



MONASH
University

MASTER OF CLINICAL PSYCHOLOGY

School of Psychological Sciences, Monash University

Researchers from the School of Psychological Sciences and the Turner Institute for Brain and Mental Health are offering a range of clinical research projects in 2027 that may be suitable for Master of Clinical Psychology students applying for enrolment in 2027. A sample of particular projects or areas of research are listed below.

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DR. ALEXANDER WOLKOW

Sleep and Occupational Health Research Group: Alex Wolkow Lab

[Alex Wolkow Lab](#)

[PURE Profile](#)

[Supervisor Connect](#)

The goal of the Sleep and Occupational Health Research Group (lead by Alex Wolkow) is to better understand, and counteract, the impact of poor sleep and other workplace stressors on health, safety, and performance in high-risk occupations. Our group is interested in both the acute and long-term impact of sleep disturbances and other stressors in occupational settings. We use simulated work environments to explore the acute impact of sleep loss on work performance and stress, as well as cross-sectional and longitudinal studies to examine the link between sleep and health issues in the workplace. A further area of focus for our team is examining the effectiveness of interventions and workplace programs designed to enhance mental health and wellbeing in high-risk occupations.

PROJECTS

IMPACT OF SLEEP DISTURBANCES AND OTHER OCCUPATIONAL DEMANDS ON MENTAL HEALTH IN EMERGENCY SERVICE PERSONNEL AND OTHER HIGH-RISK OCCUPATIONS

Emergency services and other high-risk industries are exposed to a unique set of occupational demands, such as poor sleep, trauma and shift work. These demands can adversely impact the mental health of personnel. Our team aims to better understand and counteract the impact of occupational demands on mental health in emergency personnel and other high-risk occupations. Within this area of research, we are interested in examining how sleep and other factors emerge in new personnel and could be related to the development of mental health conditions (e.g., PTSD, depression, anxiety, burnout). We are also interested in understanding the effectiveness of interventions and programs designed to enhance mental health in these high-risk occupations. There are opportunities for PhD (Clinical psychology PhD, Research-only PhD and Clinical Neuropsychology PhD) and Masters (Master of Clinical Psychology) candidates to join this research area. Note this project area can be modified to align with the specific interests of the candidate. See our lab website for information: <https://www.monash.edu/medicine/psych/alex-wolkow-lab>

ACUTE IMPACTS OF OCCUPATIONAL DEMANDS ON PERFORMANCE AND STRESS IN EMERGENCY PERSONNEL AND OTHER HIGH-RISK OCCUPATIONS

Shift work can lead to sleep loss and circadian misalignment, which in turn can adversely impact an individual's performance and stress physiology. Our team uses simulated work environments and field settings to examine how shift work, sleep loss and other occupational demands influence different aspects of work performance and physiological stress responses in high-risk occupations (e.g., emergency services). There are opportunities for PhD (Research-only PhD, Clinical Psychology PhD and Clinical Neuropsychology PhD) and Masters (Master of Clinical Psychology) candidates to conduct projects within this area of research. Note this project area can be modified to align with the specific interests of the candidate. See our lab website for information: <https://www.monash.edu/medicine/psych/alex-wolkow-lab>

DR. ANNA MULLINS

Jackson Lab / Sleep and Brain Health

[PURE Profile](#)

Investigates links between sleep, cognition, and neurodegeneration using brain and biological biomarkers. Uses physiological signal analysis and interpretation to understand the influence of sleep-wake physiology and psychology on brain health.

PROJECTS

SLEEP STABILITY, EMOTIONAL MEMORY AND RISK FOR NEURODEGENERATION

In sleep disorders and the general community, poor sleep quality is associated with cognitive impairments, biomarkers of neurodegeneration and dementia. Rescue & Recovery Workers (RRWs) exhibit a high prevalence of sleep disorders, mental health comorbidities and show evidence of early-onset neurodegeneration. This project will investigate habitual sleep (using cardio-pulmonary coupling), emotional memory and plasma markers of neurodegeneration in this population.

PROF. ANTONIO VERDEJO-GARCIA

Addiction and Impulsivity Research Lab

[PURE Profile](#)

[Supervisor Connect](#)

My research investigates how the brain and body interact to shape emotion, interoception, reward, and addiction, and how these processes are disrupted in psychiatric illness. I combine naturalistic neuroimaging (film-based fMRI, EEG, and simultaneous physiological recording) with intracranial EEG in patients to characterise emotional learning and brain-body coupling at high spatial and temporal resolution. A second strand develops precision neuromodulation, using transcranial magnetic stimulation and transcutaneous vagus nerve stimulation to test causal mechanisms and therapeutic targets.

Methodologically, I utilise functional connectivity approaches as well as effective connectivity approaches with dynamical causal modelling to investigate meso- and macroscale brain dynamics. I also use computational neuroscience and dynamical systems approach, applied to fMRI, intracranial EEG, peripheral bodily responses, and behaviour. Projects integrate these tools within a mechanistic, clinically grounded framework rather than purely data-driven modelling.

Students can expect training across neuroimaging, computational analysis, and translational study design, with scope to develop projects spanning healthy cognition and clinical populations with strong focus on translational neuroscience. I have a medical background (MBBS) with strong signal processing skills thus enabling supervision of students from diverse backgrounds such as psychology, engineering,, computer science, physics and medicine.

