# Postdoctoral fellowship

**CHU Sainte-Justine Research Center**

<table>
<thead>
<tr>
<th>Principal Investigator(s)</th>
<th>Serge McGraw, PhD</th>
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<td>Project duration</td>
<td>1 year, with the possibility of an extension for up to 4 years</td>
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<td>Start date</td>
<td>As soon as possible</td>
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**Research laboratory presentation**

A Postdoctoral position is available in the laboratory of Dr. Serge McGraw at the new state-of-the-art research facility of the CHU Sainte-Justine Research Center (Montréal, Québec, Canada). Our work focuses on the epigenetic events occurring during early fetal development, and how dysregulation of epigenetic homeostasis during this period leads to developmental and mental disorders. The successful candidate will use her/his expertise towards uncovering the molecular mechanisms implicated in the dysregulation of epigenetic patterns during cell lineage specification resulting from the dysfunction of specific epigenetic modifying enzymes.

**Research project description**

The candidate postdoc will have opportunity to work on functional characterization of epigenetic regulators in various cell- and animal-based models, as well as in patient-derived primary and IPS cultures using next-generation sequencing approaches, proteomics, biochemistry and large-scale drug screens. The proposed project is designed to allow the applicant to play a major role in determining its directions.

For more information about research in the McGraw Lab, please visit [McGraw Lab](#).

**Required training and profile**

We are looking for a PostDoc with strong research background and experience in the epigenetic/chromatin field with a proven record of peer-reviewed publications. The candidate must have completed a PhD within 2 years, but PhD candidates nearing graduation are also encouraged to apply. The candidate must be fluent in written and spoken English.

Applicants with experience and skills in at least two of the following fields will be prioritized:

- CRISPR-based approaches
- Genome-wide DNA methylation profiling (including data analysis)
- Histone modifications
- Chromatin immunoprecipitation and sequencing (ChIP-Seq) (including data analysis)
- Next-generation sequencing library prep
- Embryonic stem (ES) or Induced pluripotent stem (iPS)
- Bioinformatics
Submit your application
Application review begins immediately and will continue until the position is filled. Please submit your application (cover letter outlining research experience and career goals, detailed CV, contact details for 2 references) in a single file per email to Serge.McGraw@recherche-ste-justine.qc.ca

√ Curriculum vitae
√ Transcripts
√ Cover letter
√ References (2)

Serge McGraw, PhD
Assistant Research Professor
CHU Sainte-Justine Research Center
Faculty of medicine, Université de Montréal
Montreal, Canada

How is it like to study or make a fellowship 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 385 students, fellows and interns who are helping to fast track the development of knowledge in the field of mother, child and adolescent health. 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 385 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 second most important pediatric center in North America. More on research.chusj.org