

**Position:** Post-doctoral fellow in computational neuroscience of language

**Description:** A post-doctoral position in computational neuroscience of language is available in the LINGUA laboratory within the framework of the Courtois Chair in fundamental neuroscience III of the Faculty of Arts and Sciences at the Université de Montréal, held by Simona Maria Brambati, PhD. The research context of the Chair is presented on the LINGUALab website: <https://lingualab.ca/en/#fundamental-research>. The projects carried out during the postdoctoral fellowship will aim to investigate the influence of sex on the language network, using functional and diffusion imaging data. The successful candidate will work with data from the Human Connectome Project and/or other neuroimaging databases.

The postdoc is for 2 years, with the possibility of an additional 1-year extension, with a desirable start date between May and October 2023.

**Responsibilities:** The successful candidate:

- Will be responsible for data analysis and interpretation. This will primarily involve the use of artificial intelligence approaches applied to neuroimaging.
- Will be responsible for writing and preparing manuscripts, presentations for scientific meetings and grant applications.
- Will be encouraged to collaborate with the research team in laboratory activities
- Will be encouraged and supervised to develop her/his career objectives, in line with the objectives of the Chair.

**Environment:** The successful candidate will join the LINGUA laboratory at the CRIUGM in Montreal. The laboratory hosts about ten PhD students in psychology and two research consultants, one of whom is specialized in programming and development of neuroimaging analysis pipelines. The members of the laboratory program mostly in Python, and use FSL, Freesurfer, SPM etc. with access to High Performance Computing (HPC) through Compute Canada. The laboratory offers a bilingual French-English environment. The CRIUGM brings together several neuroscience laboratories and is a very dynamic place for knowledge exchange and collaboration.

**Candidate profile:** The following characteristics are sought:

- Ph.D. (completed or almost completed) in computational neuroscience, cognitive neuroscience and related fields and/or computer science and related fields
- Autonomy
- Rigor
- Experience writing scientific articles in English
- One of the following three required characteristics:
  - Research experience in neuroimaging analysis (fMRI and dMRI)
  - Programming skills in Python
  - Research experience in machine learning
- Is considered an asset:
  - Knowledge of nilearn, scikit learn, dipy, FSL, Freesurfer

- Knowledge of language neuroscience
- Familiarity with large databases

**Compensation:** The proposed salary follows the current University of Montreal regulations and will be between \$37,103 and \$61,947 as of May 1, 2023.

**Application:** Send to [simona.maria.brambati@umontreal.ca](mailto:simona.maria.brambati@umontreal.ca) and [berengere.houze@umontreal.ca](mailto:berengere.houze@umontreal.ca) :

- A cover letter specifying your research interests and experience, and your career goals
- A CV
- List of publications
- 2 or 3 reference contacts, with email address and phone number

Applications will be received until the position is filled.