PROJECTS

BRAIN-BODY INTERACTIONS IN DEPRESSION AND ADDICTION: MAPPING DISRUPTED COUPLING AS A MECHANISTIC MARKER AND TREATMENT TARGET

This project examines how communication between the brain and peripheral bodily systems shapes mood and motivation, and how disrupted brain-body coupling contributes to depression and addiction. Using neuroimaging, physiological recording, and computational modelling, students will characterise these interactions and test their value as mechanistic markers and neuromodulation targets.

NOVEL METHODS FOR MEASURING BRAIN ACTIVITY AND CONNECTIVITY IN ALCOHOL USE DISORDER, AND THEIR CHANGES WITH BRAIN STIMULATION

Alcohol use disorder is linked to altered activity and communication between brain regions that support reward, craving, and self-control. This project develops and applies novel computational methods to measure brain activity and connectivity from brain imaging data, and tests how these measures change following non-invasive brain stimulation (transcranial magnetic stimulation, TMS). Students will learn advanced analysis approaches and use them to identify markers of the disorder and to track how the brain responds to treatment.

PROF. BEI BEI

Sleep and Mental Health

[Bei Bei Lab](#)

[PURE Profile](#)

[Supervisor Connect](#)

The Sleep and Mental Health Laboratory researches a range of research areas related to: - the nature and mechanisms of sleep and circadian rhythm disorders - Interventions for sleep and circadian rhythm disorders, including Cognitive Behavioural Therapy for Insomnia, and Bright Light Therapy - Moderators and mechanisms of Cognitive Behavioural Therapy for Insomnia - the relationship between sleep and mental health (e.g., depression, anxiety, and other psychiatric symptoms/disorders) - sleep-wake behaviours and sleep health in adolescents, including the effects of restricted and extended sleep opportunities on adolescents' emotional and cognitive wellbeing; and sleep health in women, including interventions to improve sleep and wellbeing during pregnancy and postpartum periods. In addition, our group is an integral part of the Monash University Healthy Sleep Clinic. We provide research support to the Clinic's translational research activities, and contribute to training of provisional psychologists and Clinical Psychology registrars on sleep disorders management.

PROJECTS

PERINATAL INSOMNIA, SLEEP HEALTH, AND MENTAL HEALTH

The Sleep Health in Perinatal Care (SHINE) study is a large National Health and Medical Research Council (NHMRC) funded clinical trial, looking at real-world effectiveness of Cognitive Behavioural Therapy for Insomnia during pregnancy and the postpartum periods, as well as the implementation potential of the intervention in the routine perinatal care (Royal Women's Hospital and Monash Health). Within this trial, there will be ample scope for the candidate to develop research topics in the area of perinatal maternal/infant sleep, mental health, and cognitive/daytime functioning; health and wellbeing of new fathers; as well as clinical expertise in treating insomnia during this challenging time for new parents. Topics for doctoral/PhD/Masters projects are worked out collaboratively with the candidate to incorporate their research interests and career goals.

SLEEP AND MENTAL HEALTH IN ADOLESCENTS

Sleep and circadian rhythms (body clock) undergo tremendous changes during adolescence. It is also during this critical developmental period, early signs of mental health symptoms such as anxiety and depression emerge. The CLASS (Circadian Light in Adolescence, Sleep and School) Study is funded by the Australian Research Council (ARC), the NHMRC, and Wellcome (UK). It follows a large cohort of teenagers across adolescence and into young adulthood, and examines how changes in sleep and circadian rhythms are related to changes in mental health symptoms and academic and cognitive performance. A wide range of topics are available within this project across clinical psychology and clinical neuropsychology domains.

DR. BETH JOHNSON

Johnson lab

[PURE Profile](#)

Neurodevelopment, mental health, children and youth, LGBTQA+, qualitative, quantitative, multidimensional phenotyping.

PROJECTS

UNDERSTANDING THE CHANGING ROLE OF EDUCATORS IN SUPPORTING CHILDREN AND YOUTH WITH CO-OCCURRING NEURODEVELOPMENTAL AND MENTAL HEALTH CONDITIONS

This project will investigate how neurodevelopmental and mental health conditions emerge and shift across childhood and adolescence, and how developmental trajectories shape the role, scope, and needs of educators supporting students. Working across primary and secondary education settings, the project will work with teachers to understand their evolving role in supporting students with neurodevelopmental and mental health conditions as they move through different stages of schooling, and supports needed for teachers at each stage.

A/PROF. DAVID MOSELEY

Child Youth and Family Intervention Clinic, Turner Clinics

[PURE Profile](#)

[Supervisor Connect](#)

Our research explores how relationships can support children's development, mental health, and wellbeing, and how this knowledge can inform effective interventions, services, and systems. A particular focus is understanding the relational processes through which development and therapeutic change occur, including attachment, attunement, co-regulation, caregiver responsiveness, and the ways parents, clinicians, educators, and other adults scaffold children's development.

Projects span parent-child therapy, parenting and caregiver wellbeing, neurodevelopment, child and youth mental health, and broader questions in child development. We are particularly interested in practical, developmentally informed and family-centred approaches for children with complex or intersecting needs that can work across traditional diagnostic and service boundaries.

Our research draws on intervention and therapy process research, co-design and participatory methods, service design and journey mapping, implementation and effectiveness research, and evaluation of models of care across health, education, and disability settings.

