



Project title	PhD in neuroimaging genomics / psychiatric genomics		
Study level(s)	<input type="checkbox"/> MSc	<input checked="" type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Dr Sébastien Jacquemont		
Project duration	2 years		
Start date	3 February 2020		

Date of posting: 2020-01-16

Research laboratory presentation

The laboratory of Sébastien Jacquemont is working with several international consortia on projects mapping the relationship between genomic variants, cognition, behavior, brain structure and functional connectivity.

We are recruiting a talented PhD student or a postdoctoral researcher with a background in either cognitive neuroscience, neuroimaging or computational biology.

The lab and the research center offer a stimulating and international environment. The close collaboration between labs will allow students to gain expertise in several disciplines such as genomics, neuroimaging and psychiatry.

Research project description

We aim at identifying the relationship between genomic variation, Brain structure and functional connectivity.

To this mean, the student will use general population and psychiatric cohorts with cognitive, neuroimaging and genomic data. This mega-dataset includes between 30 000 and 400 000 individuals for the neuroimaging and cognitive data respectively. Depending on interest and background, the student will analyse either the cognitive, neuroimaging or genomic data. Collaborations with other students in the lab will allow to perform analyses across modalities.

Required training and profile

The ideal candidate holds a master in cognitive neuroscience, computational biology, genomics, statistics / machine learning. They should have knowledge in coding using either R, Python, Matlab, etc.

Conditions

Students will attend summer schools on specific topics as well as train in a collaborating laboratories abroad to gain additional expertise. They are expected to present their research at international conferences.

Postdoctoral fellows must register at the Université de Montréal and must meet the eligibility requirements of the program. Postdoctoral fellows receives a stipend 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 CHU Sainte-Justine has a minimum remuneration policy for all its students and postdoctoral fellows. Remuneration may come from the researcher's funds or from an external nominal award. The candidate will have to apply for external scholarships to obtain a nominative award.

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 status at the university.

Submit your application

Candidates must send the required documents before **6 April 2020** to **Dr Sébastien Jacquemont** at sebastien.jacquemont@gmail.com.

Please provide:

- ✓ *Curriculum vitæ*
- ✓ Most recent transcripts
- ✓ Cover letter
- ✓ References

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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

