Associate Professor Jacquelyn Cranney, Psychology, UNSW

Current Research Areas

These research areas may be of interest to potential PhD, Masters and Honours students. Please contact me on j.cranney@unsw.edu.au to discuss further.

1. Neural bases of fear reduction, attention and memory

Most of my research has been on the neural bases of attention (eg prepulse inhibition, habituation), memory (eg spatial location) and fear acquisition and reduction. My current focus is on understanding the functional and neural mechanisms of anxiety/fear reduction, with a specific emphasis on memory processes. Systemic GABA and NMDA manipulations are the primary instrument in this animal model work, thereby increasing clinical translation potential. Conditioned freezing is the primary paradigm, although generalisation of memory findings to the Morris Water Maze spatial paradigm is a potential future focus.

Applications by potential PhD students in this area are welcome; honours projects are limited in number.

2. Adaptive cognition

a. I am interested in the cognitive and motivational nature of prospective memory in its various forms (event-based vs time-based; laboratory vs naturalistic), how prospective memory performance may vary in particular subclinical populations such as binge-drinkers and moderately depressed individuals, and the neuropsychology of prospective memory. Applications by potential PhD, Clinical Masters, and Honours students in this area are welcome.

b. I have recently undertaken some research on the testing effect, which is the increased memory performance following a study period that involves active testing of, compared to more passive exposure to, the target material. There are some quite fascinating possibilities regarding the memory mechanisms underlying this effect, which have interesting implications for training and educational settings. In addition, the potential advantages and disadvantages of collaborative test taking (ie taking the intermediate test in groups/teams) deserves further investigation.
Applications by potential PhD, Organisational Masters, and Honours students in this area are welcome.

c. A new area of interest is self-regulation (cognitive, emotional, and motivational aspects) and how this relates to other metacognitive and neuropsychological indices, and adaptive behaviour. Applications from potential PhD, Clinical and Organisational Masters, and Honours students in this area are welcome.

3. **University student learning and performance**

2b has obvious educational implications, and most of my research in that area has been conducted in the classroom. I am interested in the processes of memory, metacognition (eg judgments of learning, self-knowledge) and motivation in optimizing adaptive behaviour in the university context. I am interested in any research that either applies laboratory findings to the classroom context, evaluates educational/training strategies, or disambiguates edu- and training-speak (eg taxonomies of learning) through rigorous methodological approaches. See also the ALTC link on my webpage for ideas regarding possible projects in organizational/educational psychology (eg change management in curriculum renewal).

Applications from potential PhD, Organisational Masters, and Honours students in this area are welcome.