

# CPH Seminar in Precision Medicine

## “The UTHealth Biobank and The UT System Health Biobank (UTSHB) Consortium – A Brief Introduction”

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Precision medicine demands a broad approach to discovering and understanding treatment options for individual patients. The era of personalized medicine requires larger sample sizes and data sets in order to research new treatment approaches and therapeutics. Biobanking initiatives seek to advance translational and precision medicine by encouraging collaborative approaches for effective use of established biobanking resources.

## “Biomarkers of Illness Pathophysiology in Patients with Schizophrenia”

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Schizophrenia is associated with immune activation and inflammation but the underlying mechanisms of this association has not been adequately elucidated. In addition no blood biomarker exists for assessing severity of illness, treatment response or diagnosis. The potential utility of cytokines, S100B, and brain derived neurotrophic factor (BDNF) as biomarkers in schizophrenia has been previously studied but no consensus has been reached. Our group has recently been interested in the potential utility of cell adhesion molecules (specifically P-, E- and L-selectins) in the spread of inflammation from the periphery to the CNS. We recently reported that L-selectin could be a potential biomarker of antipsychotic exposure in patients with schizophrenia and we now aim to replicate our findings in plasma from a larger sample of patients with schizophrenia (recruited at the University of Texas Harris County Psychiatric Center) and controls (from the Center for Clinical and Translational Sciences Biobank Program). In addition, I will discuss other hypotheses (involving S100B, cytokines and BDNF) that will be tested using a comparative analyses of sera from the patients and controls.

Friday, April 7, 2017. 12p – 1p. UCT.1414

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