CHU Sainte-Justine
Research Center
Mother and Child
University Hospital Center

For the love of children

Université de Montréal

February 1, 2018

Subject: Postdoctoral fellowship positions in my laboratory (2018-2019)

Dear Colleagues,

I am pleased to announce that I am currently accepting applications for 5 post-doctoral positions with my research team. I would be very grateful if you would circulate this document within your department.

The candidates will be based at the Research Centre at CHU Ste-Justine, affiliated with the Research Unit on Children's Psychosocial Maladjustment (GRIP), the Université de Montréal's Department of Psychiatry, and the Montreal Neurological Institute (MNI) at McGill University, depending on the research activities of the candidate. My team consists of a multi-national, multi-disciplinary group of bright and enthusiastic young researchers. The Conrod Venture Lab brings together trainees with various professional and educational backgrounds, including mathetmatics, clinical psychology, psychiatry, medicine, educational psychology, public health and sociology.

I am inviting motivated graduates in the fields of developmental psychology or clinical psychology, counselling, or related clinical fields, public health/implementation science, or computational neuroscience with strong track-record in research to join my research team. Stipends begin at $45 000 Cdn per year, are 1-year appointments and will start any time before September 2018, with possibility of renewal, depending on project and performance.

1) **CIHR PsyVenture Trial** (Conrod, Potvin and Bourque, 2017-2018, CIHR-Institute of Population and Public Health (CIHR-IPPH), Catalyst Grant: Population Health Intervention Research on the Legalization and Regulation of Non-Medical Cannabis in Canada

   Specific Aims: A major public health concern associated with cannabis use and it's legalisation is the causal role of heavy and early onset cannabis use in risk for Psychotic Disorders. This project aims to develop a targeted prevention strategy for a significant portion of the population (approximately 8-10%) who are at elevated risk of experiencing psychotic symptoms and disorders as a result of their cannabis use. We propose to apply our recent quantitative and qualitative findings on neurocognitive and motivational correlates of persistent psychotic-like experiences trajectories (PPLE) to develop new, targeted, preventative interventions for adolescents who report this psychological risk profile with the aim of preventing heavy cannabis use and cannabis-induced psychosis. The project has three aims:
   a. Aim 1. Using the approach that we have used in the past to develop and adapt personality-targeted interventions to new cultural contexts, we aim to adapt the Preventure Programme to include a fifth target personality risk profile – PPLE. This work will include producing a new manual focusing on

persistent PLE and the cognitive and motivational processes that trigger more severe psychotic-like thinking or cannabis use in this at-risk group.

b.   Aim 2. Pilot this new intervention program with 30 at-risk youth reporting persistent PLE and cannabis use in a pre-post test design.

c.   Aim 3. focus groups with at-risk youth, clinical experts and decision makers to help develop a feasible implementation strategy for this targeted intervention in order to assure rapid uptake and sustainability of the program should it be shown to be effective in the current pilot and future randomized controlled studies.

Essential skills: spoken and written English, MSc or PhD in clinical psychology, counselling psychology or related fields, experience delivering cognitive-behavioral and motivational interviewing interventions. Experience conducting research on psychosocial interventions.

2) **Addiction in the brain: Ethically Sound Implementation in Governance (A-BRAIN)**, (funded by NEURO ERA-NET, CIHR and FRQS, Hellman, Conrod and Hendershot, 2018-2021).

Neurobiological advancements can have great potential for solving human problems. At the same time, it often remains unclear how jurisdictions are to implement novel neuroscientific findings to improve fair and accountable governance. In the project "Addiction in the brain: Ethically Sound Implementation in Governance (A-BRAIN), an international research consortium (Canada, Finland, and German), will formulate sustainable and ethically sound ways for implementing the neuroscientific knowledge and ideas around Brain Disease Model of Addiction (BDMA). The study takes its point of departure in the idea that if the BDMA is to be integrated in governance in a meaningful, ethically-solid, and efficient way, there is a need to identify the apparatus of ideas and visions that such a governmentality allows for and strives towards. The main objective is achieved with the help of empirical inquiries into different materials and settings of implementation into praxis. The project will inquire into expectations and ideas in different contexts, in the media, among scientists, and experts in prevention programmes, as well as among staff and clients in treatment. The overall goal is to accomplish a formulation of principles whereby knowledge and notions of the BDMA can best serve jurisdictions' overall aims, mandates and purposes. Methods consist of a mix of qualitative and quantitative measures, namely media analysis, surveys and focus-group interviews.

The A-BRAIN project will develop a book with guidelines for a practical implementation of neuroscientific research in dealing with addictions. These guidelines articulate principles of ethically sound governance through considerations of multiple stakeholders' perspectives. The project advances the research on addictions by creating and testing a novel instrument for measuring BDMA-related attitudes. Finally, the findings of this project have also an important role in giving feedback to neuroscientific addiction research itself by showing what is expected and what is needed from this field in the light of fair and sound implementation of its research results. This is a three-year project.

The Montreal-based researcher will be expected to:
a.   Work within a multi-disciplinary team of researchers investigating the impact of knowledge transfer around the Brain-Disease Model of Addiction (BDMA).
b.   Conduct qualitative and quantitative research with youth and educational professionals assessing changes in attitudes about substances and substance abuse following exposure to an intervention that is based on the BBTA.

Essential skills: spoken and written English, MSc or PhD in health field with some experience in addiction research.

