these towns have been exposed to the same restrictions as more urban areas including social distancing, reduction in face to face health services and shortages in essential products. Emerging evidence from across the world suggests that people with disability are experiencing increased disadvantage and are at greater risk of neglect during this time. The project focuses on an exploration of the experiences of adults with disability living in Karratha and Port Hedland during this time.

Outline: This study will involve a qualitative exploratory investigation of the lived experiences of remotely located adults with disability during the social restrictions associated with the Covid19 pandemic. The study will provide a detailed picture of the challenges they experienced and the support mechanisms available to them in maintaining their usual lives, including healthcare needs, social connection and community access.

Results of the study will contribute to the scant body of knowledge regarding the experiences of people with disability. Recommendations will be co-designed with participants using an appreciative inquiry, strengths based framework.

Methodology:
This qualitative study will draw on interview transcripts collected during the project. Participants will also be invited to take part in a Photo-story methodology where they will help select images to reinforce, elaborate or clarify their experiences. Analysis will be conducted using a narrative lens to develop stories that reflect the lives of participants during the social restrictions associated with the Covid19 pandemic.

Project Specific Requirements:
• Working with Children Check.
• Basic knowledge of qualitative research approaches.
• Literature searching skills.
• Good communication skills.
• Ability to work collaboratively with families of children with disability.
Teachers’ perspectives on Kindergarten and Pre-primary handwriting instruction
A/Prof Monica Moran; Ornissa Naidoo

Background: Foundational skills like pre-writing are important so that children can successfully transition from Kindergarten to Pre-primary. Foundational skills are predictive of long-term academic achievement.

There are limited formal handwriting guidelines to inform Kindergarten and Pre-primary teachers.

In 2020 a play-based pre-writing skills program was trialled in Kindergarten classes at two Pilbara schools. Evaluation of this pilot program demonstrated good outcomes.

The program has been further refined following pilot evaluation and in 2021 will be rolled out to seven schools across the Pilbara region.

Outline: The purpose of this study is to continue the evaluation of the play-based pre-writing skills program by generating new information and evidence regarding the needs and practices of the teachers who deliver the program in 2021.

The study aims to:
1. Identify the various methods and activities teachers are currently using to teach letter formation.
2. Explore the perceptions of kindergarten and pre-primary teachers regarding the specific pre-writing skills required to be developed by children during their Kindergarten year.
3. Identify the supports required by Kindergarten Teachers to embed pre-writing activities in their curricula.

Methodology:
Ethical approval from UWA Human Ethics Committee and WA Department of Education is currently underway.

This study will use a survey research design encompassing:
1. Literature review
2. Survey Development - A survey will be designed informed by the contemporary evidence and expert opinion to explore study aims 1 - 3 (above). The survey will utilise a variety of closed and open-ended questions addressing the overall needs of teachers for early writing in Kindergarten.
3. Survey Deployment - The Qualtrics platform will be used to disseminate the survey to all Kindergarten and Pre-primary teachers across the Pilbara in state funded schools.
4. Data Analysis - Descriptive statistics and qualitative content analysis will be used to report the survey results.

Project Specific Requirements:
The following are required:
1. WA Working with Children check
2. Interest in child development and early learning
3. Interest in survey development
Assessing contributions of international students to rural Australia

Prof Sandra Thompson

Background: The Australian Government funds a number of rural academic centres as part of building the rural workforce (a program known as the Rural Health Multidisciplinary Training Program - RHMT).

The Western Australian Centre for Rural Health (WACRH) is part of the School of Population and Global Health and has its main office in Geraldton, plus offices in Karratha and Perth.

International graduates make a major contribution to the Australian workforce, and particularly in rural areas.

International students form a varying proportion of allied health and nursing cohorts, however, support for international students is not encouraged under the RHMT.

WACRH has supported two major types of international students:

• those enrolled in health science courses with requirements for clinical supervision;
• those undertaking public health degrees or internships.

Outline:
1. To assess the contributions made by international students who have undertaken a placement with WACRH
   i) to the health workforce;
   ii) to the community and academic work of WACRH.
2. To explore the challenges and benefits experienced by people who were supported as international students by WACRH during their degree.

Methodology:
This is a mixed methods study and can be adapted for the project length required.

WACRH maintains a student database which includes questions which students complete related to their placement. It includes student status (domestic or international) as well information such as name, demographics, contact details and student’s self-reported satisfaction with their placements.

There were 100 international students from 2010 to 2018 (~3% of WACRH’s students)

For 1.i) data on all students for a period (say 2010 to 2019) to be analysed to assess the nature of international placements and any differences by category of student. Analysis of the type and nature of international student placements over time will be described.

Using the contact details in the database, attempt to contact previous students to find out their current location and work role. Of particular interest is how many of the alumni are working in Australia and in a rural setting.

1.ii) Assessment of contributions to the community and academic centre will be assessed through interviews with:
   • WACRH staff including academic supervisors
   • Community and health service partners (purposive sampling)

The key focus here is on what value these students brought to the staff and the local community in which they were placed, and the nature of those contributions.

Project Specific Requirements:
This requires basic quantitative analysis skills. And interest in interviewing and qualitative methods is essential. The work can be undertaken from Perth or Geraldton.
Project Length: The project length can be adapted to any of the unit requirements by selecting individual components of the research.

Case Studies of Organisational Action on Family Violence from the Community Respect Equality Initiative
Prof Sandra Thompson; A/Prof Monica Moran

Background: Family Violence (FV) is a gendered issue with 1 in 4 women in Australia experiencing violence by an intimate partner compared to only 1 in 13 men experiencing the same situation. Women who experience FV are often employed. The violence they experience can affect their working life by not being able to complete their job role due to physical injury or the mental health impacts from experiencing the violence. The impact FV can have on employees has now encouraged businesses to create safer work environments for employees and to promote gender equality. The work environment is a useful location to promote behaviour change and positive decision making to improve the health of employees.

Outline:
1. To assess the contributions made by international students who have undertaken a placement with WACRH i) to the health workforce; ii) to the community and academic work of WACRH.
2. To explore the challenges and benefits experienced by people who were supported as international students by WACRH during their degree.

Methodology:
To work towards the primary prevention of FV in Geraldton, the Community, Respect & Equality (CRE) Action Plan was launched. The CRE works with local community leaders, sectors and organisations to create and implement strategies to raise awareness and prevent FV.

Two of the organisations signed on to the CRE action plan, the Midwest Ports (MWP) and the City of Greater Geraldton (CGG), are interested in participation in this research project. These are the two largest Geraldton-based organisations to sign on to the CRE and their size and diversity will enable understanding of the impact of CRE family violence prevention initiatives upon different employees.

Two components using case study methods (mixed methods) are proposed:
1. A short online survey distributed to all staff in each organisation (expected to take 5-8 minutes for completion) to help with understanding where the organisation workforce overall sits on readiness and implementation of change related to primary prevention of family violence.
2. Interviews or focus groups with several staff who work in different areas and work roles within the organisation (30-60 minutes). A summary of the actions of each organisation since signing on to the CRE including informants’ assessment of progress and resistance will be provided to the organisation and (with permission) shared with the CRE Reference Group to help inform ongoing actions.

Project Specific Requirements:
Ability to travel and spend time in Geraldton is required for data collection – for example, it is suggested that 2 weeks x 5 days would be a minimum. Assistance with travel will be available and desk space and support is available within WACRH.

Communication skills and ability to engage remotely by phone and Zoom will be required for a student based outside of Geraldton.