Title: Postdoctoral Fellow in Pregnancy Biomarkers, Early Brain Development and Psychiatric Risk

Job type: Postdoctoral Fellow

Employer: CAMH in Collaboration with the Lunenfeld-Tanenbaum Research Institute,

Sinai Health System

Location: Toronto, Canada

Job hours: Full time

Position Summary:

Applications are invited for this postdoctoral fellowship position at CAMH, in collaboration with the Lunenfeld-Tanenbaum Research Institute, Sinai Health System. The successful candidate will join the Pregnancy Biomarkers, Early Brain Development and Psychiatric Risk component of the Ontario Birth Study (OBS), with co-supervision from Dr. Robert Levitan, Professor of Psychiatry and Physiology at CAMH and Dr. Rayjean Hung in the Prosserman Centre for Population Health Research, Associate Director of Population Health of the Sinai Health System.

The main objective of the research group led by Dr. Levitan is to investigate the early maternal-fetal biomarkers that contribute to later psychopathology. This work is based on a well–established longitudinal birth cohort, the Ontario Birth Study, co-led by Dr. Rayjean Hung, that begins in early pregnancy and follows the respective children with systematic yearly assessments post-natally. The pregnancy biomarkers include maternal inflammatory measures and indices of tryptophan metabolism, both of which have established links with fetal brain development. The primary outcomes include executive functioning, positive and negative emotionality, social behavior, and sleep. The goal is to contribute to the understanding, primary prevention, early detection, and improved prognosis of various complex psychiatric diseases such as schizophrenia, autism, and major depression.

One postdoctoral fellowship is immediately available to join the Ontario Birth Study group to lead statistical analyses linking pregnancy biomarkers with various developmental outcomes and trajectories linked to emerging psychopathology. The successful candidate will develop their own line of research and hypothesis testing based on OBS data while helping ongoing OBS researchers with longitudinal data-analytical approaches. The ability to analyze multivariate longitudinal data including repeated measurements of individual children is a key element of this work. The position will initially be for one year with the possibility of a one-year renewal. The stipend will be $60,000/year-$70,000/year.

Requirements:

This fellowship is suitable for candidates who have a Ph.D. in Developmental Psychology, Epidemiology, Biostatistics, Bioinformatics, or relevant fields. Significant experience with developmental research including advanced analytical skills for longitudinal multivariate data are required. A well-developed ability of statistical programming and analytical skills using R or STATA are required. Evidence of prior research productivity and programming experience in additional languages (Python, etc) is an asset.

Institutes:

The Centre for Addiction and Mental Health (CAMH) is Canada's leading mental health research facility. CAMH offers a highly enriched environment for young researchers with many opportunities for collaboration and learning, including a very well-developed educational program for research trainees. CAMH aims to revolutionize the understanding of the brain and the understanding, prevention, and treatment of all mental disorders over the lifespan.

The Lunenfeld-Tanenbaum Research Institute (LTRI) of Sinai Health System is one of the Canada's leading biomedical research institutes. In LTRI, the Prosserman Centre for Population Health Research includes a group of multi-disciplinary scientists who are specialized in quantitative research of complex diseases.

How to Apply:
Please submit curriculum vitae, cover letter, and contact information of three references to robert.levitan@camh.ca

Application deadline is on December 15th, 2023.

We appreciate all expressed interests in this position, only those candidates shortlisted for interview will be contacted.