



Project title	Canadian Cannabis and Psychosis Research Team		
Study level(s)	<input type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Patricia Conrod, Ph.D.		
Project duration	3 years		
Start date	Between 01/09/2020 and 01/01/2021		

Date of posting: 2020-07-29

With the launch of a CIHR-funded team grant: the Canadian Cannabis and Psychosis Research Team (CCPRT), which involves several research groups across 4 Canadian universities (University of Montreal, University of Toronto, Dalhousie University and McGill University), we seek to fill a Postdoc position for a three-year project starting in the fall of 2020 (or at the selected candidate's earliest convenience).

Research project description

One of the main goals of this multidisciplinary team is to make progress in understanding the underlying **neurodevelopmental mechanisms of adolescent cannabis exposure** in relation to **psychosis** from a population neuroscience perspective. Within this initiative, we will be **data-pooling** existing longitudinal neuroimaging datasets to create a **unique study of adolescent cannabis use and brain development** (n=5,000; 8 to 25 years old). We plan to use a meta-analytical approach or mega-analytical approach when possible, to study the pathways through which cannabis use induces psychotic symptoms. This endeavour will be an extension of our recent work (<https://pubmed.ncbi.nlm.nih.gov/26308966/>; <https://pubmed.ncbi.nlm.nih.gov/28320226/>). The project will also involve using machine-learning tools with cross-study validation to explore the risk markers for susceptibility to cannabis-induced psychotic symptoms. By integrating and harmonising large-scale brain imaging datasets, this research program will provide exceptional data output and knowledge translation to the Canadian Consortium for Early Intervention in Psychosis.

The selected candidate will work under the supervision of Professor Patricia Conrod, and in close collaboration with Professors Natalie Castellanos-Ryan (University of Montreal) and Tomáš Paus (University of Toronto), and Drs Kamran Afzali and Josiane Bourque.

Required training and profile

Applicants should:

- Hold a PhD degree in Cognitive Neuroscience, Biomedical Engineering, Computational Neuroscience, or a related field;
- Have a solid experience in human brain imaging, programming, and database management;



- Ideally have experience in machine learning, statistics and data harmonization;
- Knowledge of French is an asset

Conditions

The candidate must register at the Université de Montréal as a postdoctoral fellow and must meet the eligibility requirements of the program. Postdoctoral fellows receive a stipend (SPB category, “*stagiaires postdoctoraux boursier*”) at the CHU Sainte-Justine, and not a salary. They are therefore not eligible to receive marginal benefits, employment insurance or retirement pension benefits. Taxes will be deducted at the source when the stipend is paid from the director's research funds.

The duration of the research project is conditional to:

- The availability of research funds;
- The progress of the project;
- The candidate's eligibility to maintain a postdoctoral fellowship status at the university.

Submit your application

Candidates must send the required documents before **August 25th 2020** to **Josiane Bourque** at josiane.bourque@umontreal.ca

Please provide:

- ✓ *Curriculum vitae*
- ✓ Most recent transcripts
- ✓ Cover letter
- ✓ References (2-3)

Dr Patricia Conrod
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Equity, diversity and inclusion

The masculine gender is used without discrimination and for the sole purpose to facilitate reading. The CHU Sainte-Justine subscribes to the principle of equal access to opportunities and invites women, members of visible and ethnic minorities, persons with disabilities and Indigenous people to apply. We would appreciate it if you could inform us of any disabilities that would require technical and physical accommodation adapted to your situation during the selection process. Please be assured that we will treat this information as confidential.

Studies at the CHU Sainte-Justine Research Center

Pursue your [graduate or postdoctoral studies](#) at the **CHU Sainte-Justine Research Center**, and be one of the 500 students, fellows and interns involved in accelerating the development of knowledge in the field of maternal, child and adolescent health, whether in basic or clinical research. Under the supervision of prominent scientists, especially in leukemia, rare



pediatric diseases, genetics, perinatology, obesity, neuropsychology and cognition, scoliosis and rehabilitation, you will have the opportunity to work with multidisciplinary scientific teams and collaborators from all over the world.

About the CHU Sainte-Justine Research Center

CHU Sainte-Justine Research Center is a leading mother-child research institution affiliated with Université de Montréal. It brings together more than 200 research investigators, including over 90 clinician-scientists, as well as 500 graduate and postgraduate students focused on finding innovative prevention means, faster and less invasive treatments, as well as personalized approaches to medicine. The Center is part of CHU Sainte-Justine, which is the largest mother-child center in Canada and the second most important pediatric center in North America. More on research.chusj.org