Across this work, we collaborate with children, families, clinicians, services, and communities to produce research that is scientifically rigorous, responsive to lived experience, and useful in real-world practice. We welcome PhD and Masters students interested in understanding how and why supports for children and families work, and how effective approaches can be translated into everyday practice and services.

PROJECTS

UNDERSTANDING AND IMPROVING HOW PARENT-CHILD RELATIONSHIPS SUPPORT CHILD MENTAL HEALTH AND DEVELOPMENT

This research examines how relationships shape children's development and mental health, and how developmental and clinical science can be translated into interventions and clinical practice that improve outcomes for children and families. Prospective PhD and Masters students are invited to co-develop the research projects, aligned with their interests. Projects may include studying mechanisms of change in parent-child therapy, evaluating relational interventions such as My Emotions, exploring the experiences of children, families, and clinicians, and/or developing and evaluating training that supports relational and dyadic practice. Students have opportunities to work within the Turner Clinics Child, Youth and Family Intervention Research Integrated Clinic and with our broader research and hospital partners.

DR. EMMA MORTON

Living Well with Bipolar Disorder

[PURE Profile](#)

[Supervisor Connect](#)

My research aims to optimize the quality of life of individuals living with mood disorders, with particular emphasis on bipolar spectrum disorders. Three intersecting research streams inform this program. First, bipolar disorder has broad ranging impacts to relationships, occupational functioning, self-image, and physical wellbeing, yet these outcomes are not fully captured by symptom measures alone. As such, I am interested in measuring and predicting patient-valued outcomes in mood disorders. Second, I am interested in developing and evaluating novel psychological interventions for mood disorders. To achieve this goal, my research explores psychological mechanisms and impacts of bipolar disorder (e.g., self-stigma, self-compassion, emotion regulation). Third, as less than 50% of people with bipolar disorder receive access to psychological care, I am interested in improving access to psychological interventions by researching pathways to care, novel dissemination strategies, training for psychologists and other healthcare providers, and initiatives targeting public stigma and mental health literacy. I welcome student proposals for research projects related to these themes. Much of my research is qualitative in nature (e.g., individual interviews, focus groups), however I also use quantitative research methodologies (e.g., surveys, experimental research, psychometric validation studies). Where feasible and appropriate, I also aim to incorporate community and lived experience perspectives in the design and conduct of my research projects.

PROJECTS

ONLINE RISKY BEHAVIOURS AND RISK MITIGATION STRATEGIES IN BIPOLAR DISORDER

Excessive involvement in activities with a high likelihood of negative consequences is a symptom of manic episodes in bipolar disorder. The internet facilitates 24/7 access to platforms that can trigger or enable risky behaviours. Applicants are invited to design studies to understand the prevalence and impacts of risky behaviours in an online context, as well as identify strategies to help individuals manage these risks.

UNDERSTANDING AND CHALLENGING STIGMA IN SERIOUS MENTAL HEALTH CONDITIONS

Stigma is associated with negative impacts to treatment access and wellbeing for people with serious mental health concerns. Applicants are invited to design projects exploring predictors of different types of stigma across diverse populations, the impacts of stigma, how stigmatising beliefs are developed and internalized, and interventions to address stigmatising beliefs and behaviours at different levels (i.e., individual/group interventions, public health campaigns, healthcare professional education).

ADDRESSING THE UNMET NEEDS OF WOMEN LIVING WITH BIPOLAR DISORDER

Although men and women are diagnosed with bipolar disorder at the same rate, there is research evidence to suggest that women with bipolar disorder would benefit from tailored interventions and supports that address their unique symptom profiles, hormonal influences, pregnancy and parenting, and sexual health and wellbeing. Applicants are invited to design projects to understand and address the intersection between mood symptoms and sex and gender-specific factors.

DR. JOSHUA WILEY

Behavioural Medicine Lab

[PURE Profile](#)

[Supervisor Connect](#)

Our research centres around sleep and mental health, particularly in people living with and after a cancer diagnosis. Besides specific projects listed, we conduct and would be happy to plan with you studies in people with cancer using designs/methods such as: (1) interventions like CBT-I or clinical trials; (2) observational designs using surveys and ecological momentary assessment (EMA) or daily diaries; (3) testing and developing methods particularly around analysing sleep/activity, daily data, or compositional data; (4) qualitative interviews to understand people's experiences with our interventions or what sort of support they want/need. This breadth of methods means we have often worked with both clinical and research only students, with a range of projects and topics possible that can match your interests, strengths, and help develop the skills you want to graduate with.

PROJECTS

SLEEPSTEPS

A randomized controlled trial of scalable, stepped care CBT-I for insomnia after cancer, with a team bringing together sleep, psycho-oncology, medical oncology, and lived experience. PhD and Masters projects span trial data, intervention development and clinical delivery, for research only or clinical students. This project offers hands-on clinical research, healthcare collaboration, and meaningful patient impact. Top-up funding, weekly supervision and negotiated workload ensure strong support throughout your degree.

CAN WE MEASURE WHY PEOPLE SLEEP BADLY?

Poor sleep is common, especially in people with cancer. Questionnaires and objective measures can tell us whether someone is sleeping badly, but currently we rarely measure and quantify why they sleep badly. This is important for personalising and optimising treatments. This project would involve high intensity data collection using objective and subjective measures as well as possible interviews to attempt to measure and quantify exactly what is happening before people wake up at night and when they struggle to fall asleep. We are particularly interested in women on endocrine therapy, which gives menopause/perimenopause type symptoms and sleep problems.

