

## Psychology Indicative PhD Project Areas

Likely DoS	Brief Summary of Research Interests
Andy Levy	Utilising social psychological theory and individual differences to understand, intervene and change lifestyle related cognition and behaviour. Three specific strands of interest are 1) mental biases and lifestyle related decision making; 2) personality and psycho-social determinants of lifestyle beliefs and behaviour; 3) interventions to change lifestyle behaviour. Methodologies: Quantitative and qualitative research design and analyses.
Derek Heim	Social and cultural influences on substance use, health and well-being. Having recently installed a 'bar lab' in our department, I am keen to examine ways in the psychopharmacological properties of alcohol interact with social and environmental contexts to shape alcohol-related beliefs and behaviours.
Derek Larkin	Psychosocial Oncology. Cancer affects 1 in 2 people, with this there is an increasing interest in the process of living with and beyond cancer. Research would be concerned with aspects of individuals' experience with cancer beyond medical treatment, and across the cancer trajectory, including at diagnosis, during treatment, transitioning to and throughout survivorship, and approaching end-of-life care.
Diana Tham	1) Research focusing on how infants and children learn from the visual world using eye-tracking technology. This includes perception of faces (emotion, race, gender) and objects (cross-modal perception, colour perception) which informs the development of social cognition. 2) Research area focusing on the development of facial mimicry. This research combines eye-tracking and facial electromyography (EMG) technology to examine the ways in which we develop these non-verbal cues.
Dorothy Tse	Learning and memory. What makes memories last? How factors such as emotion, novelty and prior knowledge affect episodic, semantic and spatial memory. Another research area is to investigate different strategies to alleviate mild cognitive impairment and dementia symptoms.
Elena Spiridon	The effect of feedback on mood and goal pursuit motivation; ambient colour light effects on mood and motivation; sleep deprivation and Melanopsin deficits. EEG, facial EMG, ECG, ICG.
Geoff Beattie	1. Human multi-modal communication and cognition, 2. The relationship between iconic gesture and speech in human communication. 3. The psychology of climate change, 4. Implicit cognition and sustainable behaviour, 5. Behaviour change, 6. Implicit racial prejudice, 7. Cognitive biases, 8. The analysis of political discourse, 9. Ethnographic approaches to social life.
Graeme Knibb	1) Cognitive and social factors that underlie excessive alcohol consumption. This includes the pharmacological effects of acute alcohol consumption and the potential role of impulsivity. 2) Self-stigma among heavy drinkers and how this may lead to harmful drinking behaviour.
Joanne Powell	Research investigating theory of mind and strategic thinking in relation to game theory and expertise. Much of the research involves chess-based paradigms. Some funding has already been obtained to conduct a neuroimaging study in this field (details available on request), thus, an MRI investigation would form one component of the PhD.
Laura Nicholson	Psychological predictors of student motivation and engagement including evaluation of teacher messages, achievement emotions, test anxiety, wellbeing at school and in general, student-teacher relationships, academic self-efficacy and perceived value of achievement.
Lauren McGale	Exploring the acceptability of sustainable (aka environmentally friendly) eating behaviours, and avenues to encourage their uptake. For example, nature exposure, home food growing, increased consumption of fruit & vegetables or alternative proteins (soy, insects, algae). Projects may include real-world research, controlled laboratory experiments, and online research. Research will primarily be quantitative but could be augmented with appropriate qualitative approaches.
Linda Kaye	1) Behavioural correlates of (social) identity in online settings 2) What is "social" in online settings? 3) Psychological and behavioural impacts of identity and online behaviours
Michel Belyk	Vocal communication: Singing, speech, and first impressions. Research on how effectively we use the voice, how it goes awry in speech disorders, vocal hygiene, how attractive, dominant, and trustworthy we sound to others. Topics on ASMR also welcome. Methods: Audio playback, audio recording, acoustical analysis.
Nicola van Rijsbergen	Recognition of emotional states in the self and others; effects of arousal and emotion on cognitive decisions about faces, trust, money, and belief; effects of ageing and neurodiversity (alexithymia, autism spectrum), emotions and neuroaesthetics. Methods: EEG, eyetracking, Biopac (heartrate, GSR); interested in real time two person interaction, maybe fNIRS/EEG.
Philip Murphy	Genetic bases influencing the experience of substance use (i.e. cannabis, alcohol, ecstasy (MDMA), cocaine, heroin), including effects on cognitive processes (e.g. memory), mood stability, withdrawal from substance use, and the maintenance of abstinence. Additionally, the relationship of self-efficacy beliefs to the processes of withdrawal from substance use, and the maintenance of abstinence.

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Rebecca Monk	Exploring the impact of social and environmental contextual influences on substance use and related beliefs, with a particular focus on alcohol. Projects are welcome which seek to harness real-world research, controlled laboratory experiments (e.g., bar laboratory), and/or advanced technologies (e.g., Smartphone Applications, TMS, Facial EMG). Applicants welcome to discuss ideas about developing further avenues of research in this domain.
Reshane Reeder	Individual differences in sensory representations, including visual/multi-modal imagery and visual working memory, and how these differences relate to anomalous perception (illusions, pseudo-/hallucinations). Methods: Behaviour (psychophysics, sensory/perceptual deprivation), TMS, potentially EEG or eye-tracking. Groups of interest: normal population, aphantasia, schizotypy, synaesthesia.
Stergios Makris	Visual perception, attention and action; Body and action representation; Brain stimulation (TMS, rTMS, tDCS); The automatic activation of the motor system by viewing graspable objects (affordances); The neural basis of action prediction and anticipation; The neural and cognitive correlates of elite sport performance; The neural basis of eating behaviour and eating disorders.
Themis Karaminis	Exploring how autistic children and adults see or perceive the world differently; studying the acceptance of autism and neurodiversity. Also: individual differences in cognitive development, (a)typical development, visual perception, language development, cross-linguistic/cross-cultural differences, interventions: online, educational. Methods: experiments, psychophysics, eye-tracking, computational cognitive modelling, computational approaches/machine learning, corpus linguistics.
Valeria Occelli	Sensory perception. Multisensory integration. Crosstalk between sensory perception and cognitive processes. Visual deprivation and cerebral plasticity. Individual differences in perception. Methods: behavioural, potentially TMS, EEG, eye-tracking.