

Psychopharmacology and Emotion DPhil Projects

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The Psychopharmacology and Emotion Research Laboratory explores the ways in which the brain processes emotional information and how this is affected by neurotransmitters such as serotonin, noradrenaline and dopamine. As well as telling us about normal brain function, this may help us understand emotional disorders such as depression and anxiety and how these may be helped by drug treatments that affect neurotransmitter function. We attempt to understand how conventional treatments may work, how mechanisms underlying treatment efficacy interact with psychological treatments, and also whether we can predict new candidate treatments for depression and anxiety using these experimental medicine models.

Examples of possible DPhil projects starting in 2017 include:

1. Using neurocognitive measures of instability to assess the effect of mindfulness-based psychological interventions in people at risk for bipolar disorder
2. Investigating the effect of 5-HT agonists on emotional processing
3. Developing and implementing analysis techniques for fMRI and MEG pharmacological challenge data
4. Developing implicit measures of cognition that can be used as cognitive biomarkers in the development of novel treatments for Parkinson's Disease
5. Using large scale cohort data to investigate associations between depression, cortisol, inflammatory markers and emotional processing

Please get in contact with us if you would like to discuss any of these projects in more detail.

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