



MPH Research Projects 2027

School of Population & Global Health

Research Projects Available in the School of Population & Global Health (SPGH)

As a world-class research university, UWA offers research opportunities of the highest calibre. Your initial research training can include 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 a 24-point MPH dissertation research student with us, you will develop, under supervision, a paper for publication in an academic 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.

If you are interested in one of these projects, please contact the person named below the project title. If you would like to undertake a project not listed here (e.g., one where the supervisor is within a different School or not based at UWA) you will still require a supervisor within SPGH. Please contact the Dissertation Coordinator to discuss.

Want to know more?

If your question is specific to the project you're interested in, please contact the academic named under the project title. For other enquiries, contact the Dissertation Coordinator; Dr Dani Barrington – dani.barrington@uwa.edu.au

Research Areas at SPGH

The Busselton Health Study

Enquire

The Busselton Health study is a series of cross-sectional and longitudinal population health studies carried out on the population of Busselton, WA which aims to provide a better understanding and management of disease and illness. Research activities undertaken as part of the Busselton Health Study 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 were collected at each of the surveys along with blood samples for biochemical measures and genetic studies. Epidemiological data analysis driven projects are available for Masters students. These projects require completion of PUBH5769: Biostatistics II; students will be considered where they are undertaking PUBH5769 concurrently with dissertation. Please contact A/Prof Kevin Murray (kevin.murray@uwa.edu.au) for details.

Cardiovascular Disease Epidemiology

Page 6

Research in this area aims to reduce the burden of cardiovascular disease through research into trends and determinants of acute events, treatment, management and outcomes.

Child and Adolescent Development and Health

Page 14

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 multi-disciplinary backgrounds to engage with stakeholders and deliver high-quality research with real world policy and practice implications.

Environment and Occupation Health

Page 18

Research in this area 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. If this area interests you, please contact A/Prof Peter Franklin (peter.franklin@uwa.edu.au) for details.

Equity and Oral Health

Page 20

The Equity and Oral Health Group led by social epidemiologist Professor Linda Slack-Smith is a multidisciplinary team researching a range of issues related to inequity underpinning population health outcomes. Research in this area is underpinned by equity and social justice in public health, including working with Aboriginal Australians and other cultural groups. Much of their work uses oral health as a lens to explore equity but they work in a range of areas with a focus on social justice. As oral health impacts overall health and wellbeing across the life span, they have explored the lived experience of diverse social groups and factors underpinning their limited access to health services. They conduct reviews, quantitative, qualitative and translational research that reflects the strengths of incorporating quantitative and qualitative approaches to offer a deeper understanding of issues being investigated.

Family and Domestic Violence

Page 26

Research in this area advances understanding of family and domestic violence (FDV) and intimate partner violence (IPV) as significant public health issues in Western Australia and internationally. Our program combines whole-population linked administrative data on post-IPV trajectories and intergenerational health outcomes with qualitative and mixed-methods research on trauma-informed and culturally responsive service design, men's wellbeing and pathways into IPV perpetration, workforce responses to FDV in health service settings, and honour-based violence prevention. Projects sit within a broader international programme of collaboration with partners at Queen's University Belfast, and the University of Michigan, and align with Australia's National Plan to End Violence against Women and Children 2022–2032 and the ANROWS 2023–2027 National Research Agenda.

Genetic Epidemiology

Enquire

Research in this area aims to identify the genetic and environmental determinants of common human diseases and explore ways of using this information to improve human health. Please contact A/Prof Jennifer Stone (jennifer.stone@uwa.edu.au) if you are interested in undertaking research in this area.

Global Health

Page 31

As public health researchers, we are interested not only in the health of Australia's domestic population, but also the health of communities across our region and around the world. We work with partners in neighbouring countries to support primary research on the impact of health programs, local policies, and new interventions or health strategies; and we work with global institutions, such as the World Health Organisation, to undertake cross-country analyses of primary and secondary data on child and women's health, water, sanitation and hygiene, nutrition, and health systems functioning.

Health and Labour Economics

Page 36

Research in this area aims to improve resource allocation and decision making in the health sector we undertake systematic evaluation and assessment, with an economic perspective.

Health Services

Page 37

Researchers in the School undertake work with linked medical and health data, other health services data and the evaluation of health services, patient safety, surgical care and pharmaco-epidemiology.

Neuropsychiatric Epidemiology

Page 40

The 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.

Priority Populations

Page 41

Research in this area aims to improve health and social outcomes and reduce the disease burden among some of society's most at-risk populations.

Research in this area seeks to build a public health research workforce capable of effectively responding to current and emerging local, national, and global health challenges. Findings will help public health researchers (from students to senior academics) conduct high-quality research that addresses diverse health issues and inequities; translates evidence into enhanced health practice, programs, and policies; and improves health outcomes for all. This area of research aligns with SPGH's strategic goals to *build a diverse, thriving, and future-ready public health workforce and champion and elevate research*. It will help equip research students and staff to secure competitive funding, lead to high-impact research, and develop the skills needed to become public health leaders.

The Raine Study

The Raine Study, established in Perth in 1989, is one of the largest longitudinal, observational and multigenerational pregnancy cohort studies globally. It aims to improve human health and well-being by studying the life-course of a cohort of 'Western Australians', focusing on understanding the multifaceted interactions of genetics, environment, phenotype, behaviour, and other developmental outcomes. For 35 years, The Raine Study has been instrumental in helping researchers and policymakers gain a deeper understanding of the factors influencing human health and well-being. It has grown to span four generations and includes Generation 1 - the original mothers (2900 women recruited at 18 weeks pregnant) and fathers. Generation 2 – the babies born into the study between 1989 and 1992. Generation 3 – biological children of Generation 2, and Generation 0 – the biological grandparents of Generation 2.

The Raine Study is a world-class research enabling platform providing researchers access to a rich data holding, including 30 million genetic and epigenetic data points, 170,000 curated biological samples and 30,000 phenotypic variables. The Raine Study contributes to life-changing scientific discoveries, advancements in clinical practice, and influences future health policies, with its research impact further evidenced by over 760 publications in peer reviewed journals. The Raine Study is currently undergoing its 18th and largest ever follow-up, collecting phenotypical data via questionnaires, physical assessments, matched biological measures from Generation 1, 2, and 3 participants' and obtaining consents to link the whole Raine Study dataset to the Commonwealth and WA administrative datasets. As a research-enabling platform, the Raine Study team works closely with researchers, providing active support and expert guidance to identify the most appropriate data for each research project.

Cardiovascular Disease Epidemiology

State-of-the-Art Cardiovascular Disease (CVD) Research

A/Prof Lee Nedkoff – lee.nedkoff@uwa.edu.au

Dr Siobhan Hickling – siobhan.hickling@uwa.edu.au

Background: CVD is a major cause of morbidity and mortality 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 trends and models of care in CVD prevention, treatment and management and may include clinical epidemiology, health outcomes, pharmacotherapy, prevention, cost-effectiveness and community engagement.

A range of topic areas include:

- Atherothrombotic disease across the vascular territories.
- Monitoring coronary artery disease and stroke
- Cardiomyopathies
- Management of CVD in First Nations people
- Diabetes and CVD
- Peripheral arterial disease
- Risk factor prevalence and outcomes
- Coronary artery revascularisation

Methodology: The Cardiovascular Epidemiology Research Centre (CERC) uses national and state person linked administrative data, together with clinical patient data to examine trends and epidemiology of CVD health outcomes.

Project Specific Requirements: Project dependent

Project Length: One semester full-time or two semesters part-time.

Development of an electronic phenotype for investigating chronic coronary disease

A/Prof Lee Nedkoff – lee.nedkoff@uwa.edu.au

Background: Coronary heart disease is a progressive and long-term condition resulting from atherosclerosis in the coronary arteries. It is the leading cause of death in Australia, resulting in 17,731 deaths in 2019, and costing the Australian health system \$2.4 billion in 2018-19. Many patients live with the chronic form of the disease, chronic coronary disease (CCD), for many decades, requiring long-term drug therapy and multiple diagnostic and interventional coronary procedures.

We don't know the true prevalence of CCD in Australia. While there are strong methodological approaches for measuring incidence and hospitalisations for acute coronary syndromes (ACS, comprising myocardial infarction (MI) and unstable angina), there is no evidence-based method for identifying CCD patients at a whole-population level in Australia. Without accurate prevalence estimates, there are limited data to inform health policy and service design regarding the effectiveness of secondary prevention therapies.

Outline: This study aims to bring together a broad scope of multi-jurisdictional Australian linked health data to develop a method for identifying people with chronic coronary disease (known as an electronic phenotype) and to investigate the burden and management of people with this disease.

Methodology: The study will use linked hospitalisation, emergency department, mortality, PBS and MBS data from multiple jurisdictions in Australia. Machine learning techniques will be used to develop the electronic phenotype; health service utilisation and medication adherence will be measured in the patient cohort.

Project Specific Requirements: Requires some experience with using linked data and/or statistical software packages, e.g., SAS, STATA.

Project Length: Two semesters part-time.

