

# WANTED: LIVED-EXPERIENCE RESEARCH ADVISORS

## Project Title

**Building Fair Machine Learning Models:  
Using Big Data to Explore Inequities in Risk Assessment**

## Project Summary

Currently, when people arrive at the CAMH Emergency Department (ED), they are assessed by staff for risk of violence or aggression. Advances in Artificial Intelligence and Machine Learning, or the ability of a computer to detect patterns and make predictions, may make it possible to automate this process. However, the use of Machine Learning in healthcare will also impact how care is delivered to, and experienced by, patients. Although promising, using Machine Learning in clinical settings comes with a risk of amplifying racial bias and other inequities. This happens when computers learn biased patterns, making predictions less accurate for certain patient groups.

Our project focuses on understanding efforts to predict aggression and violence in psychiatry using Machine Learning. This area is of particular importance because aggression and violence negatively impact both patients and staff. This project will investigate if, and how, Machine Learning models can be used equitably to predict violence and aggression in the Emergency Department (ED) at CAMH. We will do this through participant observation (shadowing clinicians in the ED as they go about their work), semi-structured interviews and Machine Learning techniques (Machine Learning on existing patient data). The involvement of lived-experience research advisors is important in this investigation as the introduction of Machine Learning into psychiatric care could have an extensive impact on how patients experience healthcare in the foreseeable future.

## Who we are looking for

- People with significant experience in the CAMH ED as a patient either through:
  - 1) More than 1 ED visit since November 2017
  - OR
  - 2) Admission to a CAMH inpatient unit via the ED since November 2017.
- Ability to relate, empathize with and be aware of the perspectives and diversities of others.
- Ability to work collaboratively within a team environment and contribute to the achievement of team goals and objectives.
- An interest in health equity and/or Artificial Intelligence (e.g., Machine Learning) is an asset but not required.
- We value diversity and *strongly* encourage applications from people belonging to racialized groups, including people identifying as First Nations, Metis or Inuit. Members from LGBTIQ+ communities and people with a disability are also encouraged to apply.
- Please note, access to a device (ie. computer, phone etc) and reliable internet is required for this position.

## About the role

We are seeking 2 lived-experience research advisors to provide insight and guidance for up to 5 hours/month over an 8 month period, with the possibility of extension, as we complete this research study. Preferably, advisors will be available during working hours (Monday-Friday 9am-5pm).

### Activities

In this role, advisors will not be asked to share specific experiences of their visits to the CAMH ED but they will be asked to provide input on the study from a lived-experience perspective and participate in the following activities:

- Participate in a capacity-building/onboarding workshop and other team-based training activities as needed (4 hours)
- Attend 1-2 virtual meetings (1 hour each) each month using a secure video conferencing platform (Webex)
- Review project materials provided prior to meetings, if possible.
- Provide feedback and insights in proposed research activities, such as the interview questions posed to research participants (people with lived experience in the CAMH ED);
- Assist with the interpretation of the study results in short workshops with the research team (1-2 hours each).
- Support research-dissemination activities by co-facilitating participatory dissemination workshops with patients and clinicians at the end of the project;
- Support patient-centered research planning based on findings from this project.

**Honorarium:** In recognition and appreciation of contributions to this research program, and consistent with the CAMH Client/Patient and Family Honoraria policy, research advisors will receive \$30 for the first hour, followed by \$20 for each additional hour.

## To Apply

For more information about the role or to apply, please contact:

**Zoe Findlay**

Research nurse

Zoe.findlay@camh.ca

Please email a short note expressing your interest in the project. Expressions of interest will be accepted until the role is filled. Advisors that meet the above criteria will be invited to discuss the project with the team to further determine if the role is a good fit. We will send a reply to all people who have expressed interest regardless of whether they have been selected for the position. Please let us know if you have any accessibility needs we can accommodate during the interview and recruitment process.