TWO POSTDOCTORAL RESEARCHERS ARE SOUGHT IN THE INB SYSTEM NEUROPHISIOLOGY LABORATORY INSTITUTO DE NEUROBIOLOGIA, UNAM Querétaro, Qro. Febrero, 2020

The laboratory of system neurophysiology of the Neurobiology Institute of the National University of Mexico, campus Juriquilla Queretaro is opening two Postdoc positions for two years (than can be scaled to four years). Candidates in computer science, biomedical engineering, medicine, biology or related fields with interest in participating in an interdisciplinary team of scientist working on the neural basis of timing in human and non-human primates. Specifically, we are looking for postdocs that: (1) work on the analysis of single cell and LFP activity from high-density multielectron arrays places in different cortical areas of animals working on various timing tasks, and (2) work on fMRI experiments on trained animals working on the same timing tasks.

The laboratory of system neurophysiology is equipped with the worldwide leading neurophysiology and training facilities and two state of the art 3T MRI magnets, with access to large computer clusters. The lab has developed a large research program to study the neurophysiological basis of time perception and time production in human and non-human primates, with emphasis on the study of the time encoding abilities pre-SMA, SMA and the putamen during the execution of rhythmic tapping tasks and the categorization of time intervals. Many papers in high impact journals have been published documenting our findings, including Nature Communication, PLoS Biology, PNAS, Journal and Neuroscience.

Candidates are expected to have:

Strong communication and collaboration skills

A good command of English

Strong motivation in research

and in-depth knowledge in at least one of the following fields:

Machine learning, deep learning and programming with Matlab

Image processing, computer programming with Psychtoolbox for Matlab.

Computational neuroscience, multidimensional statistics, and graph analysis

Neuroimaging and data analysis

Non-human primate training in behavioral tasks

Neurophysiological recordings with multisite high-density electro arrays.

Applicants are requested to send a motivation letter, CV and two recommendation letters to Dr. Hugo Merchant email: hugomerchant@unam.mx before the 30 of June, 2020.

