



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

Université  
de Montréal

Project title	Cerebral lesional load in the preterm born baby		
Study level(s)	<input type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	<a href="#">Gregory A. Lodygensky</a> , MD Assistant Clinical Professor Department of Pediatrics and Neuroscience University of Montréal		
Project duration	2 years		
Start date	As soon as possible		

Date of posting: 2019-12-16

### Research project description

A postdoctoral fellow is currently available at the CHU Sainte-Justine Research Center, in association with the Research Center of the Institute of Geriatrics of Montreal, CRIGM, DIRO and University of Montreal. The purpose of this advanced training, which is part of a series of neuroimaging projects on the development of the human brain, will be to study the impact of brain lesions related to preterm birth. This will involve the design and implementation of new analysis methods related to the fcMRI, the DTI and volumetric analysis.

### Required training and profile

- Hold a PhD degree (or a M.Sc. with an MD without right of practice) in the field of Biomedical Sciences, biomedical engineering, medical physics or equivalent and also have an excellent academic record;
- Be motivated and self-determined to complete this project;
- Have a strong background in human medical imagery analysis, including fcMRI, volumetric, cortical thickness, and analysis in DTI;
- Knowledge of various computer languages including Matlab;
- Have good communication and organization skills;
- Bilingualism, flawless writing English required;
- Experience in the field of brain developing will be highly regarded;
- Have publications as first author in scientific journals

### Conditions

The postdoctoral student must apply for admission at the University of Montreal as a postdoctoral fellow and will comply with all applicable eligibility conditions. Because the recipient is a trainee and not an employee of the CHU Sainte-Justine or Université de Montréal, the recipient is not entitled to employment benefits. Deductions for Canadian income tax will be made from twice monthly stipend, but the stipend is no subject to source deductions for Employment Insurance or Canada Pension Plan. All post-doctoral students at the CHU Sainte-Justine receive a stipend from their Principal investigator research funds (according to the minimum amount required at the CHU Sainte-Justine Research Center). The candidate should apply for external scholarship awards. The



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candidate will also have access to the internal postdoctoral fellowship program of the Sainte-Justine UHC Foundation.

The duration of research development is conditional:

- On the availability of research funds;
- To the project's progress;
- Eligibility of the intern to renew its status as postdoctoral fellow at the university.

We have an equal access to employment program and invite applications from women, Indigenous people, visible minorities, ethnic minorities and people with disabilities.

We recognize that career interruptions can have an impact on the achievement record without compromising excellence. Where applicable, candidates are encouraged to report the circumstances of any interruption and explain its impact on their progress and file: this information will be duly taken into account in the assessment.

When recruiting, our selection tools can be adapted to the needs of people with disabilities who request it in complete confidentiality.

### **Submit your application**

Interested candidates should send their resumes to Gregory A. Lodygensky at [ga.lodygensky@umontreal.ca](mailto:ga.lodygensky@umontreal.ca)

Please provide:

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

Gregory A. Lodygensky , M.D.  
Clinician Researcher, CHU Sainte-Justine Research Center  
Director, Canadian Neonatal Brain Platform  
Associated researcher, Institut de cardiologie de Montréal (ICM)  
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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 employment 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.



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#### 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](https://research.chusj.org)

