

Schizotypal symptoms in children and youth at high risk for psychosis

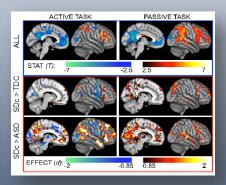
A unique opportunity to undertake joint international doctoral research between the Universities of Melbourne and Bonn.

The University of Melbourne and the University of Bonn (Germany) are looking for an outstanding PhD student to join a project investigating the course of schizotypal disorder in the early (childhood) developmental period, and tracking its long-term effects on behaviour and functional outcome.

A team at the University of Melbourne and University of Bonn have developed a program of work investigating decision making in the schizophrenia spectrum through exploring developmental trajectories, neural correlates and cognitive mechanisms. Decision making deficits occur in a number of psychiatric conditions, including schizophrenia, and present a problem with substantial implication for lifestyle and health choices. There is also evidence that people with high levels of schizotypy, a personality constellation reflecting risk for schizophrenia, to show altered decision making, supporting the hypothesis for a continuum between schizophrenia and subclinical expressions such as schizotypy.

Contributing to the overall program, the team in Melbourne are focusing on investigating the course of schizotypal disorder in the early (childhood) developmental period, and tracking its long-term effects on behaviour and functional outcome. This research represents an important opportunity to advance our understanding of the antecedents of schizophrenia and mapping neurodevelopmental trajectories from before illness onset.

To date, the team has undertaken the most extensive currently available clinical and cognitive characterisation of children with schizotypal features, contrasting with children with Autism Spectrum Disorder and typically-developing children. We are in the process of establishing an additional longitudinal cohort of children in all three groups to extend this work and to collect comprehensive developmental, neuropsychological and neuroimaging data. The graduate researcher who undertakes this scholarship will contribute significantly to the data collection, data analyses and publication outcomes for this cohort in Melbourne. The work in Bonn would entail characterising in detail the pattern of decision making deficits that occur in people with high levels of schizotypy, identifying underlying cognitive and neural mechanisms, using experimental psychological and neuroimaging approaches.



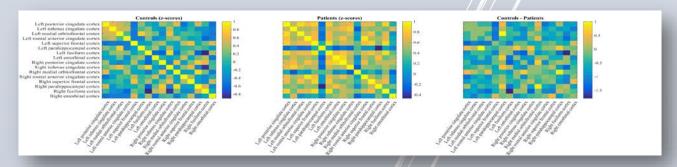
LEFT: Brain activation maps from previously collected data for Schizotypa Disorder in Children (SDc), Autism Spectrum Disorder (ASD) and Typically Developing Children (TDC) cohorts.



The graduate researcher selected for this scholarship will have an interest in developing an academic career, demonstrable analysis and problem-solving skills, excellent interpersonal and communication skills, and will show evidence of self-management and initiative. The scholarship will provide the candidate an excellent opportunity to develop skills in clinical and neurocognitive assessment of a sample of children between the ages of 6 and 15 years, in addition to developing skills in neuroimaging techniques and analyses (including structural and functional imaging). The graduate researcher will be responsible for developing a detailed proposal, including the generation of specific study hypotheses based on the information provided, while working closely with their team of supervisors. While in Melbourne, the graduate researcher will be based at the Melbourne Neuropsychiatry Centre (www.mncresearch.org), will learn research skills from world-leading researchers, and will engage with a diverse, enthusiastic and knowledgeable group of graduate researchers. While in Bonn, the graduate research will be based at the Section of Cognitive Psychology in the Department of Psychology.

The University of Melbourne has entered an agreement with the University of Bonn to offer multiple scholarship opportunities for graduate researchers. Upon successful completion, a graduate is awarded a single doctoral degree (PhD) by both The University of Melbourne and the University of Bonn, including the provision of a testamur from each institution that references the jointly awarded nature of the degree. The graduate researcher undertaking this scholarship at The University of Melbourne will be expected to spend a minimum of 12 months at the University of Bonn throughout their candidature.

The successful candidate will need to meet the minimum eligibility requirements for both University of Melbourne and University of Bonn. Please see more detail about the University of Melbourne's PhD eligibility <u>here</u>. The successful candidate will be awarded a scholarship and benefits as outlined <u>here</u>, along with additional funding for travel between the institutions.



ABOVE: Connectivity matrices showing structural covariance in TDC (left), SDc (middle) and a difference score between the groups (right).

Potential candidates should contact Professor Christos Pantelis at cpant@unimelb.edu.au to discuss specific options for this project and for an interview, or the jointphd-admin@unimelb.edu.au team for further information regarding the program.

Closing date: 31 October 2020