DR. KELLY ATKINS

Atkins Lab

[PURE Profile](#)

[Supervisor Connect](#)

Ageing and Neurodegeneration with an emphasis on the implementation and evaluation of models of care (both diagnostic and post-diagnostic care). This includes evaluating the experiences and needs of caregivers who support people with young-onset dementia. Both qualitative and quantitative research projects are available.

PROJECTS

EVALUATING POST-DIAGNOSTIC CARE FOR YOUNG-ONSET DEMENTIA

This project will evaluate a novel model of post-diagnostic care for people diagnosed with young-onset dementia (e.g., early onset AD, FTD) and their caregivers. We are currently piloting this care model at the Department of Neuropsychiatry and the Royal Melbourne Hospital. Both quantitative and qualitative outcomes are available for evaluation, with the intention to refine the model to meet the needs of patients and their families for a subsequent larger trial.

IDENTIFYING PATIENT PREFERENCES FOR DISEASE-MODIFYING THERAPIES IN ALZHEIMER'S DISEASE

Disease-modifying therapies that may slow or delay the progression of neurodegenerative disease are beginning to emerge. Understanding patient and caregiver preferences is essential to ensure that treatment decisions, regulatory processes, and funding models are aligned with what matters most to those living with the disease, ultimately supporting more patient centred and equitable care. This project will use Discrete Choice Experiments (DCEs), a stated preference method to quantify how people value different aspects of a treatment or intervention. Both quantitative and qualitative data may be generated for analysis.

SOCIAL AND ECONOMIC COST OF HUNTINGTON'S DISEASE IN AUSTRALIA

A major barrier to improving HD services is a lack of population-level evidence about how people with HD use the healthcare system. We have no systematic, statewide estimates of the type of healthcare services used by people with HD, how frequently they are accessed, or how service use differs between metropolitan, regional and rural areas. Without this information we cannot identify service gaps, define priorities for improvement in services, or implement effective change for people living with HD. Using data held by the Australian Institute of Health and Welfare (AIHW), we aim to: 1) describe the patterns of healthcare utilisation among people with HD in Victoria, including hospital admissions, emergency department presentations, outpatient specialist care and pharmaceutical use; 2) examine variation in healthcare utilisation according to demographic characteristics; 3) estimate the direct healthcare-system costs associated with HD, overall and across major categories of care and; 4) explore how healthcare utilisation and costs vary across the course of illness.

PROF. LAURA JOBSON

Culture, Trauma and Mental Health Group

[PURE Profile](#)

[Supervisor Connect](#)

- *Mixed methods*
- *Understanding the influences of culture on the mechanisms underpinning posttrauma recovery*
- *Development of culturally-tailored interventions*

PROJECTS

UNDERSTANDING THE INFLUENCES OF CULTURE ON THE MECHANISMS UNDERPINNING POSTTRAUMA RECOVERY

Our current understanding of posttraumatic stress disorder (PTSD) is primarily based on Western norms, values and belief systems. This has informed current interventions. However, the processes underpinning PTSD are influenced by cultural and social factors. This research will involve exploring these factors and how the factors influence posttrauma recovery.

DR. MANA BIABANI

Bellgrove lab

[PURE Profile](#)

[Supervisor Connect](#)

My research examines the neural and computational mechanisms that support human cognition, with a particular focus on perceptual decision-making, attention, cognitive control, and neurodevelopmental conditions such as ADHD. I investigate how molecular, cellular, circuit-level, and behavioural processes interact to shape cognition and individual differences.

My work combines multimodal human neuroscience methods, including electroencephalography (EEG), transcranial magnetic stimulation (TMS) with concurrent EEG, focused ultrasound stimulation (FUS), magnetic resonance imaging (MRI), psychopharmacology, and computational modelling. I use these approaches to identify causal brain mechanisms, characterise the neural dynamics underlying cognition, and link neurophysiological signals to formal models of behaviour.

PROJECTS

EXCITATION–INHIBITION DYNAMICS UNDERLYING COGNITIVE FUNCTION IN ADHD

This project investigates how alterations in excitation–inhibition dynamics contribute to attention, impulse control, and decision-making in ADHD. Combining pharmacological perturbation, high-density EEG, and computational modelling, it will link neural activity to behaviour and individual differences, providing a mechanistic foundation for more targeted and personalised interventions.

PROF. MARIE YAP

Parenting and Youth Mental Health Research Group

[PURE Profile](#)

[Supervisor Connect](#)

Our team conducts impact-focused applied research in child and youth mental health (aged between 5-18 years), with a particular focus on empowering parents and carers in the important role they have in their child's development and mental health. Our research revolves around scalable digital parenting interventions that empower parents to support their child's mental health, and span prevention into early intervention of mental health problems. Our team's vision is that all parents will be empowered with evidence-based parenting strategies to support their child's mental health that are relevant and actionable.

If your research interests align with our vision and approach, I would welcome the opportunity to discuss potential Master's or PhD projects you may wish to conduct.

