

## Two postdoctoral positions available in the MultiFunkIm Lab - Montreal Canada

I am happy to announce that there are **two postdoc positions** available in my lab at Concordia University, Montreal Canada. The fellow will join a multidisciplinary team and have the opportunity to get involved in projects involving multimodal data application (EEG/MEG, high density EEG/fMRI, prolonged EEG/fNIRS recordings) for applications in epilepsy presurgical mapping and sleep studies, advanced methodological and statistical analysis developments, and contributions in neuroimaging software implementations.

**Position 1: EEG/MEG analysis in epilepsy and sleep studies**, involving development of source localization techniques, contribution to our Maximum Entropy on the Mean

package <u>https://neuroimage.usc.edu/brainstorm/Tutorials/TutBEst</u>, evaluation of source localization methods for resting state connectivity, advanced computational modeling.

**Position 2: High density EEG/fMRI and personalized EEG/fNIRS to study sleep and cognition**, in several projects involving the neural mechanisms of sleep, sleep deprivation and sleep disorders (e.g. insomnia, hypersomnolence). This position co-supervised by Dr. Dang-Vu, expert in sleep studies and neuroimaging, is funded through a prestigious Horizon Postdoctoral Scholarship from Concordia University, http://www.concordia.ca/sgs/postdoctoral-fellows/funding/horizon/descriptions/5007.html

The ideal candidate will be involved in setting up advanced multimodal data acquisitions to study sleep, developing dedicated methods for data analysis, especially for whole night prolonged recordings, and contributions to NIRSTORM software package implementations https://github.com/Nirstorm/nirstorm

Data acquisitions will take place either at PERFORM centre at Concordia University (<u>http://www.concordia.ca/research/perform.html</u>) or at the McConnell Brain Imaging Centre of the Montreal Neurological Institute at McGill University (<u>https://www.mcgill.ca/bic/</u>).

Applicants must have a PhD (or close to completion) in a related field (e.g., neurosciences, computer science, (biomedical engineering, physics). Applicants should have strong knowledge of Matlab and or Python and/or experience in analysis of neuroimaging, excellent organizational skills, an aptitude for teamwork, good writing skills and a productive publication record. Experience in one or more aspects of the research themes will constitute an asset.

Both positions are available now. Review of applications will begin as they are received and will continue until the position has been filled. If interested please send your CV, a brief research statement and two references letters to myself: christophe.grova@concordia.ca

Please note that I will attend both ISMRM and OHBM conferences, so will be available to schedule interviews there.

Cordially Christophe Grova

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For more information about our current research programs, please visit the lab website: https://www.concordia.ca/artsci/physics/research/grova-research-group.html