Measuring cardiovascular health in First Nations communities using routinely collected primary health care data: a scoping review

Dr Ingrid Stacey - ingrid.stacey@uwa.edu.au

Dr Emma Haynes – emma.haynes@uwa.edu.au

Samantha Stiles – samantha.stiles@uwa.edu.au

A/Prof Judith Katzenellenbogen - judith.katzenellenbogen@uwa.edu.au

Background: Aboriginal and Torres Strait Islander (First Nations) people experience an inequitable life expectancy gap relative to non-Indigenous Australians, with almost one-fifth of premature deaths caused by cardiovascular disease (CVD). Improvements in First Nations cardiovascular (CV) health demands data that goes beyond high-level descriptions of these disparities and instead identifies “what works” for each community. This evidence-based approach to health improvement is foundational to public health. First Nations-led interventions to improve CV health are urgently needed, which could build upon the strength of Aboriginal Community Controlled Health Organisations (ACCHOs) to provide culturally safe primary care. Knowledge gaps to inform this do exist however, and ACCHOs have identified “increased data capacity” as one of their four key priority reform areas in the “National Agreement on Closing the Gap”.

Outline: The proposed project aims to generate a synthesis of CV health measures derived from primary health care and examine their use, within the context of Indigenous Data Sovereignty principles. This information will inform future projects to be undertaken in partnership with several ACCHOs.

1. What current CV health and wellbeing measures based on primary health care data have been reported in peer-reviewed and grey literature?
2. How do the reported measures align with the principles of Indigenous Data Sovereignty?
3. Where are the CV health measurement gaps in routine primary care data collection?

Methodology: This project does not involve the collection of primary data in a traditional sense. Due to the collaborative nature of First Nations health research and broad topic areas considered CV health, codesign of the scoping review strategy will be undertaken by the student in partnership with national experts in CV health and community health service providers. So attendance and coordination of these meetings will form part of scoping review activities.

Scoping review methodology is outlined by: Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Scoping Reviews (2020). Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. JBI; 2024. Available from: <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-24-09>

Project Specific Requirements: NA

Project Length: This project is time critical so is offered for one semester full time only. There is an opportunity for PhD supervision thereafter on a related mixed methods research project that involves the collection and analysis of primary data.

Pharmacoepidemiology studies using the 10% PBS sample

A/Prof Frank Sanfilippo - frank.sanfilippo@uwa.edu.au

Background: We obtained 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 hydroxychloroquine); (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: One semester full-time or two semesters part-time.

Western Australian Heart Valves Study (WAVES)

Dr Charley Budgeon – charley.budgeon@uwa.edu.au

Georgie Graham – georgie.graham@research.uwa.edu.au

Graham Hillis, Primeo Ng, Tom Gilbert, Royal Perth Hospital Clinical Trials Team

Background: To establish the WAVES registry and inform clinical practice on the treatment of valvular heart disease, improve patient outcomes, and design future trials which have global health implications.

Outline: Research Objective 1: Create a historical registry of all patients and outcome measures after surgical heart valve replacement and/or repair in one of the three tertiary public hospitals in Western Australia (WA) between 1 January 2010 and 31 December 2020 (retrospective cohort).

Research Objective 2: Create a new registry of all patients and outcome measures after surgical heart valve replacement and/or repair in one of the three tertiary public hospitals in WA from 1 January 2021 onwards with prospective periodic follow-up.

Methodology: A combination of data sources including local and national retrospective and prospective clinical/surgical quality registries, patient-reported measures, and routinely collected hospital morbidity and mortality collections.

Project Specific Requirements: Requires knowledge and competency with common data analytical software and in statistical regression. This project requires completion of PUBH5769: Biostatistics II; students will be considered where they are undertaking PUBH5769 concurrently with dissertation.

Project Length: One semester full-time or two semesters part-time.

Understanding trends and patterns of medicine utilisation to manage cardiovascular disease

A/Prof Frank Sanfilippo - frank.sanfilippo@uwa.edu.au

A/Prof Lee Nedkoff – lee.nedkoff@uwa.edu.au

Dr Derrick Lopez – derrick.lopez@uwa.edu.au

Keira Robinson - keira.robinson@uwa.edu.au

Background: Cardiovascular disease (CVD) is a leading cause of morbidity and mortality worldwide. In Australia, it accounts for 27% of deaths every year and around 1.2 million Australians have one or more heart or vascular conditions. One of the means of preventing and treating CVD is using evidence-based pharmacotherapies. These drug groups include blood pressure lowering drugs, lipid lowering drugs, and vasodilators, and they account for around one third of all Pharmaceutical Benefits Scheme (PBS) prescriptions in Australia. While there is some data available on supply trends of CVD medicines in Australia, there is limited research investigating other aspects of pharmacological management. In particular, most studies concentrate on trends in various measures for individual drug groups, with limited data on patterns in people taking multiple drugs. Little is known about the use of nitrates (a subgroup of the vasodilator category) and the patterns of use in combination with other CVD drug groups. Nitrates are an anti-anginal drug and some are highly specific for the management of coronary artery disease-related chest pain. Therefore, they could potentially be used to identify the portion of this patient group who are not hospitalised for their condition. However, we have limited data on patterns of use of this drug group, of different nitrates, and of how they are used in combination with other CVD drugs.

Outline: The primary aim of this project is to examine trends in the dispensing of PBS-listed CVD pharmacotherapies, stratified by age, sex and state. Specifically, the aims are to:

- Examine the dispensing trends of major CVD drug groups, including vasodilators, beta blockers, calcium channel blockers, agents acting on the renin-angiotensin system, and lipid modifying agents.
- Determine the prevalence and incidence of use of these drug groups.
- Determine the co-prescribing patterns for people using the CVD medications of interest.

Methodology: This study will utilise the PBS 10% sample dataset to examine trends and patterns in government-subsidised CVD pharmacotherapy use from 2005 to 2022. This dataset contains information on medicines dispensed from Australian pharmacies. Variables include age, sex, name and strength of the drug, quantity dispensed, PBS item code, supply date, prescribed date, beneficiary status and year of death. Various analyses can be conducted using this dataset to understand trends and patterns in dispensing of CVD pharmacotherapies.

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 and some knowledge or understanding of working with linked data.

Project Length: One semester full-time or two semesters part-time.

Acute Coronary Syndromes and Stroke

A/Prof Lee Nedkoff - lee.nedkoff@uwa.edu.au

Keira Robinson – keira.robinson@uwa.edu.au

Background: Acute coronary syndromes (ACS) occur when there is a reduction in blood supply to the heart and include ST-segment elevation myocardial infarction (STEMI), non-STEMI and unstable angina. In 2020, 56,700 Australians aged 25 and over suffered an acute coronary event. Stroke is a known complication following ACS and is associated with increased morbidity and mortality. There were around 39,500 new and recurrent stroke events in Australia in 2020. Currently, age-specific incidence of stroke and long-term cardiovascular outcomes following hospital admission for ACS is unclear. A more accurate understanding of stroke risk in the ACS population is needed to inform health policies pertaining to stroke prevention strategies.

Outline: This study aims to describe the age-specific risk of stroke in people admitted to hospital with ACS. This may include estimation of:

1. age-specific stroke incidence and recurrence rates in the ACS population, stratified by sex.
2. short, medium, and long-term risk of stroke in the ACS population.
3. the population attributable risk of stroke due to ACS.

Methodology: A linked dataset containing hospital, emergency department, and mortality data for all cardiovascular disease presentations in Western Australia since 1985 is available. A retrospective cohort of ACS patients will be constructed based on International Classification of Diseases (ICD) coding, and relevant statistical and regression analyses will be undertaken.

Project Specific Requirements: This is a linked data project. Requires some experience using SAS, STATA or R programming, and >70 in both PUBH4403: Epidemiology I and PUBH4401: Biostatistics I.

Project Length: Two semesters part-time.

Enhancing the surveillance of cardiomyopathy in Australia

A/Prof Lee Nedkoff – lee.nedkoff@uwa.edu.au

Samantha Stiles – Samantha.stiles@uwa.edu.au

Background: Cardiomyopathy is a clinically significant but under-recognised contributor to cardiovascular disease (CVD) burden in Australia. The 2023 European Society of Cardiology (ESC) guidelines recently refined the classification of cardiomyopathy phenotypes (dilated, ischaemic, hypertrophic, and arrhythmogenic), each associated with varied aetiology and prognosis and occurrence throughout life. Most subtypes are linked to the development of heart failure, with several also associated with cardiometabolic conditions such as diabetes and ischaemic heart disease. However, the temporal relationship between heart failure and cardiomyopathy varies by subtype, and important knowledge gaps remain regarding disease progression across cardiomyopathy phenotypes in diverse populations.

Despite their clinical importance, cardiomyopathies are not specifically monitored in Australian national statistics. This study will provide crucial data on the burden of cardiomyopathy subtypes in Australia and establish best-practice methods for ongoing monitoring.

Outline: This study will utilise WA and national data linked health data to develop methods to identify cardiomyopathy and investigate the burden of cardiomyopathy subtypes, including their associations with heart failure and coronary heart disease.

