

HONOURS/MSc PROGRAM PROJECT 2019

Project title: Examination of brain structure in schizophrenia subgroups stratified by hallucination types

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Project description:

Although hallucinations and delusions are a core feature of schizophrenia, they vary in their clinical presentation and the neural substrates underpinning different forms of hallucinations and delusions are unclear. This project aims to investigate the prevalence of hallucinations/delusions in a treatment resistant schizophrenia group, and examine the contribution of underlying brain structure and function to them. SANS and SAPS/PANSS data will be analyzed to determine the prevalence of specific hallucinations (i.e., visual, auditory, somatic) and delusions (persecutory, grandiose etc) in the treatment resistant cohort. Patients will then be stratified according to hallucination/delusion types, and differences in the underlying brain structure will be explored between these groups and healthy controls. Secondary analysis will involve examining clinical and cognitive differences between the groups. The outcomes of this project are expected to enable insight into the phenomenology and brain mechanisms associated with different forms of hallucinations and delusions in schizophrenia. Knowledge of this kind will contribute to the development of more personalized neuroscience-based treatments that target specific symptoms.

The student will be responsible for conducting a literature review of the area, the development of the proposal and generation of specific study hypotheses, as well as data processing, and statistical analyses. Publication of results is expected at the end of the project.

Department: Psychiatry, Melbourne Neuropsychiatry Centre, University of Melbourne

Research themes: Neuropsychiatry