3) **The CIHR-Canadian Underage Substance use Prevention Trial (CUSP).**

Aims: As countries move towards decriminalising substance use, effective adolescent drug prevention has become a central focus of modern national drug strategies. However, evidence-based drug prevention is not widely practiced and available to young people. As a result, despite having made great strides in reducing adolescent binge-drinking rates, illicit substance use remains significantly above national targets for health promotion and disease prevention in the United States and Canada. There is also an emerging crisis of prescription drug misuse and related overdose deaths in North America, but programmes validated for the prevention of prescription drug misuse in young people are currently lacking. The Preventure Programme is a targeted school-based cognitive-behavioural intervention delivered to adolescents with personality-risk factors for substance use disorders (e.g., impulsivity, sensation seeking, hopelessness) and has been shown to be effective in reducing and preventing the uptake of illicit substance use and binge drinking by 30%-80%. The programme has also been shown to be effective in reducing prescription drug misuse among drug dependent individuals. We now propose a hybrid effectiveness/implementation-facilitation trial of school-based personality-targeted interventions when implemented more broadly across 3 new communities in Canada. The proposed hybrid trial will test effectiveness of programme implementation when delivered through a train-the-trainers model on illicit substance use in high risk adolescents with prescription drug misuse as a novel secondary outcome. The implementation facilitation (IF) component will evaluate whether population penetrance, implementation quality and sustainability can be enhanced through an IF intervention addressing barriers to implementing evidence-based programmes for youth. Three sites linked to CIHR's Canadian Research Initiative in Substance Misuse (CRISM) Network will assist in recruiting 9 schools each, to be randomised to one of three intervention conditions: treatment as usual (TAU); standard Preventure training (PT); or Preventure training with an implementation facilitation package (PT+IF).

Considering the demonstrated impact of the Preventure Programme on youth substance use, this study, involving a total of 12,150 students and 5467 high risk youth, has the potential to prevent substance misuse by 30%-80% and provide solutions to Canada's emerging drug concerns. This trial will also rapidly test a large-scale implementation model that could be applied to other areas of addiction and mental health in Canada, and internationally.

I am recruiting a postdoctoral researcher who has experience conducting research using population-based surveys, clinical trial designs, or longitudinal cohort designs to help manage the pan-Canadian CUSP trial. This is an excellent opportunity for a trainee to gain valuable experience managing large, community-based, multi-site randomised trials.

This candidate will be expected to:

   a. Assist in coordinating a multi-site intervention trial, including ethics applications and protocol development.
   b. Arrange training and supervision of research coordinators and clinicians across sites
   c. Analyse data related to progress of the trial, publish the research protocol and findings based on the data from the trial.

Essential skills: spoken and written English, MSc or PhD in health research and experience in trial or project management.

4) **Post Doctoral Researcher in Longitudinal and Multivariate Data Analyses**:

This candidate should have a PhD in fields of study that focus on computational methodologies, statistics or developmental psychopathology. The candidate will have access to a number of very large adolescent cohort studies and prevention trials, which include rich and repeated behavioural phenotyping assessments. The candidate will be encouraged to use these datasets to study the organisational structure of psychopathology in youth and the different developmental trajectories relevant to mental health outcomes. They will also be encouraged to analyse the effects of psychosocial interventions on these outcomes.

Essential skills: spoken and written English, MSc or PhD in health research or developmental research with demonstrated strengths in computational modeling and statistical analyses.

5) Lead Preventure Trainer.

The Preventure Program involves brief cognitive-behavioural interventions targeting these personality traits from a neurocognitive perspective and has proven remarkably effective in reducing alcohol and illicit drug use and mental health symptoms by a notable 30-80%, among high-risk secondary students in multiple published randomised trials (See Conrod et al., 2010; 2013; 2016). Trials with college students have also shown efficacy of the program in reducing alcohol misuse and mental health disorder symptoms and trials with community-recruited adults living with anxiety disorders and drug dependence have also proven the efficacy of the personality-targeted approach, including prescription drugs. A recent summary of the findings from 8 randomised trials of personality-targeted interventions for SUDs suggests moderate effects sizes (average $d=.37-.47$) across all substance use outcomes, intervention formats and populations targeted. The program was recognized in the U.S. Surgeon General's 2016 Report on Addiction and in the UNESCO/UNODC/WHO Joint Report on Education Sector Responses to the Us eof Alcohol, Tobacco and Drugs. In recognition of the strong evidence base in support of personality-targeted interventions, communities from around the world are requesting training on the Preventure Program. We hope to add an enthusiastic, clinician with experience delivering cognitive-behavrioual and motivational interventions to young people. Candidates should have a PhD in clinical psychology, Psychiatric Nursing or Social Work, Behavioural Health or related disciplines.

The candidate will be expected to:

   a. Demonstrate high fidelity delivery of Preventure interventions with youth.
   b. Demonstrate high fidelity delivery of Preventure training sessions to health and educational professionals
   c. Agree to travel to communities around the world to deliver training.
   d. Contribute to updating and adaptating treatment material based on research findings from trials involving Preventure.
   e. Help manage the Preventure Training Network, including providing webinars updating trainees on new findings and protocols related to the Preventure Program.

Essential skills: spoken and written English, professional degree in Psychology, Education, Counselling, or related fields, supervised practice delivering CBT and motivational interventions.

Interested candidates are to contact: Patricia Conrod, PhD, Department of Psychiatry, Université de Montréal, GRIP, CHU Sainte Justine, 3175 Côte-Ste-Catherine, Centre de Recherche, loc A-1551, Montreal, Quebec, H3T 1C5, Canada, Tel : +1 514 345 4931 ext 4051, Email: patricia.conrod@umontreal

Applications will be accepted until the positions are filled.