Several potential projects associated with this project are available for students, including a scoping review and epidemiological analyses using linked datasets.

Methodology: A scoping review will be conducted to summarise methodological approaches for the identification of cardiomyopathy in population-based health data.

Linked hospitalisation, emergency department, mortality, Pharmaceutical Benefits Scheme (PBS) and Medicare Benefits Schedule (MBS) data will be used to develop and test an algorithm to identify cardiomyopathies. There is also the potential to use linked clinical data for validation of the algorithm. Trends in age-standardised rates for cardiomyopathy subtypes and risk of cardiovascular complications will be investigated.

Project Specific Requirements: For linked data analysis, some experience with using linked data and/or statistical software packages, e.g., SAS, STATA, R is preferred.

Project Length: One semester full-time or two semesters part-time. There is an opportunity for PhD supervision on this project upon completion.

Child and Adolescent Development and Health

How do environmental and pharmacological exposures during pregnancy impact maternal and child health?

Dr Erin Kelty - erin.kelty@uwa.edu.au

A/Prof Caitlin Wyrwoll - caitlin.wyrwoll@uwa.edu.au

Dr Ebony Quintrell – ebony.quintrell@uwa.edu.au

Background: Exposure to extreme heat, medications, pollution, alcohol, and illicit drugs during pregnancy can have a profound impact on maternal, neonatal and child health. For a lot of these exposures, we are only just beginning to understand their potential impact. This research is becoming increasingly important, particularly with increasing global temperatures and frequency/severity of heat waves, and the increasing use of medication during pregnancy. Understanding the impact of exposure to environmental and pharmacological factors during pregnancy is important for working towards mitigating hazardous risks and ensuring the health of pregnant persons and their children.

Outline: We currently have several projects with potential for student involvement.

These include:

- Examination of the impact of prenatal exposure to extreme heat on child health (e.g. in terms of immune related conditions such as asthma, allergies, infections).
- Examining the maternal and neonatal safety associated with the use of medications during pregnancy (particularly mental health medications).
- Examining the use of contraceptives in women prescribed medications that are not safe to use in pregnancy.
- Conducting systematic/scoping reviews on medication safety or maternal/neonatal health in pregnancy (including topics related to alcohol use).

However, we do have additional projects available, which we are happy to discuss.

Methodology: Our research primarily involves the use of large retrospective cohorts, which are linked with state health data (e.g. hospital, deaths). Typically, this involves the use of state-wide perinatal records which are linked with exposure data (e.g. weather data or medication dispensing data) to identify exposed neonates. Linked state health data can then be used to examine outcomes like perinatal mortality, congenital anomalies, hospitalisation. However, there is also scope for systematic/scoping reviews and potentially a qualitative study within the same themes.

Project Specific Requirements: Completion of PUBH4401: Biostatistics I for quantitative projects.

Project Length: Two semesters part-time.

Maternal imprisonment and implications for children's health and development

Dr Megan Bell – megan.bell@uwa.edu.au

Prof David Preen – david.preen@uwa.edu.au

Background: Despite being recognised as one of the most vulnerable groups in society, the health and wellbeing of children of prisoners in Australia is noticeably absent from policy and practice. There are no official statistics on the number of children with a mother in prison, and limited population-level research on their health and developmental outcomes, in Australia and internationally. In Western Australia, there are no dedicated services supporting children when their parent goes to prison. An empirical evidence base is crucial for developing appropriate health-focused policies, guidelines, referral pathways, and staff training that effectively respond to the needs of children of incarcerated mothers.

Outline: This project aims to quantify the number of children in WA with an incarcerated mother and determine the impacts of maternal incarceration on children's physical and mental health across the life course. This will involve consideration of the implications of when, how often, and how long mothers are incarcerated, and the impacts of co-existing adversity including mental illness, family violence, and substance use. Research findings will inform policies and services aimed at supporting positive health outcomes for children of incarcerated mothers

Methodology: There are two options for student projects: 1) quantitative analysis of linked administrative data, 2) scoping/systematic review

Option 1: Quantitative analysis of linked administrative data

This project uses over 30 years of whole-population de-identified linked administrative data, enabling the investigation of outcomes for the children of all female prisoners without compromising privacy. Data have already been obtained for this project and are accessed through a secure e-research environment. Administrative data from the WA Departments of Justice, Health, Education, and Communities have been linked along with birth and death data. The cohort includes all children born from 1985 to 2019 in WA, comprising a sample size of more than 980,000 individuals. Data on mothers of the cohort and children born to the cohort are also linked, enabling the investigation of intergenerational patterns of health and disadvantage. Potential areas of study include health, educational, and justice outcomes, and investigations of multiple adversity in childhood.

Option 2: Scoping/Systematic Review

Students who are interested in this topic but who do not have the relevant experience to complete a data project are encouraged to consider undertaking a scoping or systematic review. Topics of focus can be discussed, but must relate to children with a parent in prison or impacts of incarceration on the family. Potential topics include participation in antenatal care among women with criminal justice involvement, the role of family violence in women's offending, and the benefits of family-focused criminal justice interventions for children. Students are also encouraged to identify their own topic of interest.

Project Specific Requirements: Students who undertake a data project must have experience in the preparation and analysis of linked data, and high competency in quantitative skills. Completion of PUBH4401: Biostatistics I and PUBH5785: Introductory Analysis of Linked Health Data, or equivalent, is necessary, as is competence in using R for data preparation and analysis.

Project Length: Two semesters part-time.

Influence of built environment on early child health and development

Prof Hayley Christian – hayley.christian@uwa.edu.au

Collaboration with The Kids Institute Australia

Background: The environments in which young children live, learn and play have an important influence on their health, wellbeing and development. Research suggests that features of the built environment, including access to parks and green spaces, walkable neighbourhoods, safe streets, quality playgrounds and supportive early childhood settings, can shape children's opportunities for active play, social interaction, development and learning. Child-friendly environments that promote movement, exploration and independent play are increasingly recognised as important for supporting healthy development and reducing health inequities during the early and later years of life.

Outline: This area of investigation focuses on understanding how physical and policy environments can support young children's play, health, wellbeing and development. Potential topics may explore the influence of neighbourhood design, green and blue spaces, early childhood education and care environments, active travel opportunities, community infrastructure, and child-friendly policies on children's health behaviours, social and emotional wellbeing, development, and health equity.

Methodology: This will be a quantitative or mixed methods project using existing data.

Project Specific Requirements:

- Ability to conduct quantitative and/or qualitative research
- Excellent writing skills
- An interest in knowledge translation
- Good interpersonal communication and team skills
- Desirable: Statistical analysis (SAS/R/STATS)

Project Length: Two semesters part-time.

Play Active Program – National Delivery and Evaluation

Prof Hayley Christian – hayley.christian@uwa.edu.au

Collaboration with The Kids Institute Australia

Background: Active play is critical during the early years of life for physical and mental health and development. Young children enjoy being active while playing. Yet, many young children do not get enough daily physical activity to support their health and development. With our national and state partners we are scaling-up the Play Active program to evaluate the benefits and costs of supporting childcare services throughout Australia to boost 100,000s of children's daily active play.

Outline: This research will help examine how childcare services, educators, policies, families and communities can work together to create environments that support children's daily active play and movement behaviours and how these approaches can be implemented effectively and sustainably across Australia.

Methodology: This will be a quantitative and/or mixed methods project using existing data.

Project Specific Requirements:

- Ability to conduct quantitative and/ or qualitative research
- Excellent writing skills
- An interest in knowledge translation
- Good interpersonal communication and team skills
- Desirable: Statistical analysis (SAS/R/STATS)

Project Length: Two semesters part-time.

Environmental and Occupational Health

The Epidemiology of malignant mesothelioma in Western Australia

A/Prof Peter Franklin – peter.franklin@uwa.edu.au

Prof Fraser Brims (Institute of Respiratory Health, Curtin University)

Dr Renee Carey – renee.carey@uwa.edu.au

Background: Western Australia has the highest incidence of malignant mesothelioma (MM) in Australia, mainly due to the mining of blue asbestos at Wittenoom. All cases of MM in WA have been recorded in the WA Mesothelioma registry (WAMR) that also includes important demographic and exposure data. Previous reviews of the WAMR (2009, 2012 and 2020) have highlighted the changing pattern of exposures over time, including increased number of cases due to non-occupational exposures. This study will be an analysis of a further 5-years of mesothelioma data to investigate how/if exposure patterns are continuing to change.

Outline: The aim of this study to describe epidemiological trends over 65 years of mesothelioma in Western Australia, with particular focus on cases with non-occupational asbestos exposure. Data will include the type of MM (pleural, peritoneal, other), histological subtype (sarcomatoid, epithelioid, biphasic), sex, age at diagnosis, survival (time between diagnosis and death), and primary asbestos exposure.

Methodology: Data from all cases of MM in WA from 1960 (the first diagnosed case) to 2025 will be obtained from the WAMR. Incidence rates will be calculated for the whole group, for specific exposure groupings, and for men and women separately, in 5-year age groups (from 40 years to 85 years and older) and five-year calendar periods. Poisson regression will be used to examine the changing trend in incidence over time for specific exposure groups.

