

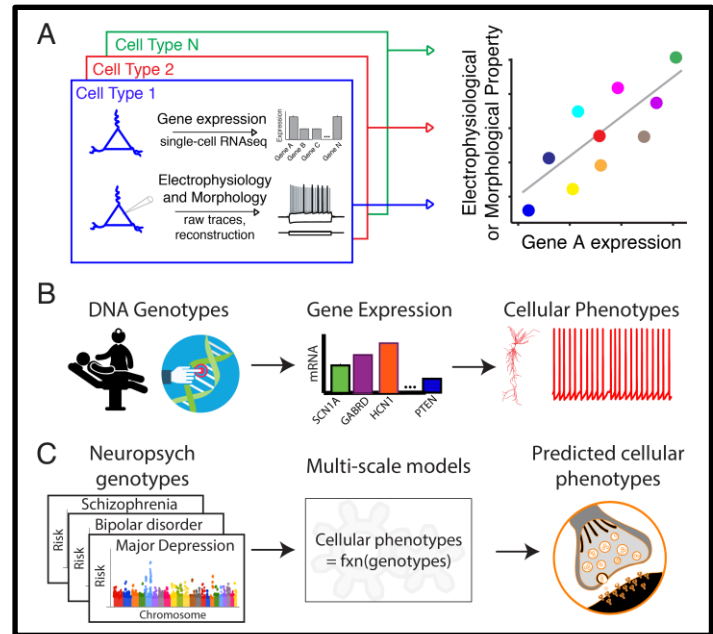
Title: **Post-doc in multi-scale bioinformatics and neuroscience**

Institution/Company:

Centre for Addiction and Mental Health and the University of Toronto

Job Description:

We are looking for a post-doctoral fellow with a background in bioinformatics, computational biology, or neuroinformatics. The position is in the [Laboratory for Computational Genomics](#), under the supervision of Dr. Shreejoy Tripathy. The post-doc will contribute to a growing team at the new [Krembil Centre for Neuroinformatics](#), based at CAMH and the University of Toronto.



Project Description:

The candidate will lead a multi-disciplinary dry-lab project in multi-omics and cellular neuroscience. The project's goal is to identify cross-modal relationships between: 1) human genotypes; 2) tissue- and cell type-specific gene expression; and 3) neuronal and circuit phenotypes, including electrophysiology, morphology, and synaptic physiology. The candidate will develop and apply machine learning and statistical methods to translate information across these data types. The project will make use of publicly-accessible datasets (e.g., PGC, PsychEncode, Allen Institute) as well as private datasets provided by collaborators. The post-doc will interface with a team of experimentalists and computational modelers to directly test their predictions and work with clinician-scientists to use these approaches for patient stratification. The ideal candidate is someone who is passionate about using basic research in genomics and neuroscience to improve the understanding and treatment of psychiatric disorders.

Qualifications:

- A recent PhD in bioinformatics, neuroscience, or statistics (or equivalent computational discipline)
- Considerable experience programming, scripting, and analyzing data in a high-level language (e.g., R, Python, or MATLAB)
- Experience analyzing and quality-controlling multi-omics datasets, including genotyping, transcriptomics, and cellular characteristics

- A track record for independent research that demonstrates creativity
- Excellent communication skills and experience working in a collaborative and multi-disciplinary environment

Position details:

The position is for a duration of up to 3 years, renewed yearly. Compensation, including benefits, is competitive and will be based on experience and established pay-scales. The candidate will support a healthy workplace that embraces diversity, encourages teamwork, and complies with all applicable and regulatory requirements.

How to apply:

A complete application should include a brief cover letter, a curriculum vitae, and the contact information for 2-3 references. Submit applications to Shreejoy Tripathy (shreejoy.tripathy@utoronto.ca), with the title: "Post-doc in multi-scale bioinformatics and neuroscience" in the subject line. In the cover letter, please highlight one or two publications or preprints the candidate feels is their best work. Applications will be reviewed in an ongoing manner and the position will remain open until filled.

About the Krembil Centre for Neuroinformatics:

In 2017, Centre for Addiction and Mental Health (CAMH) established its new \$15-million Krembil Centre for Neuroinformatics to leverage the largest mental health patient database in Canada and combine world-leading talent specializing in computational approaches to brain science, a robust data integration platform, and analytical tools to accelerate and revolutionize the world's understanding of the brain and brain-based illnesses. The Krembil Centre for Neuroinformatics positions CAMH as a leader in brain science using the power of big data analytics, artificial intelligence and machine learning, and multi-scale brain modelling in order to bridge the levels of the structure and function of the brain – from genes to circuits to behavior.