



Project title	Social environment and functioning of adolescents born preterm
Study level(s)	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Tomas Paus
Project duration	To be determined
Start date	Fall 2021

Date of posting: 2021-08-04

Research laboratory presentation

Applications are invited for a post-doctoral position in the Population Neuroscience Laboratory based at the University of Montreal and headed by Tomas Paus. The laboratory provides a dynamic, interdisciplinary setting for studies of environmental and genetic factors that are shaping structure and function of the human brain (<https://www.chusj.org/Bio?id=4b3a4dbd-1e3c-4743-a0be-876757fe2d61&lang=en>). We are part of IVADO (<https://ivado.ca/en/>), a community of 1000+ scientists working in the field of digital intelligence.

Research project description

This fellowship is funded by the Canadian Institute of Health Research through a project grant entitled “Social environment and functioning of adolescents born preterm”. The first phase of this project involves the development and implementation of innovative strategies for characterizing social environment at the neighbourhood level using data compiled from a variety of proprietary and open sources. We will then combine such neighbourhood-level indicators of social environment with individual-level data extracted from administrative health databases.

Required training and profile

The successful candidate will identify and gather relevant data, develop high dimensional approaches for extracting metrics of key domains of social environment (e.g., level of psychosocial stress, social buffering), and use these metrics to test their moderating effects on the relationship, assessed at the individual level, between preterm birth and adolescent health (and other exposure-outcome associations explored through our international collaborations).

The applicant must have:

- PhD in Data Science, Computer Science, Statistics, Epidemiology, Sociology or other relevant disciplines;
 - Expertise and knowledge of statistics, artificial intelligence, natural language processing and data mining will be of particular importance in selecting the successful candidate
- Good academic profile.

The selected candidate will work with a multi-disciplinary team of experienced researchers, post-doctoral fellows, graduate students and clinicians. The candidate should be a team player able and willing to interact with others. They should have excellent communication skills (oral and written), should be diligent and open-minded with a flexible approach to working in an academic



environment. Ability to multi-task, and a real appetite for acquiring new skills and knowledge are positive advantages in applying for this role.

Submit your application

For inquiries about this position, contact **Dr. Tomas Paus** (tpausresearch@gmail.com).

Deadline for application

August 31st, 2021.

Please provide:

- ✓ *Curriculum vitæ*
- ✓ Cover letter
- ✓ Names of referees

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