Project Specific Requirements: Completion of PUBH4401: Biostatistics I and PUBH5769: Biostatistics II, or completing (PUBH5769) concurrently with dissertation.

Project Length: One semester full-time or two semesters part-time.

PLAYCE Cohort Study

Prof Hayley Christian – hayley.christian@uwa.edu.au

Collaboration with The Kids Institute Australia

Background: This research forms part of the PLAYCE program of research – Places Spaces & Environments for the Child Physical Activity, Health & Development team. The PLAYCE cohort study examines the 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, at early childhood education and care and school.

Outline: The PLAYCE cohort study details patterns of movement behaviours across childhood and the effect on weight status and socio-emotional, cognitive, and motor development across four waves (2-14 years old). This research will provide information on how best to create healthy home, neighbourhood and learning environments.

Methodology: This will be a quantitative and/or mixed methods project using existing data.

Project Specific Requirements:

- Ability to conduct quantitative and/ or qualitative research
- Excellent writing skills
- An interest in knowledge translation
- Good interpersonal communication and team skills
- Desirable: Statistical analysis (SAS/R/STATS)

Project Length: Two semesters part-time.

Equity and Oral Health

Smoking, Vaping and Pouches

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Background: Smoking is a major health issue in our society and globally with increasing vaping and use of pouches.

Outline: There are a range of potential projects around smoking, vaping and pouches.

Methodology: The project would use epidemiology or qualitative approaches.

Project Specific Requirements: Requires strong epidemiology and biostatistics skills or qualitative skills for most projects.

Project Length: Normally two semesters part-time, but potentially full time.

Public health issues in formal and informal childcare for children, parents, grandparents and workplaces

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Members of the Equity and Oral Health Group or collaborators

Background: Childcare plays a significant role in our society, allowing women to return to work or study and for many children to experience good quality care during an important stage of development. There are important issues around the health of children (for example diet, physical injuries, immunisation, medication use, infectious diseases, general health), parents (managing work and family responsibilities, parent health) and childcare workers (health, turnover, experience of racism). In addition to formal childcare (centres and family day care), there is significant care provided by grandparents, which is unregulated and often places high demands on our older adults.

Outline: To explore one aspect of health in childcare.

Methodology: Options include systematic or realist reviews, qualitative research, quantitative research, policy exploration.

Project Specific Requirements:

- May require Working with Children Check.
- Basic knowledge of qualitative research approaches.
- Literature searching skills.
- Good communication skills.

Project Length: Normally two semesters part-time, but potentially full time.

Social inequities and health

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Various team members and collaborators.

Background: Quotes “The measure of a civilisation is how it treats its weakest members” and “The greatness of a nation can be judged by how it treats its weakest member” have both been attributed to Gandhi.

Our group is interested in many aspects of inequities and there are many potential projects. If you are interested in social inequities and health, we can collaboratively develop a project to suit your interest and expertise. The recent extraordinary experiences of the pandemic have demonstrated the vulnerability of our society where people are marginalised. Inequities occur across the life-course from access to safe contraception to how we treat older adults. We have many potential projects

Outline: There are a range of potential projects to explore inequities and health in different groups using review methods, co-design, qualitative, quantitative methods and translational methods.

Examples of types of projects include:

- Contextual factors and smoking/ vaping/ nicotine use
- Projects related to the commercial determinants of health.
- Barriers and enablers to people with mental health disorders in accessing health services?
- What do adults with CALD backgrounds consider effective ways of communicating public health messages to their communities? Who do they trust?
- Health, diet or oral health in women and children in prison (with Dr Jocelyn Jones, Curtin University).
- Breastfeeding, birth and perinatal issues.
- Diabetes care in older adults.
- Homelessness
- Physical activity in older adults.
- Health and dental care for those with HIV or other disorders
- Other groups may include the aged, those with disability, refugees and others.

Methodology: Qualitative or quantitative. There are a range of potential projects investigating and addressing health inequities (health or oral health) 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.

Project Specific Requirements: Skills required will depend on the particular project.

- Ability to work independently and under direction.
- Interest in inequities and social justice.
- Working knowledge of qualitative or quantitative research approaches.
- Literature searching skills.
- Good communication and project management skills.

Project Length: Normally two semesters part-time, but potentially full time.

Sugar (including Commercial Determinants of Health)

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Various team members and/or collaborators

Background: Sugar has long been associated with poor oral health and obesity, yet it remains a common part of our diet. There are a range of potential projects.

Examples may include qualitative interviews to investigate community perceptions and/or investigation of the role of the media or policy in promoting sugar despite evidence of its relationship to significant health problems.

There is potential to look at various groups - for example preschool, ageing etc. (Project could be systematic review, qualitative, quantitative or mixed methods studies).

There is an important opportunity to investigate commercial determinants of health in relation to sugar and other areas.

Outline: Potential projects may include:

- a Literature Review or scoping review to determine the 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).
- conducting a comparative analysis of similarities and differences between groups.

Methodology: There are options to undertake simple content analysis of news media, collect quantitative data or to undertake qualitative interviews depending on skills and preferences of students. News media would be extracted using Factiva or similar approach.

Project Specific Requirements:

- May require Working with Children Check.
- Basic knowledge of qualitative research approaches.
- Literature searching skills.
- Good communications skills.

Project Length: Normally two semesters part-time, but potentially full time.

Social practices and domestic violence

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Background: Family and domestic violence is a complex challenging problem with substantial toll in terms of mortality, morbidity and psychological damage to family members. Social practice theory is a novel approach gaining substantial traction in public health moving the focus away from individuals to the practices or cultures/habits around an issue.

Outline: The aim is to analyse existing published qualitative studies to explore potential social practices impacting family and domestic violence. This would likely be through a qualitative metasynthesis (see example: Girard IM, Ward P, Durey A, McLean C, Lund S, Calache H, Baker SR, Slack-Smith L. (2024) A qualitative meta-synthesis of carers' perceptions of factors influencing preschool children's oral hygiene practices—A social practices perspective. *Community Dent Oral Epidemiol.* 2024; 52(5):677-689. doi:10.1111/cdoe.12973)

Methodology: Data sources are existing papers – the project does not require ethics approval.

Project Specific Requirements: This would suit a student with a social science background.

Project Length: Best as two semesters part-time, but negotiable.

Dental Services and Oral Health Projects

Prof Linda Slack-Smith - linda.slack-smith@uwa.edu.au

Background: Oral health is an important aspect of public health that is often siloed.

Outline: Various projects looking at dental service use or oral health outcomes.

Methodology: Potentially scoping review, systematic review, quantitative, qualitative or mixed methods study.

Project Specific Requirements: May require Biostats 1 or 2 or qualitative unit completed to satisfactory level.

Project Length: Prefer two semesters part time.

Family and Domestic Violence

Male perceptions of masculinity and pathways into intimate partner violence perpetration: a comparative Perth-Belfast qualitative study

Dr Chantal Orgeas – chantal.orgeas@uwa.edu.au

Dr Craig Cumming – craig.cumming@uwa.edu.au

Dr Amanda Dylina Morse (Queen's university Belfast) – a.morse@qub.ac.uk (Clinical Faculty, Health Systems and Population Health, University of Washington; Affiliate Faculty, Nursing and Health studies, University of Washington – Bothell)

Background: Intimate partner violence (IPV) perpetration by young men is a critical but under-researched public health issue in Australia. The Andrizo Integrated Conceptual Framework articulates relationships between features of High Traditional Masculinity and the components of elevated suicide risk from the Interpersonal Theory of Suicide in adolescent males and illustrates developmental and normative pathways into violence. Australia's National Research Organisation for Women's Safety (ANROWS) 2023–2027 *People Who Use Domestic, Family and Sexual Violence* Research Programme has identified developmental pathways into IPV perpetration as a priority evidence gap. A parallel qualitative study in Perth, methodologically aligned with an existing Northern Ireland cohort, offers a unique international comparative opportunity to advance understanding of how masculinity is understood and enacted by young men, and how they negotiate relationships, conflict and violence.

Outline: The student will conduct qualitative interviews with young men aged 16–19 years from working-class communities in the Perth metropolitan area. The interviews will use the interview schedule and coding framework developed by Dr Amanda Dylina Morse (Queen's University Belfast) for her existing Northern Ireland cohort (n=30, aged 16–19, working-class communities), enabling direct comparative thematic synthesis across the two jurisdictions. The student will join an emerging UWA–Queen's University Belfast–University of Washington international research programme on masculinity and IPV perpetration and will contribute to a co-authored comparative paper for publication in a peer-reviewed journal.

Methodology: Qualitative research; semi-structured interviews with young men; reflexive thematic analysis using an established coding framework; direct comparative analysis with an existing Northern Ireland qualitative dataset.

Project Specific Requirements:

- Interest in men's health, masculinity studies, or family and domestic violence research
- Excellent interpersonal skills — this project involves interviewing young men on sensitive topics
- Ability to work as part of an international research team
- Strong writing skills

Project Length: Two semesters part-time.

