INFLAMMATORY CYTOKINES IN SCHIZOPHRENIA

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Dr Purves-Tyson’s research goal is to determine the underlying neurobiology of schizophrenia to develop treatments for the cognitive deficits and psychotic symptoms in schizophrenia. Pro-inflammatory cytokine transcripts are elevated in postmortem cortex of some people with schizophrenia. Dopamine dysregulation contributes to cognitive deficits and psychosis, yet postmortem midbrain cytokine transcripts have not been examined. Maternal immune activation (MIA) with a viral mimic in rodents yields behavioural disturbances in adult offspring reminiscent of schizophrenia. Dr Purves-Tyson will present data to show that changes in immune-related pathways extend to the midbrain, the region where the majority of dopamine neurons are found, in schizophrenia as well as in adult MIA-offspring midbrain. Increased cytokine transcripts in the midbrain in some people with schizophrenia may indicate a neuroinflammatory process consistent with an early developmental immune-activating signal.

NMDA RECEPTOR COMPOSITION IN PREFRONTAL CORTEX IN SCHIZOPHRENIA

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N-Methyl-d-Aspartate receptor (NMDAR) hypofunction may contribute to cognitive deficits in schizophrenia. Inflammatory markers in post mortem dorsolateral prefrontal cortex are elevated in 40% of schizophrenia cases and linked to exaggerated pathology. We find evidence of altered NMDAR stoichiometry in schizophrenia, particularly in those with elevated inflammatory markers. Neuroinflammation may be a potential target to alleviate NMDAR pathology in people with schizophrenia.

Date: Wednesday 17th October 2018
Time: 1 - 2 PM
Location: Clinical Sciences Building (WR Pitney), Level 2, Meeting Room (new venue!)
Short St, St George Hospital, Kogarah
Light refreshments will be provided
www.stgcs.med.unsw.edu.au/ripm

Research in Progress Meeting Committee
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