

One Postdoc position is available in the **human intracranial EEG Laboratory** at The Feinstein Institutes for Medical Research in New York (USA). The open position is funded by a newly awarded NIH grant to study the cortical and subcortical mechanisms underlying interoception, particularly breathing sensations (respiroception) including dyspnea (affective and sensory components of breathlessness), the neural control of breathing, and brain-body interactions (biofeedback).

The lab works with patients being evaluated for epilepsy surgery using methods such as invasive stereo EEG and electrocorticography recordings (iEEG, ECoG). Imaging data (MRI, fMRI, DTI), surface EEG, eyetracking are also available. There is a focus on using neuromodulation methods (i.e., invasive and non-invasive electrical stimulation). General research topics include the investigation of neuronal dynamics underlying selective attention and active sensing, auditory/speech analysis, and neural correlates of object identification.

The ideal candidate has a PhD and/or MSc in biomedical engineering, neuroscience, psychology, or related field. She/he should have a solid background in signal processing (either ECoG, EEG/MEG, or fMRI), programming (Matlab/Python), statistics, and scientific writing. He/she should be comfortable working in a lab where there is interaction with clinical patients. The position is computationally focused, and responsibilities include analysis of neural, imaging, and behavioral data using existing scripts (Matlab/Python), further development of analysis scripts, and database mining. Responsibilities will also include assisting with the collection and analysis of data, project management, assistance with preparing progress reports and grant applications, and helping to present lab findings at conferences and in journals.

----- Qualifications -----

Minimum:

- PhD (and/or MSc) in an appropriate discipline (e.g., neuroscience, biomedical engineering, computer science, physics, psychology)
- Experience with at least one programming language (MATLAB, R, or Python).
- 1 year commitment

Desirable:

- Prior experience working with ECoG/EEG/MEG, neuroimaging, or brain stimulation data
- Previous experience working with patients
- Previous work in a research laboratory that shows evidence of independent scholarship, problem solving, and motivation

- 2 years commitment
- Previous publications

The position is funded by a newly awarded NIH (NHLBI-RO1) grant, 2 years guaranteed, with expected start date **as soon as possible**. The candidate will have ample opportunities to work closely with national and international collaborators and will expose the successful applicant to basic and clinical neuroscience as well as neurosurgery, neurology, and neuropsychology. The location of the institute allows living in either Queens, Brooklyn and Manhattan, or the suburban neighborhoods of Long Island.

If you are interested, please send your CV, names and contacts of 2-3 references (ideally researchers), along with possible questions about the positions to Jose Herrero, PhD (jherreroru@northwell.edu). We are looking forward to hearing from you!

Thanks,

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Jose L Herrero, PhD
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