Experiences of Women or Non-Binary People, LGBTQA+ or Children Accessing Support Services for Family and Domestic Violence

Dr Chantal Orgeas - chantal.orgeas@uwa.edu.au

Dr Craig Cumming – craig.cumming@uwa.edu.au

Prof Ashleigh Lin – ashleigh.lin@uwa.edu.au

Aryaman Bhoosreddy (PhD Candidate) – Aryaman.bhoosreddy@research.uwa.edu.au

Background: Chantal, Craig, Ashleigh and Aryaman are open to supervision on a range of projects in family, domestic and sexual violent (FDSV) of women or non-binary, LGBTQA+ and children using qualitative and quantitative methodologies.

Outline: Our research program focuses on understanding factors involved in the healing and recovery of people exposed to FDSV, investigating the impacts on health and broader social outcomes in the short, medium, and longer-term. We aim to analyse linked data in the future to examine longitudinal health and social outcomes related to experiences of FDSV. Specifically, we are interested in understanding how exposure to the continuum of FDSV affects these outcomes over time. We are open to discussing new project ideas with potential students and encourage interested students to reach out to discuss potential projects further.

Methodology:

Projects may include:

- **Analysis of existing international datasets:** Students with strong statistical skills may undertake secondary data analysis of established international datasets examining healing and recovery from gender-based violence. These projects offer opportunities to investigate patterns and predictors of recovery across diverse populations and contexts.
- **Primary qualitative research:** Students may conduct qualitative studies exploring people's experiences of recovery, with participants recruited independently through community organisations, FDV sector partners, and established research networks.
- **Systematic or scoping reviews:** Students may undertake evidence synthesis projects examining specific aspects of healing and recovering from FDSV,

Additional projects analysing existing data are also available. We encourage interested students to get in touch to discuss potential projects further. We use mixed methods, thus will consider qualitative and quantitative studies.

Project Specific Requirements: Depends on the project selected. Projects involving secondary analysis of international datasets require strong quantitative and statistical skills.

Project Length: Students collecting empirical data will require two semester part-time duration.

Experiences and Help-Seeking Behaviours of LGBTQA+ University Students at The University of Western Australia for sexual violence and/or intimate partner violence

Dr Chantal Orgeas - chantal.orgeas@uwa.edu.au

Dr Craig Cumming – craig.cumming@uwa.edu.au

Prof Ashleigh Lin – ashleigh.lin@uwa.edu.au

Aryaman Bhoosreddy (PhD Candidate) – Aryaman.bhoosreddy@research.uwa.edu.au

Background: Sexual violence (SV) and intimate partner violence (IPV) are globally prevalent public health concerns with serious, long-lasting consequences for those affected. Tertiary students have been identified as a population at elevated risk, with systematic reviews suggesting that at least one in five female undergraduates have experienced sexual assault (Rosenberg et al., 2019). In the Australian context, a growing but still limited evidence base indicates similarly high rates among university students (Heywood et al., 2022; Zark et al., 2022).

Within this broader population, students who identify as lesbian, gay, bisexual, transgender, queer, asexual, or with other diverse sexualities and gender identities (LGBTQA+) face disproportionately elevated risks. Research from North America has found that bisexual women experience higher levels of sexual and relationship violence than both heterosexual and lesbian peers (Klein et al., 2022), whilst transgender students are more likely to be victimised compared to cisgender students (Martin-Storey et al., 2024). Despite elevated prevalence, rates of formal help-seeking among LGBTQA+ students remain notably low, with fear of discrimination, concerns about not being believed, and the perception that support services are designed primarily for heterosexual, cisgender women all identified as significant barriers (Spencer et al., 2017; Butterby et al., in press).

Recent qualitative research with minoritised students in the United Kingdom found that structural vulnerabilities and shared understandings within marginalised groups about institutional trustworthiness profoundly shape willingness to report (Butterby et al., in press). Similarly, Australian research has demonstrated that isolation and structural factors create significant barriers for students from minoritised backgrounds seeking support following violence (Tran et al., 2024). Within Western Australia specifically, no published studies have explored the experiences and help-seeking behaviours of LGBTQA+ university students. This represents a significant gap in the evidence base needed to inform inclusive university policy and practice.

Outline: This qualitative study aims to explore the experiences and help-seeking behaviours of LGBTQA+ students at universities in Western Australia with respect to sexual violence, intimate partner violence, and broader safety and wellbeing concerns within the university setting. Specific objectives include:

- To explore LGBTQA+ students' experiences of sexual violence, intimate partner violence, harassment, and/or safety concerns during their time at UWA.
- To examine the help-seeking behaviours and decision-making processes of LGBTQA+ students, including both formal (e.g., university services, health services, police) and informal (e.g., friends, family, peers) pathways.
- To identify the barriers and facilitators to help-seeking, with attention to how intersecting identities (e.g., gender identity, cultural background, disability, international student status) shape these experiences.
- To generate recommendations for university policy and support services to improve safety, inclusivity, and responsiveness for LGBTQA+ students at UWA.

Methodology: This study will employ a qualitative descriptive design informed by an intersectional theoretical framework (Crenshaw, 1991). Current or recently graduated university students who identify

as LGBTQA+ will be recruited through purposive sampling via student associations, social media, campus posters, and snowball sampling. Participants will not be required to have experienced violence to participate. A sample of approximately 15–25 participants is anticipated.

Data will be collected through individual semi-structured in-depth interviews (approximately 45–75 minutes) conducted face-to-face or via secure videoconferencing. A semi-structured interview guide will be developed in consultation with the supervisory team and, where feasible, LGBTQA+ community advisory representatives. Vignettes depicting hypothetical scenarios involving LGBTQA+ students may be incorporated to facilitate discussion of sensitive topics (Butterby et al., in press; Bradbury-Jones et al., 2012).

Transcripts will be analysed using reflexive thematic analysis (Braun & Clarke, 2006, 2019) with attention to the intersectional framework. NVivo will support coding and theme development. A reflexive journal will be maintained throughout to document analytical decisions and enhance rigour.

Ethical Considerations: This study requires full ethics approval from the UWA Human Research Ethics Committee (HREC) prior to recruitment or data collection (Type 6 project). Key considerations include informed consent, a distress protocol with referral to support services (e.g., UWA Counselling and Psychological Services, 1800RESPECT, QLife), confidentiality through pseudonyms and de-identification, secure data storage on UWA OneDrive, and regular researcher debriefing with the supervisory team.

Project Specific Requirements: Completion of PUBH5805 Qualitative Research Methods in Health with a mark of $\geq 70\%$. Interest in LGBTQA+ health, gender-based violence, or intersectional health research is desirable but not essential.

Project Length: Two semesters part-time (PUBH5714). This project requires primary data collection and ethics approval and therefore cannot be completed full-time in one semester.

Investigating the health and social outcomes of children exposed to family and domestic violence

Dr Carol Orr - carol.orr@uwa.edu.au

Background: Despite the high prevalence of family and domestic violence (FDV), it is only in recent years that significant steps have been made to understand the impact of the exposure on children. Much of the existing research on the outcomes of children exposed to FDV is limited in its scope. Additionally, the tendency to focus on children whose mothers are involved in specialist FDV services only represent a subsection of those exposed in the wider community. Linked administrative data present an opportunity to address these issues by merging individual unit-records for the entire population from a variety of sources, enhancing the potential to identify the outcomes of children exposed to FDV at the population level.

Outline: A number of potential projects are available utilising our dataset, including epidemiological analyses of different health and social outcomes of children exposed to FDV.

Methodology: The project is a retrospective cohort study utilising linked administrative datasets including hospital and police data.

Project Specific Requirements:

- Good statistical knowledge and skills.
- Competent in SAS or equivalent.

Project Length: One semester full-time or two semesters part-time.

Global Health

Developing an mHealth intervention to promote antenatal health and immunisation

A/Prof Julie Saunders - julie.saunders@uwa.edu.au

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. This includes a number of smaller projects, including:

- A scoping review the of the types of mHealth interventions in low- and middle-income countries.
- A systematic review of the effectiveness of mHealth interventions in low- and middle-income countries.
- Determining the type of health messages that might be most effectively conveyed by an mHealth intervention.
- Developing culturally appropriate and engaging messages with input from the local community.
- Piloting and evaluating the health messages for the mHealth intervention 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: Completion of PUBH4401: Biostatistics I and PUBH4403: Epidemiology I with mark >70.

Project Length: Reviews full time or part time, message development, piloting and evaluation part time.

Understanding nutrition, growth and early childhood health in a birth cohort in Northern Thailand

Dr Siobhan Hickling - siobhan.hickling@uwa.edu.au

Background: The NEST-WK (Nutrition and Early-life Study in Thailand - Wiang Kaen) study is a longitudinal birth cohort designed to follow mothers and their children from pregnancy through early childhood in Wiang Kaen District, Northern Thailand. Building on the CHERish Kids project, which identified high rates of food insecurity and child stunting in the region, NEST-WK aims to provide deeper understanding of the early-life determinants of growth, development, and wellbeing.

