MSc: Impact of bariatric surgery on nutrition, microbiome, and brain health

Project summary:

The EMBRACE study (Evaluation of the impact of radical nutrition and Microbiome changes on BRAin funCtion and structurE) is a 15-month prospective observational study using bariatric surgery as a natural experimental setting to evaluate cognitive outcomes as they relate to drastic changes in dietary patterns and microbiota profiles. The study has a multi-disciplinary investigative team, which includes a variety of stakeholders (researchers, healthcare professionals, patients, and policy makers). A variety of clinical, psychological, behavioural, and medical variables are measured pre-surgery, 6-months post-surgery, and 12-months post-surgery. The position will be based at the Montreal Behavioural Medicine Centre (http://mbmc-cmcm.ca), which is a collaborative centre between the CIUSSS-NIM, Concordia University, and UQAM.

Position summary:

The individual who is selected for this position will be expected to help study PI's, Drs. Simon Bacon (http://mbmc-cmcm.ca/member/simon-bacon/) and Kim Lavoie (http://mbmc-cmcm.ca/member/ kim-lavoie-2/), and co-investigator's Drs. Tair Ben-Porat and Tamara Cohen, with the nutrition related components of the study. They will also have the opportunity to work with the multidisciplinary investigative team on a variety of study related aspects including:

- Detailed nutritional evaluations, using both photo capture and biochemical based approaches
- Quantitative methods and analyses
- Epidemiological analyses linking nutritional data to other outcomes
- Participating in stakeholder engagement activities
- Systematic reviews, meta-analyses and reporting

Required Qualifications

- A bachelor's degree in a related discipline (e.g., Nutrition, Physiology, Kinesiology/Exercise Science, Medicine)
- Effective oral and written communication skills
- Excellent interpersonal skills
- Demonstrated research productivity (e.g., honours thesis, conference presentations, peer-reviewed publications)
- Ability to work autonomously and take a lead role on projects under supervision of principal investigators

Preference will be given to candidates with:

- Experience using integrated stakeholder engagement strategies
- Openness to learn new methods and techniques in an applied clinical setting

- Ability to communicate (orally) in both English and French

Provincial, national and international candidates are encouraged to apply

Start date, Duration, Stipend, and Location

The MSc will start in September 2023 (though there is also the possibility of starting during the summer of 2023); funding has already been received.

The funding package consists of a minimum 2-year stipend (consistent with Fonds de Recherche du Quebec funding levels) plus conference / training funding. For out of province and international candidates there are also tuition waivers potentially available.

The successful candidate will be registered either at Concordia University in the Department of Health, Kinesiology, and Applied Physiology (www.concordia.ca); the actual work would be conducted at the CIUSSS-NIM, Hôpital du Sacré-Coeur de Montreal (https://rechercheciusssnim.ca/). Please note that the language of instruction at Concordia is English.

To apply, please forward the following:

- A complete curriculum vitae, including summary of GPA's, a full publication list (including hyperlinks where possible) and email contact details for two referees
- A letter of motivation and statement of research accomplishments and future research goals

How to apply:

- The complete application package must be emailed to: apply@mbmc-cmcm.ca. Please include "MSc EMBRACE" in the subject line.
- Queries about the application should be sent to either Dr. Lavoie (lavoie.kim@uqam.ca) or Dr. Bacon (simon.bacon@concordia.ca).
- The closing date for receipt of applications is **Friday December 2, 2022, 5 pm EST**. Interviews will be conducted in **January 2023** and the successful candidate will need to apply to the University by the official application deadline.