The research projects we conduct are inherently translational, and use a range of methodologies, which may include:

PROJECTS

- Co-design of digital parenting interventions to support child/adolescent mental health with parents/carers, young people, and professionals who support these families, to address depression and anxiety problems and associated challenges (e.g. school refusal, suicide risk, non-suicidal self-injury, trauma) and for different subgroups of the population (e.g. autism, ADHD, parental mental health challenges, family adversities, immigrant families, rural/remote families, fathers)
- Small-scale evaluations of the acceptability and feasibility of our interventions using mixed methods
- Large-scale randomised controlled trials to evaluate the effectiveness and cost-effectiveness of the interventions
- Development and evaluation of parenting-coach training frameworks and packages, as part of the coach-supported versions of our digital parenting interventions
- Implementation research surrounding the integration and national roll-out of parenting interventions in existing services, e.g. headspace
- Understanding the mechanisms of change (e.g. parent factors, child factors, sociodemographic factors, intervention-specific factors, coach-level factors) in parenting interventions
- Systematic reviews, meta-analyses, and Delphi studies of international expert consensus are examples of research translation methods we use to ensure that our parenting intervention content is drawn from the highest-quality research evidence.

PROF. MARK BELLGROVE

[Mark Bellgrove Lab](#)

[PURE Profile](#)

[Supervisor Connect](#)

My lab does work across basic neuroscience and clinical application (ADHD, autism). We study how cognition is enacted at the systems level (genes, neurochemistry, brain, phenotypes) in order to understand risk mechanisms for ADHD and autism

PROJECTS

SYSTEMS NEUROSCIENCE OF PERCEPTUAL DECISION MAKING

We have funded programmes of work examining how perceptual decisions are formed using neuropharmacological challenge, EEG, and behaviour both in healthy populations and in clinical samples. We have a new programme of work developing rodents models of perceptual decision making. We are also starting a new programme of work looking at how arousal shapes fluctuations in behavioural variability using pharmacological challenge

PROF. MARTIN SELBOM

Personality, Psychopathology, and Measurement lab

[PURE Profile](#)

[Supervisor Connect](#)

My research concerns how individual differences in personality traits can be used to understand, classify, and assess mental disorder. Much of this work has focused on personality pathology, in step with the shift in DSM-5 and ICD-11 away from traditional categorical diagnoses toward a model based on impairment in self and interpersonal functioning described by dimensional trait profiles. I examine both underlying mechanisms and clinical utility issues in this respect.

A second theme addresses the hierarchical structure of psychopathology and what mechanisms personality traits and mental disorders share, whether disorder reflects personality functioning under stress, or traits act as risk factors for later difficulty.

A third concerns clinical assessment in applied settings, with a particular emphasis on the MMPI-3: how its scales map onto contemporary hierarchical models, and how its validity scales detect feigned or defensive responding.

PROJECTS

CLINICAL UTILITY OF DIMENSIONAL MODELS OF PERSONALITY DISORDER

DSM-5 and ICD-11 have begun to move away from traditional categorical personality disorders (e.g. Borderline, Antisocial, Narcissistic), instead understanding them in terms of impairment in self and interpersonal functioning, described using dimensional personality trait profiles. Research has established that these dimensional operationalisations have good psychometric properties, but far less is known about their clinical utility. Do they actually improve patient care and treatment planning? What stands in the way of their implementation in routine practice? Can a dimensional framing reduce the stigma attached to the term "personality disorder" and prove more acceptable to affected communities? These questions suit a range of methods, including clinician surveys and vignette studies, qualitative work with patients and practitioners, or trials of training and feedback formats. Projects in this area can be shaped around prospective students' specific interests.

HIERARCHICAL TAXONOMY OF PSYCHOPATHOLOGY (HiTOP): ASSESSMENT, MECHANISMS AND CLINICAL UTILITY

The Hierarchical Taxonomy of Psychopathology (HiTOP) models mental disorder dimensionally and hierarchically, rather than as a set of discrete categories. It was developed to address well-documented limitations of categorical diagnosis (e.g., comorbidity, within-diagnosis heterogeneity, and unreliable boundaries between disorders). The framework is still young and important questions remain open. How is HiTOP best assessed, and can existing instruments be mapped onto it? What neuropsychological and environmental mechanisms underlie its spectra? And is the framework feasible and clinically useful in practice? Projects might involve secondary analysis of existing datasets or new data collection, and can be shaped around prospective students' specific interests.

VALIDATION STUDIES USING THE MMPI-3

My lab conducts research on the Minnesota Multiphasic Personality Inventory – 3 (MMPI-3), an omnibus clinical measure covering a broad range of personality and psychopathology. Recent work has centred on the assessment of personality disorders, on mapping the instrument's scales onto contemporary hierarchical models of personality and psychopathology, and on the detection of feigned and defensive responding through its validity scales. The lab continues to test the MMPI-3's validity and clinical utility across a range of settings and clinical purposes, and projects in this area can be shaped around prospective students' specific interests.

PERSONALITY DISORDER AND SLEEP DYSFUNCTION: FROM ASSOCIATION TO MECHANISM

Sellbom and Drummond (2026) recently established associations between dimensional models of personality disorder and several forms of sleep dysfunction. That work was entirely cross-sectional and survey-based, and examined a fairly limited number of sleep metrics, however, leaving open questions of directionality and mechanism — both of which matter if sleep is to be a viable treatment target in personality pathology. This project will build on those findings through a series of small-scale prospective studies using varied methodologies (e.g., experience sampling, daily sleep diaries, wearable sleep monitors) to test how personality pathology and sleep disturbance influence one another over time. The student will gain training in intensive longitudinal design and analysis, with scope to shape the specific research questions around their own interests.