Wiang Kaen is a geographically remote area where families face challenges related to food access, seasonal employment, and service provision. Over the coming years, this cohort will generate valuable insights into maternal and child nutrition, early development, and changes in the local environment and community systems. The study is a partnership between Mae Fah Luang University and The University of Western Australia.

Outline:

NEST-WK will enrol pregnant women in their final trimester and follow them and their children at multiple timepoints: during pregnancy, within 1 month post-delivery, and through early childhood. At each wave, information will be collected on infant feeding practices, dietary patterns, maternal and child health, household food security, and early childhood growth and development. The resulting dataset will enable exploration of a wide range of research topics across maternal, infant, and child health domains.

Methodology: Each project will draw on NEST-WK data as they become available. Projects can be tailored for specific areas of interest depending on scope and timing.

Project Specific Requirements: Sound knowledge of statistical software for data analysis (such as SPSS, STATA or SAS) and basic regression modelling. Interest in child nutrition and double burden of malnutrition in low-middle income countries

Project Length: One semester full-time or two semesters part-time. Suitable for BPhil Honours, MPH or MD Scholarly Activities Research

Understanding nutrition, growth and early childhood health in a birth cohort in Northern Thailand

Dr Siobhan Hickling - siobhan.hickling@uwa.edu.au

Background: The NEST-WK (Nutrition and Early-life Study in Thailand - Wiang Kaen) study is a longitudinal birth cohort designed to follow mothers and their children from pregnancy through early childhood in Wiang Kaen District, Northern Thailand. Building on the CHERish Kids project, which identified high rates of food insecurity and child stunting in the region, NEST-WK aims to provide deeper understanding of the early-life determinants of growth, development, and wellbeing.

Wiang Kaen is a geographically remote area where families face challenges related to food access, seasonal employment, and service provision. Over the coming years, this cohort will generate valuable insights into maternal and child nutrition, early development, and changes in the local environment and community systems. The study is a partnership between Mae Fah Luang University and The University of Western Australia.

Outline:

NEST-WK will enrol pregnant women in their final trimester and follow them and their children at multiple timepoints: during pregnancy, within 1 month post-delivery, and through early childhood. At each wave, information will be collected on infant feeding practices, dietary patterns, maternal and child health, household food security, and early childhood growth and development. The resulting dataset will enable exploration of a wide range of research topics across maternal, infant, and child health domains.

Methodology: Each project will draw on NEST-WK data as they become available. Projects can be tailored for specific areas of interest depending on scope and timing.

Project Specific Requirements: Sound knowledge of statistical software for data analysis (such as SPSS, STATA or SAS) and basic regression modelling. Interest in child nutrition and double burden of malnutrition in low-middle income countries

Project Length: One semester full-time or two semesters part-time. Suitable for Honours, MPH or MD Scholarly Activities Research

Mapping Menstrual Waste Knowledge

Dr Dani Barrington – dani.barrington@uwa.edu.au

Menstrual Health Action for Impact (<https://www.menstrualhealthaction.org/>)

Global Working group on Menstrual Waste Management in LMIC's

Background: Across low- and middle-income countries (LMICs), access to and use of disposable menstrual products has grown significantly in recent years. While this reflects important progress in menstrual health and dignity, it has also created an urgent and under-addressed challenge: the safe disposal and management of menstrual waste.

Menstrual waste has associated stigma, taboos and social norms, making it more complicated to manage than general household waste. Menstrual waste disposal systems must thus consider not just technical and environmental needs, but also how the local sociocultural context dictates such sensitive waste be managed. In the absence of appropriate disposal systems, women and girls may use menstrual products for longer than is hygienically recommended, increasing discomfort and the risk of reproductive tract infections. Used materials are frequently discarded in the open, burned, or thrown into water bodies, toilets, and drainage systems. These practices have public health, dignity, environmental, and infrastructural consequences. Single-use sanitary pads, largely composed of plastics, synthetic polymers, and chemical additives, can take over 800 years to decompose. Disposal in landfills has implications for emissions through anaerobic breakdown. Open disposal contaminates soil and water sources; open burning releases toxic emissions; and improper disposal contributes to clogged drainage and sewerage systems.

Compostable, flushable and other 'environmentally friendly' products are seen in LMIC markets. However, questions of appropriate disposal pathways, standardisation of requirements per LMIC contexts and the issue of false claim products flooding LMIC markets is pertinent.

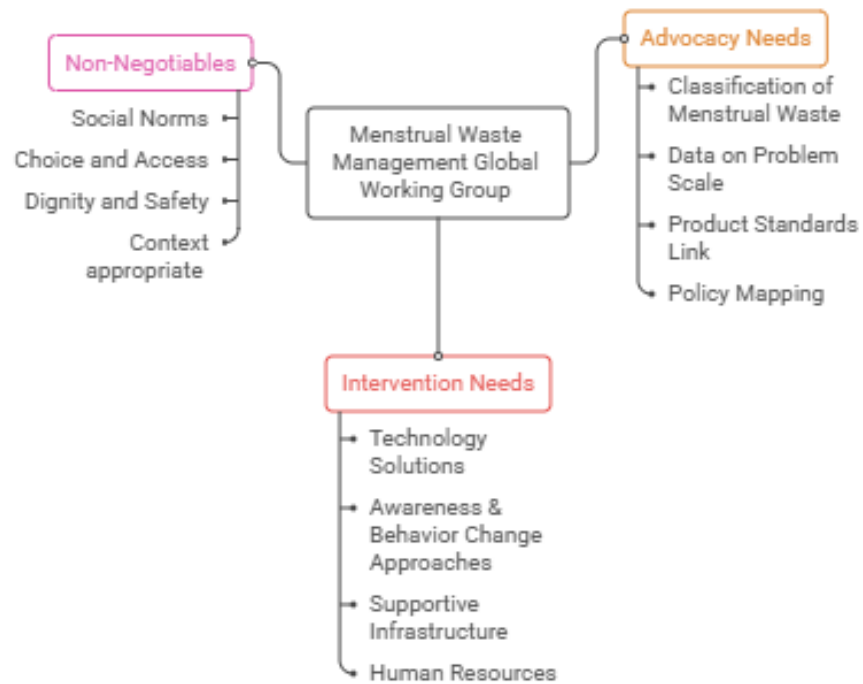
Menstrual waste management therefore sits at the intersection of menstrual health, environmental sustainability, sanitation systems, gender equality and consumer protection. Addressing this issue is both a human health and environmental health imperative, requiring coordinated attention, shared learning, and context-appropriate solutions, particularly in LMIC settings where waste and sanitation systems are already strained, especially in the context of climate change.

Outline:

Purpose of the Working Group

The Global Working Group on Menstrual Waste Management serves as a collaborative platform to advance understanding, solutions, and visibility for menstrual waste management in LMICs. The Working Group brings together practitioners, researchers, policymakers, waste management experts, environmental actors, and advocates to strengthen the evidence base and promote practical, scalable approaches. There is an opportunity for a student to engage with the Working Group to assist them in examining multiple areas of menstrual waste management. A project will be developed in collaboration with the student in one of these areas.

Menstrual Waste Management Global Working Group: Areas of Work



Project Specific Requirements: >70 in PUBH5805: Qualitative Research Methods in Health

Project Length: One semester fulltime or two semesters part-time

Health and Labour Economics

Household, Income and Labour Dynamics in Australia (HILDA) Survey: Investigating Social Determinants of Health

Dr Wendy Feng – wendy.feng@uwa.edu.au

Dr Charley Budgeon – charley.budgeon@uwa.edu.au

Background: The Household, Income and Labour Dynamics in Australia (HILDA) Survey is a household-based panel study which collects information about various life aspects including household and family relationships, income and employment, and health and education. The annual survey, which commenced in 2001, follows more than 17,000 Australians over the course of their lifetime.

Outline: Given the extensive amount of information collected through the HILDA Survey, there are a number of potential research projects which could be undertaken. Some examples include:

- Examining health impairments on educational and employment outcomes.
- Investigating the long-term health effects of major life stresses including financial, employment and familial/relationship stresses.
- Examining the effect of caregiving and changes in mental health wellbeing.

Methodology: Quantitative research study (analysis of secondary data)

Project Specific Requirements: PUBH5769: Biostatistics II must be completed, or taken concurrently to dissertation.

Project Length: Two semesters part-time.

Health Services

Linking for Life: Enhancing pathways to well-being for all Australians

Prof David Preen - david.preen@uwa.edu.au

A/Prof Rebecca Glauert - rebecca.glauert@uwa.edu.au

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 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.
3. Aboriginal Wellbeing,

With the primary aims of the current program being to:

- Determine pathways that reduce vulnerability to adverse outcomes and restricted access to public services.
- Identify critical transition points to target prevention and intervention strategies across government sectors; and
- 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: Analysis of Linked Health Data or equivalent prior experience.
- Experience with writing statistical syntax to complete data analyses.

Project Length: One semester full-time or two semesters part-time.

