Research project offer

CHU Sainte-Justine Research Center

Project title	The role of endocrine disrupting chemicals on pubertal timing : a Mendelian randomization study		
Study level(s)	☐ MSc	☒ PhD	☒ Postdoctorate
Principal investigator(s)	Despoina Manousaki, M.D., Ph.D.		
Project duration	12 months		
Start date	September 2020		

Date of posting: 2020-03-18

Research laboratory presentation

Research in Dr Manousaki's laboratory is broadly focused on complex traits genetics and their epidemiology, and includes genome-wide association studies (GWAS), Mendelian randomizations studies, and development and application of polygenic risk scores.

Research project description

Specifically, this project consists in performing a GWAS on levels of endocrine disrupting chemicals, and in using the identified genetic variants in Mendelian randomizations studies investigating causal associations between these chemicals and pubertal traits. Opportunities also exist to extend the Mendelian randomizations studies to investigate the causal role of these chemicals in cardiometabolic traits in youth.

Required training and profile

Candidates must be comfortable analyzing very large "omics" datasets using operating systems such as linux and must have at least basic knowledge on epidemiology. Candidates must have a M.Sc. or Ph.D. degree in a bioinformatics field (obtained in the last 2-3 years). Excellent written and verbal communication skills and publication record are required.

Conditions

The successful candidate will work closely with the principal investigator, as well as other lab members, in a highly collaborative environment. The candidate will be expected to perform genetic, statistical and bioinformatic analyses to analyze available genomic data to gain new insights into the genetic architecture of endocrine disrupting chemicals and their causal role in disease. She or he will be selfmotivated and will be responsible for the experimental design, collecting and analysis of research data. She or he will also be responsible for the preparation of manuscripts related to her or his work and keeping up-to-date with the literature.

Submit your application

Candidates must send the required documents before June 2020 to **Dr Manousaki** at **despina.manousaki@umontreal.ca**

Please provide:

√ *Curriculum vitæ*

√ Most recent transcripts
√ Cover letter
√ References (2)

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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