A/PROF. MELINDA JACKSON

Sleep & Brain Health Research Group

[PURE Profile](#)

[Supervisor Connect](#)

Sleep disorders/ disturbance, digital interventions, cognition, clinical trial.

PROJECTS

CARE 2 SLEEP: A DIGITAL SLEEP INTERVENTION FOR COMMUNITY-DWELLING PEOPLE LIVING WITH COGNITIVE IMPAIRMENT AND THEIR CARER

Over 200,000 Australians provide informal assistance and caregiving to people with dementia, and two thirds of these individuals experience significant sleep disturbance. Poor sleep in dementia carers is associated with increased depressive symptoms and reduced quality of life. This project will test the feasibility and efficacy of a digital sleep intervention for people with dementia and their carer using a multimodal approach that combines brief training of caregivers in behavioural strategies to improve sleep in the person with dementia, in addition to cognitive and mindfulness-based strategies to improve sleep and mood in the caregiver.

DR. PRERNA VARMA

[Sletten Lab](#) (Sleep and Circadian Rhythms Theme)

[PURE Profile](#)

Projects are spread across two themes:

- *Sleep and Mental Health Equity*
- *Digital Interventions for Shift Work:*

PROJECTS

INEQUITIES THAT DON'T SLEEP: USING INTERSECTIONAL FRAMEWORKS TO UNDERSTAND SLEEP AND MENTAL HEALTH ACROSS COMMUNITIES

1 in 2 Australians experience sleep deficiencies. This is linked to more than 3,000 premature deaths and costs the economy over \$66 billion each year through its effects on physical and mental health. But the burden is not evenly borne. Inequities in sleep and mental health are shaped by migration, discrimination, gender, sexuality, disability, trauma, social and structural barriers. However, Australia does not systematically document or address these inequities. This theme examines sleep and mental health inequity using intersectional frameworks and a decolonising lens. Our goal is to develop community-led, co-designed interventions that advance health equity. We partner with community organisations, local councils and not-for-profits. We use mixed methods, including risk modelling, multilevel intersectional analysis, and qualitative approaches such as participatory storytelling.

SLEEPSYNC: PERSONALISED, DIGITAL INTERVENTION FOR SHIFT WORKERS

Digital Interventions for Shift Work: Shift workers are our essential workforces, providing 24/7 services in high-stress, operationally demanding contexts. Over 70% of shift workers experience sleep and circadian disruption associated with an increased risk of accidents, injuries and adverse mental health outcomes. This theme develops personalised digital interventions for shift workers. We work directly with industries such as healthcare, defence and aviation to co-produce solutions that improve sleep and alertness. We collaborate with industries, researchers, clinicians, computational modelling experts and intend to extend these interventions beyond shift work, to conditions such as delayed sleep-wake phase disorder, mental health conditions and jet lag.

DR. REBECCA KIRKHAM

Safe and Resilient Futures (SAFER) Lab / Trauma Clinic

[PURE Profile](#)

First Responder Mental Health

There are several avenues and data sources that a candidate could pursue for their own potential PhD/Master's project. Note: All potential projects can be tailored to align with the candidate's interests and career goals. These opportunities are well suited to PhD/Clinical PhD or Master's candidates.

Candidates will join a welcoming, supportive team with expertise across research and clinical practice and a strong passion for advancing the mental health and wellbeing of first responders. Supervision team members will be tailored to suit the candidate's interest and may include: Rebecca Kirkham, Sean Cowlshaw, James Courtney, Alexandra Anderson and Alexander Wolkow.

PROJECTS

INTENSIVE TRAUMA TREATMENT FOR PTSD IN PARAMEDICS

Drawing on a unique clinical trial dataset, this project explores mechanisms of change and treatment process/outcomes following an intensive trauma treatment program incorporating EMDR, VR exposure therapy, somatic therapy, and psychoeducation.

MENTAL HEALTH AND WELLBEING SUPPORT FRAMEWORK ACROSS FIRST RESPONDER SECTORS

This project will use Delphi, survey, and qualitative methods to develop a mental health and wellbeing framework for first responders. Research opportunities include understanding support needs across the career lifespan and translating findings into evidence-based workforce initiatives.

NATIONAL FIRST-RESPONDER SURVEY - ANSWERING THE CALL

Using the national Answering the Call dataset of over 21,000 first responders, this project uses secondary data analysis to explore factors such as wellbeing, psychological distress, PTSD, help-seeking, stigma amongst others.

EVALUATING MENTAL HEALTH SERVICES FOR POLICE MEMBERS

In partnership with BlueHub, this project analyses real-world clinical data from police members accessing psychological services to evaluate treatment outcomes and service engagement.

DR. SAM MCKAY

Youth and Emerging Adult Mental Health Lab

[PURE Profile](#)

The Youth and Emerging Adult Mental Health Lab investigates the conditions that support young people to move from adversity to flourishing, across three connected areas. The first is suicide prevention in educational settings, including schools and universities. The second is mental health and suicide prevention with migrant communities, including the only sustained Australian research program focused specifically on international student suicide prevention. The third examines protective factors such as awe and resilience as targets for novel prevention approaches, rather than as incidental correlates of wellbeing.

Methodologically, the lab spans scoping and systematic reviews, randomised controlled trials, longitudinal designs, psychometric scale development and validation, and advanced statistical modelling in R. Co-design and mixed-methods work with young people and people with lived experience of suicide is integral to the program. Across these areas, the lab has a particular focus on digital delivery, having led randomised trials of digital interventions and the co-design processes behind them.