Developing an Evidence-Based Framework for Evaluating Injury Surveillance System Models in Western Australia

Prof David Preen - david.preen@uwa.edu.au

Amy Hunter – Principal Policy Officer, Population and Preventative Health, Department of Health

Narelle Mullan - Director, Epidemiology, Department of Health

Background: Injuries are a leading cause of preventable death, disability and healthcare burden in Western Australia (WA), particularly among children, older adults, Aboriginal people and high-risk occupational groups. Although substantial injury-related data are collected across WA Health, there is currently no contemporary, coordinated injury surveillance and reporting system in WA. An Injury Surveillance System is essential for understanding the burden and characteristics of injuries, allowing informed decisions regarding prevention and control measures. It helps identify program needs and measure the effects of interventions, making it vital for improving population health.

Outline: To develop and apply an evidence-based framework for evaluating injury surveillance system models and determining the most effective, feasible and sustainable approach for population-level injury surveillance and reporting in Western Australia. The project will address the central research question:

"What surveillance system model would best support injury prevention policy, public health action and health system decision-making in Western Australia?"

Methodology: This project may be suited to more than one MPH student, or a selection of the activities below identified for one student:

- Systematic review of injury surveillance system characteristics and evaluation frameworks.
- Development of assessment criteria informed by international best practice.
- Comparative analysis of injury surveillance systems operating in Australia and selected international jurisdictions.
- Stakeholder consultation using interviews, Delphi methods or structured surveys.
- Multi-Criteria Decision Analysis to evaluate alternative models for WA.
- Development of evidence-based options.

Data sources may include:

- Publicly available injury surveillance reports and dashboards from Australian jurisdictions
- WA Department of Health reporting products and surveillance resources
- Published literature on injury surveillance systems and best practice
- Relevant strategic plans, policy documents and governance frameworks
- Information obtained through stakeholder interviews or workshops

Project Specific Requirements:

- Literature searching skills
- Qualitative research skills
- Data and analytical skills
- Interest in public health surveillance, epidemiology or injury prevention

Project Length: Two semesters part-time

Trends in vaccine administration errors, Western Australia, 2016-2025

A/Prof Julie Saunders – julie.saunders@uwa.edu.au

Dr Anastasia Phillips – Boorloo (Perth) Public Health Unit, National Centre for Immunisation Research and Surveillance, The Kids Institute

Ellie Darcey – Boorloo (Perth) Public Health Unit

Background: Vaccines are one of the most effective public health interventions, preventing infectious disease cases and deaths worldwide. It is important that vaccines are administered appropriately to ensure they are effective and safe. Errors can occur in the administration of vaccines just as with any other medicine. Vaccine Administration Errors (VAE) range from injection at an inappropriate site, improper product preparation, incorrect product use, delivery of expired vaccines and improper storage.

Outline: This study aims to develop a better understanding of the trends and types of VAE in WA over a 10-year period to inform public health communication and education initiatives for immunisation providers. This is a retrospective observational cohort study consisting of two separate sub-studies.

1. Types, trends and outcomes of vaccine administration errors (VAE)

A retrospective cohort analysis will describe rate, types and trends of VAE reported to the WA Health clinical immunisation advice service between 2016 and 2025.

2. Potentially unreported vaccine administration errors (VAE)

A retrospective cohort analysis will describe rate, types and trends of VAE on the Australian Immunisation Register (AIR) between 2016 and 2025.

Methodology: De-identified data on VAE will be analysed at Boorloo (Perth) Public Health Unit. Analysis will include VAE types, severity, rates and trends to understand patterns and account for factors that may have impacted VAE rates. Comparative analyses will be used to explore key differences between subgroups. Analysis will be conducted in R. The student will conduct these analyses under supervision of Boorloo PHU Epidemiologist and Public Health Physician. This project has ethics approval.

Project Specific Requirements:

- Required completion of PUBH5769: Biostats II.
- Student must be able to or willing to learn to code using R.

Project Length: One semester full-time or two semesters part-time.

Neuropsychiatric Epidemiology Research Unit

Survey of High Impact Psychosis (SHIP) Projects

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 Assist/Prof Anna Waterreus – anna.waterreus@uwa.edu.au

Priority Populations

Pathways to Confident Health Choices: a model for the design, implementations and evaluation of programs and services: a scoping review

Dr Emma Haynes – emma.haynes@uwa.edu.au

Danie Zappa – SWAMS

Alice Mitchell – Menzies

Background: Despite important shifts in policy and practice, Aboriginal health continues to be influenced by systemic inequities, including the privileging of Western biomedical frameworks and a limited understanding of Aboriginal worldviews. Many mainstream public health interventions overlook Aboriginal concepts of health, contributing to variable outcomes and, in some cases, unintended negative consequences in the implementation of health promotion strategies in Aboriginal communities.

Conventional Western health promotion models often assume a linear progression from knowledge to behaviour change, from awareness-raising to shifts in individual action. However, evidence suggests that such approaches, particularly those relying on information-based campaigns directed at individuals, can reinforce or exacerbate health inequities, especially in low-socioeconomic and marginalised populations. 'Culturally-tailored' interventions may enhance knowledge and attitudes, but questions remain about their effectiveness in achieving sustained behaviour change in complex community contexts.

Outline: A new model, **Pathways to Confident Health Choices**, has been developed to better reflect the multifaceted influences on health decision-making. Drawing on an ecological approach, the model incorporates the nested levels of individual, family, community, and health systems — similar to the Social Ecological Model — but extends this by introducing six cross-cutting dimensions that allow for a more nuanced exploration of how power, knowledge, values, emotion, and risk perception operate across different contexts. This framework supports a more culturally grounded and reflective approach to preventive health.

The current project will contribute to refining this model by undertaking a scoping review and analysis of the literature that describes the use of similar frameworks and models in the design and evaluation of preventive health programs. In particular, the project will identify key enablers and barriers to implementation, offering insights into how complex, culturally responsive models can be successfully operationalised in diverse settings.

Methodology: This project does not involve the collection of primary data. Due to the collaborative nature of First Nations health research and broad topic areas considered, codesign of the scoping review strategy will be undertaken by the student in partnership with community health service providers and community members. Attendance and coordination of these meetings will form part of scoping review activities.

Scoping review methodology aligned with Indigenous methodologies is outlined by: Tina Brodie, Natasha J. Howard, Odette Pearson, Kootsy Canuto, Alex Brown, The Advisory Group; 2023. Enhancement of scoping review methodology to reflect Aboriginal and Torres Strait Islander ways of knowing, being and doing <https://doi.org/10.1016/j.anzjph.2023.100096>. General scoping review methodology is outlined by: Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Scoping Reviews (2020). Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. JBI; 2024. Available from: <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-24-09>

Project Specific Requirements: NA

Project Length: One semester full-time or two semesters part-time.

Pathways to Confident Health Choices: a model for the design, implementations and evaluation of programs and services: a qualitative study

Dr Emma Haynes – emma.haynes@uwa.edu.au

Danie Zappa – SWAMS

Alice Mitchell – Menzies

Background: Despite important shifts in policy and practice, Aboriginal health continues to be influenced by systemic inequities, including the privileging of Western biomedical frameworks and a limited understanding of Aboriginal worldviews. Many mainstream public health interventions overlook Aboriginal concepts of health, contributing to variable outcomes and, in some cases, unintended negative consequences in the implementation of health promotion strategies in Aboriginal communities.

Conventional Western health promotion models often assume a linear progression from knowledge to behaviour change, from awareness-raising to shifts in individual action. However, evidence suggests that such approaches, particularly those relying on information-based campaigns directed at individuals, can reinforce or exacerbate health inequities, especially in low-socioeconomic and marginalised populations. 'Culturally-tailored' interventions may enhance knowledge and attitudes, but questions remain about their effectiveness in achieving sustained behaviour change in complex community contexts.

Outline: A new model, **Pathways to Confident Health Choices**, has been developed to better reflect the multifaceted influences on health decision-making. Drawing on an ecological approach, the model incorporates the nested levels of individual, family, community, and health systems — similar to the Social Ecological Model — but extends this by introducing six cross-cutting dimensions that allow for a more nuanced exploration of how power, knowledge, values, emotion, and risk perception operate across different contexts. This framework supports a more culturally grounded and reflective approach to preventive health.

The current project will contribute to refining this model by testing its application in a health promotion context. The setting is to be determined but likely to be an Aboriginal Community controlled health service or other organisation providing health promotion to vulnerable groups.

Methodology: This qualitative research project involves the collection of primary data. Research participants will primarily be service providers involved in program/service planning, delivery and evaluation. If time permits the implementation of the model into practice then consumers perceptions will also be investigated. Data sources include project log, field notes, interviews a focus groups.

Research objectives:

1. Investigate the potential usefulness of the model in the planning, delivery and evaluation of health promotion programs and services:
2. enablers of model uptake (e.g. accessibility, acceptability, and value of tools and resources)
3. barriers to model uptake (e.g. limitations of staff training; funding constraints)
4. effectiveness as a framework for program/service planning, delivery and evaluation

Due to the collaborative nature of First Nations health research codesign of the research methods will be undertaken by the student in partnership with community health service providers and community members.

Project Specific Requirements: Knowledge of qualitative research methods is required. Project management skills would also be useful.

