



Title: Postdoctoral Fellow in Pregnancy Biomarkers and Early Child Neurodevelopment

Employer: CAMH and Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto

Position Summary:

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

This work is based on a well–established longitudinal birth cohort, the Ontario Birth Study, that begins in early pregnancy and follows the respective children with systematic yearly assessments postnatally. 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, cognitive flexibility, episodic memory and neurodevelopment.

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 children's cognitive functions. 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.

Requirements:

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

Institutes:

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

The <u>Centre for Addiction and Mental Health (CAMH)</u> 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.

How to Apply:

Please submit a cover letter, curriculum vitae, and contact information of three references to the following Interfolio site: http://apply.interfolio.com/139934

Application deadline is on **April 1, 2024**.

We thank all those expressed interests. Only candidates who are shortlisted will be contacted.