PROJECTS

AWE AS A NOVEL TARGET FOR SUICIDE PREVENTION

Can everyday moments of awe protect young people from suicidal thoughts? This project explores whether awe eases defeat and entrapment both directly and by improving sleep, a pathway no study has examined. Students will work with survey and daily diary data, gaining training in R and multilevel modelling.

BREAKING THE SILENCE: WHAT ENABLES DISCLOSURE AND HELP-SEEKING FOR SUICIDAL THOUGHTS AND BEHAVIOURS AMONG INTERNATIONAL STUDENTS

When an international student is struggling, who do they tell, and what happens next? This project examines how and when international students disclose suicidal thoughts, with the aim of understanding how we can better support disclosure. Students will work with both survey and interview data, gaining mixed-methods training.

ADVERSE CHILDHOOD EXPERIENCES AND COLLEGE ADJUSTMENT AMONG INTERNATIONAL STUDENTS

Does early adversity shape how international students adapt to life in a new country? Using baseline data from a recent randomised controlled trial, this project examines links between adverse childhood experiences, college adjustment, and psychological distress. It would suit a masters student.

DR. SAURABH SONKUSARE

Addiction and Impulsivity Research

[PURE Profile](#)

My research investigates how the brain and body interact to shape emotion, interoception, reward, and addiction, and how these processes are disrupted in psychiatric illness. I combine naturalistic neuroimaging (film-based fMRI, EEG, and simultaneous physiological recording) with intracranial EEG in patients to characterise emotional learning and brain-body coupling at high spatial and temporal resolution. A second strand develops precision neuromodulation, using transcranial magnetic stimulation and transcutaneous vagus nerve stimulation to test causal mechanisms and therapeutic targets.

Methodologically, I utilise functional connectivity approaches as well as effective connectivity approaches with dynamical causal modelling to investigate meso- and macroscale brain dynamics. I also use computational neuroscience and dynamical systems approach, applied to fMRI, intracranial EEG, peripheral bodily responses, and behaviour. Projects integrate these tools within a mechanistic, clinically grounded framework rather than purely data-driven modelling.

Students can expect training across neuroimaging, computational analysis, and translational study design, with scope to develop projects spanning healthy cognition and clinical populations with strong focus on translational neuroscience. I have a medical background (MBBS) with strong signal processing skills thus enabling supervision of students from diverse backgrounds such as psychology, engineering,, computer science, physics and medicine.

PROJECTS

BRAIN-BODY INTERACTIONS IN DEPRESSION AND ADDICTION: MAPPING DISRUPTED COUPLING AS A MECHANISTIC MARKER AND TREATMENT TARGET

Uses neuroimaging, physiological recording, and computational modelling to examine how communication between the brain and bodily systems shapes mood and contributes to depression and addiction.

NOVEL METHODS FOR MEASURING BRAIN ACTIVITY AND CONNECTIVITY IN ALCOHOL USE DISORDER, AND THEIR CHANGES WITH BRAIN STIMULATION

Applies novel computational methods to measure brain activity/connectivity changes in alcohol use disorder following non-invasive brain stimulation (TMS).

A/PROF. SEAN COWLISHAW

Safe and Resilient Futures (SAFER) Lab

[PURE Profile](#)

The SAFER Lab specialises in translational research that strengthens mental health, resilience, and recovery in the context of trauma and adversity. Our work addresses risks to health and wellbeing from major mental health challenges, including compound disasters and emergencies linked to climate change, workplace trauma and psychosocial hazards (for example, associated with histories of service with the military or first responder agencies), and pervasive problems of family or gender-based violence. We also address intersections with social, environmental, and commercial drivers of mental health and wellbeing, including gender and social inequality.

PROJECTS

ADDRESSING FAMILY, DOMESTIC AND SEXUAL VIOLENCE (FDSV) IN MILITARY AND VETERAN POPULATIONS

Projects in this area can build off a major research initiative mapping points of contact with service systems and veterans or families with experiences of IPV use or experience. Specific projects will be co-designed with community partners, and may leverage existing data sources, or involve direct data collection (using quantitative or qualitative methods) regarding questions including suitable strategies for identifying, assessing, or responding to risks of FDSV (potentially including family violence and/or Military Sexual Violence).

BUILDING FOUNDATIONS FOR INTERVENTIONS TO ADDRESS FAMILY AND DOMESTIC VIOLENCE (FDV)

Projects in this area will focus on building evidence for interventions addressing FDV, potentially including experiences of either FDV victimisation or violence use / perpetration. Projects on the former may focus on developing concepts of 'recovery' in the context of FDV, or exploring novel programs of psychological support. Project on violence use / perpetration may focus on synthesising evidence from randomised trials of behaviour change programs, and/or adapting novel interventions that have been trialled in international jurisdictions.

PROF. SUE COTTON

Early Intervention and Mental Health

[Pure Profile](#)

[Supervisor Connect](#)

Research Themes: Psychosis, bipolar disorder, mood disorders, youth mental health, health service outcomes, measurement, carers

Methodologies: Data-driven quantitative, clinical trials, psychometrics, and qualitative methodologies

PROJECTS

GENDER DIFFERENCES IN THE PRESENTATION OF BD

This project will examine gender differences in the clinical presentation and experiences of people with bipolar disorder. Using existing or new data, it will explore differences in mood symptoms, comorbidities, functioning, quality of life and treatment experiences. Findings may help identify gender-specific needs and inform more personalised approaches to bipolar disorder care.