Project Length: Two semesters part-time.

Social and Emotional Wellbeing: Translation and Practice

Dr Emma Carlin – emma.carlin@uwa.edu.au

Dr Abby Cox – abby.cox@uwa.edu.au

Background: The supervisors are open to supervision on a range of projects that strengthen the translation and practice of social and emotional wellbeing services in Aboriginal Community Controlled Health Organisations. The supervisors work in partnership with the sector using qualitative and quantitative methodologies.

Outline: This research area focuses on strengthening the translation and delivery of social and emotional wellbeing (SEWB) services within Aboriginal Community Controlled Health Organisations (ACCHOs). Working in close partnership with the sector, projects may explore how services are designed, implemented, and improved to support culturally appropriate, community-led care. Using qualitative and/or quantitative approaches, the research aims to generate practical evidence that enhances service effectiveness and supports better health and wellbeing outcomes for Aboriginal and Torres Strait Islander communities.

Methodology: Methodology will be guided by a health equity focus and an Indigenous standpoint theory tailored to the specific project. Approaches may include document analysis, resource development, and/or mixed-methods research.

Project Specific Requirements: We recognise the importance of lived experience and community knowledge in shaping meaningful research. Students with relevant lived experience are encouraged to apply, alongside those with a strong commitment to working respectfully in this space.

Project Length: One semester full-time or two semesters part-time.

National Health Survey

Dr Wendy Feng – wendy.feng@uwa.edu.au

Background: The National Health Survey (NHS), conducted by the Australian Bureau of Statistics, is a series of Australia-wide health surveys, designed to collect a wide range of information about the health of Australians:

- Health status of the population, including long-term health conditions;
- Health risk factors such as smoking, Body mass index, diet, exercise and alcohol consumption; and
- Demographic and socioeconomic characteristics.

The 2018-19 NHS was conducted from a sample of approximately 21,300 people in 16,400 private dwellings across Australia.

Outline: There are a number of potential research projects which could be undertaken using data from the NHS. Some examples include:

- Mental health status and mental health-related prescriptions in adults with chronic health conditions
- Examining health literacy and perceived access to health care services in the Australian population

Methodology: Quantitative research study (analysis of secondary data)

Project Specific Requirements: PUBH5769: Biostatistics II must be completed prior to, or taken concurrently with dissertation.

Project Length: Two semesters part-time.

Cancer Symptom Appraisal and Help-Seeking Behaviours in Regional Australia

Dr Wendy Feng – wendy.feng@uwa.edu.au

Background: Diagnosing cancer at an earlier stage through symptom appraisal and timely engagement with healthcare services is critical for improving survival and treatment outcomes. Despite improvements in cancer survival across Australia, people living in regional and remote areas continue to experience poorer cancer outcomes and inequities in access to healthcare services. Examining the current evidence on cancer symptom awareness and the factors that influence help-seeking behaviours in response to symptoms among regional and remote populations is essential for informing strategies and initiatives that promote earlier presentation, timely diagnosis, and improved cancer outcomes.

Outline: This project involves undertaking a scoping review of the current literature on cancer symptom awareness, as well as the barriers and facilitators influencing help-seeking behaviours and timely engagement with healthcare professionals in response to potential cancer symptoms among people living in regional and remote Australia.

Methodology: Scoping review

Project Specific Requirements:

- Understanding of qualitative research methods
- Excellent communication and writing skills
- Competency in literature searching

Project Length: Two semesters part-time.

How are people with disability represented in menstrual product advertising

Dr Dani Barrington – dani.barrington@uwa.edu.au

Dr Jess Keeley – The Kids Research Institute Australia

Background: Menstruation is stigmatised, as is disability. People with disability who menstruate experience intersecting forms of stigma. Despite growing attention to diversity in advertising, people with disability remain largely absent from campaigns and, when included, representations can be limited or harmful.

Outline: This qualitative research project will examine how people with disability are represented in Australian menstrual product advertising. The project will involve systematically identifying, collecting and documenting advertisements for menstrual products.

Methodology: Content analysis of Australian menstrual product advertising

Project Specific Requirements: >70 in PUBH5805: Qualitative Research Methods in Health

Project Length: Two semesters part-time.

Public Health Research Capacity

SPHeRES: Supporting Public Health Researchers Undertaking Evidence Synthesis

Dr Craig Cumming - craig.cumming@uwa.edu.au

Dr Ebony Quintrell – ebony.quintrell@uwa.edu.au

Sam Burrow – sam.burrow@research.uwa.edu.au

Background: High-quality evidence synthesis (conducting scoping reviews, systematic reviews, and meta-analyses) is foundational to the development of evidence-informed practice, policy, clinical guidelines, and grant applications, as well as determining strategic research investment. It identifies, assesses, and synthesises existing research, building the evidence base in a way that no single study can. Evidence synthesis helps to reduce research waste, identify funding priorities, and counter misinformation by clarifying what is already known and identifying where the knowledge gaps lie.

In WA, support for evidence synthesis exists but is dispersed and ad hoc. This fragmentation creates inefficiencies and inconsistent evidence synthesis quality. Appropriate supports are needed to strengthen methodological standards, enhance the competitiveness of WA research grant applications, and accelerate the pathway from research to impact.

Outline: One of the aims of the SPHeRES program is to review the international public health literature to identify existing strategies for building capacity in the conduct of evidence synthesis. We are seeking a Master's student to undertake this review with the support of an experienced, multidisciplinary, supervisory team.

Findings will have the potential for immediate real-world application in the development of new supports for public health students, researchers, clinicians, and other practitioners in WA.

Methodology: Conducting the review will involve searching, screening, and extracting data from publicly available, peer-reviewed journal articles. The inclusion of any other literature and the choice of scoping review methods used (Arksey & O'Malley, JBI etc.) will be determined in consultation with the supervisory team. No primary data will be collected.

Project Specific Requirements:

- Willing and able to conduct literature searches, appraise research, and extract data from published journal articles
- Familiar with or willing to learn how to use relevant bibliographic and data management tools e.g. EndNote, Convidence
- Willing and able to work as part of a multidisciplinary team
- Good project management skills
- Strong writing skills

Project Length: One semester full-time or two semesters part-time

The Raine Study

Why Do Some People Thrive Despite Adversity? A Life-Course Study of Resilience and Mental Wellbeing

Prof Phil Melton – phillip.melton@uwa.edu.au

Background: Most mental health research focuses on identifying risk factors for depression and anxiety. Much less is known about the factors that enable people to maintain good mental health despite experiencing challenges throughout life. The Raine Study provides a unique opportunity to examine how childhood environment, family relationships, education, physical health, sleep, personality traits and social factors contribute to resilience and psychological wellbeing by adulthood.

Outline: To identify life-course factors associated with resilience and positive mental wellbeing in adulthood using longitudinal data from The Raine Study.

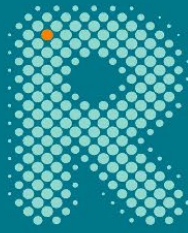
Objectives:

- Examine the relationship between childhood family, social and environmental factors and adult mental wellbeing.
- Investigate whether adolescent characteristics, such as self-esteem, sleep, physical activity, personality traits and social connectedness, contribute to resilience in adulthood.
- Determine whether educational attainment, physical health and lifestyle factors during young adulthood are associated with positive mental health outcomes later in life.
- Explore the relative importance of protective factors across different stages of life.
- Develop a predictive model of adult mental wellbeing based on factors measured throughout childhood, adolescence and early adulthood.

Methodology: This project will utilise existing longitudinal data collected through the Raine Study from birth through to adulthood. The dataset has already been collected, quality checked, cleaned and is readily available for analysis, allowing the student to focus on literature review, research design, data interpretation and statistical analysis. The Raine Study includes a rich range of questionnaire, clinical, physical, cognitive, behavioural and environmental data collected across multiple follow-ups from childhood to adulthood. Students will identify relevant variables from the literature and apply statistical analyses to investigate factors associated with resilience and positive mental wellbeing in adulthood.

Project Specific Requirements: Completion of Biostatistics 2 (PUBH5769)

Project Length: One semester full-time or two semesters part-time.



the
Raine
Study

One of us
could change
your life

rainestudy.org.au

A unique data holding from pre-birth to middle age
FREE or REDUCED FEES to UWA researchers



17

follow-ups

33

years

4

generations

2,900

pregnant women
recruited (Gen1)

2,868

children born into the
study (Gen2)

600+

offspring born to
Gen2 (Gen3)

30,000

pieces of data
per participant

30 million

pieces of genetic
information per participant

Data available across 14 Special Interest Group
research focus areas

PHYSICAL
HEALTH

MENTAL
HEALTH

LIFESTYLE

GENETICS

BIOLOGICAL RESOURCES & COHORT METHODS
DATA ACROSS ALL SIGS



Curtin University



MU Murdoch University





THE UNIVERSITY OF
**WESTERN
AUSTRALIA**

SCHOOL OF POPULATION AND GLOBAL HEALTH

UWA Nedlands Campus, Stirling Hwy
M431, Perth WA 6009 Australia