Research Project Proposal
Academic year 2018-2019

Project Nº 34

Title: *Translational biomarkers for the evaluation of physical/pharmacological neuromodulation strategies*

Department/ Laboratory *Systems Neuroscience Lab, CIMA/University of Navarra.*

Director 1 *Miguel Valenciq Ustárroz*
Contact: *mvustarroz@unav.es*
Codirector:
Contact:

Summary

During this project you will join the Systems Neuroscience Team at CIMA. Depending on your background, skills and/or interests you will be involved a suitable project aimed at characterizing the dynamics of cerebral systems in health and disease.

You will use systems neuroscience tools to identify the neurofunctional domains affected in patients and animal models of disease (epilepsy, Parkinson's, Alzheimer's or schizophrenia).

With the ultimate goal of developing new therapeutic approaches aimed at restoring normal cerebral dynamics, you will participate in the evaluation of pharmacological and physical treatments (electrical and/or magnetic stimulation) by using clinical and experimental techniques covering a broad spectrum of neurophysiological data recording modalities including EEG, EMG, ECoG, deep-brain activity in humans, records in chronic and acute preparations in animal experimentation models.

In addition, you would have the opportunity to participate in technological investigations including the development of techniques for data analysis, building recording electrodes, design of chronic implantation devices and long-term monitoring systems.

yes	**X**	**Does the project include the possibility of supervised animal manipulation to complete the training for animal manipulator?**
no		