SOCIAL DETERMINANTS ASSOCIATED WITH BIPOLAR DISORDER (BD)

This research program examines how social determinants influence bipolar disorder, including diagnostic and treatment delays, illness course, and health and psychosocial outcomes. The student will investigate factors such as economic stability, education, social inclusion, healthcare access, and neighbourhood environments within the NHMRC Centre of Research Excellence in Bipolar Disorder (CORE-BD).

UNDERSTANDING RISK BEHAVIOURS IN BIPOLAR DISORDER

This research program will examine the diverse risks associated with bipolar disorder, extending beyond self-harm and suicide to include financial, sexual, substance-related, social and behavioural risks. It will explore perspectives of people with lived experience, caregivers and clinicians, and contribute to developing improved approaches to assessing risk in bipolar disorder within CORE-BD.

THE CARE PROJECTS

The CARE program examines the experiences, wellbeing and support needs of carers of people with severe mental illness across family and diagnostic contexts. Projects include carers of people with psychosis, bipolar, mood and anxiety disorders, siblings, and young carers, with opportunities to examine social determinants, suicide attempts and family violence. A range of projects are available

EMPLOYMENT, EDUCATION, STIGMA AND BIPOLAR DISORDER

People with bipolar disorder can experience substantial disruption to education and employment, including interrupted study, unemployment, underemployment and difficulties maintaining work. Stigma and discrimination may further restrict opportunities and discourage disclosure or help-seeking. This project will examine barriers and facilitators to meaningful participation in education and employment for people with bipolar disorder.

SCREENING FOR BIPOLAR DISORDER

Screening tools can support earlier identification of bipolar disorder, yet existing measures vary in accuracy and may perform differently across clinical and community settings. This project will evaluate commonly used bipolar disorder screening tools, examine factors influencing their performance, and identify opportunities to improve screening and reduce delays in diagnosis and appropriate treatment.

DEVELOPING A LIFESTYLE INTERVENTION FOR INDIVIDUALS WITH BIPOLAR DISORDER

Lifestyle factors such as sleep, physical activity, diet, substance use and daily routines can influence physical and mental health outcomes in bipolar disorder. This project will explore the lifestyle needs and priorities of people with bipolar disorder and contribute to the co-design of a practical, evidence-informed lifestyle intervention to support wellbeing and recovery.

LIFESTYLE IN MALES WITH SERIOUS MENTAL ILLNESS

Men with serious mental illness experience substantial physical health inequalities, influenced by factors such as diet, physical activity, sleep, substance use and healthcare engagement. This project will examine lifestyle behaviours, barriers and facilitators to healthy living, and opportunities to develop tailored interventions that improve physical health, wellbeing and recovery.

PERINATAL PERIOD AND SERIOUS MENTAL ILLNESS

The perinatal period presents unique challenges for women with serious mental illness, including risks of relapse, sleep disruption, medication changes and difficulties accessing appropriate support. This project will examine experiences, needs and outcomes during pregnancy and postpartum to identify opportunities for more responsive, integrated and person-centred perinatal mental health care.

WHAT DOES QUALITY OF LIFE MEAN TO YOUNG PEOPLE TODAY?

Quality of life can mean different things to different young people and may extend beyond traditional measures of health and functioning. This project will explore how young people define a good quality of life, what factors matter most to them, and how these priorities could inform more meaningful measures and supports.

WHAT DO YOUNG PEOPLE THINK ABOUT BIG DATA AND DATA LINKAGE?

Young people's data are increasingly used in large datasets and linked across health, education and other services, yet little is known about their views on these practices. This project will explore young people's understanding, expectations and concerns regarding big data, data linkage, privacy, consent, governance and the acceptable use of their information.

A/PROF. TRACEY SLETTEN

Shift Work and Circadian Health Laboratory

[PURE Profile](#)

[Supervisor Connect](#)

Our research and industry engagement program is focussed on the mechanisms of sleep and circadian disruption, particularly in shift workers. We work to understand the adverse implications of sleep and circadian disruption for health, safety and productivity, and develop targeted interventions to improve sleep health in occupational environments. We specialise in translational research to understand and improve sleep health challenges in unique industry settings including healthcare, Defence, commercial aviation, heavy vehicle transport, manufacturing and Antarctic expedition.

PROJECTS

SLEEP AND NEUROBEHAVIOURAL PERFORMANCE IN INTERNATIONAL AVIATION

This program of research is examining the sleep, alertness and cognitive performance of international pilots and cabin crew during the longest commercial flight patterns globally. The project translates laboratory-based research into the real-world with novel technologies allowing EEG and cognitive assessments in the skies. This world-first research involves collaborative data collection with Qantas Airways during specifically designed research flights patterns. It provides the opportunity to support personalised behavioural recommendations to crew to optimise occupational health and wellbeing.

SLEEPSYNC: DIGITAL SLEEP HEALTH MANAGEMENT FOR SHIFT WORK

Development and evaluation of app-based technology to provide personalised recommendations for sleep-related behaviour to manage sleep and health in shift work where immediate access to clinical support is limited. The program incorporates adjustment of digital health to the needs of users, and evaluation of effectiveness. This project can include the optimisation of interventions via qualitative user-centred design.