



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA



FONDAZIONE  
RICERCA BIOMEDICA  
AVANZATA ONLUS  
V.I.M.M.



PADOVA  
neuroscience  
CENTER



European  
Research  
Council



## POSTDOC POSITIONS AVAILABLE + 1 PhD CANDIDATE

We are pleased to announce that our six-year European-funded ERC Synergy grant **NEMESIS** (NEurological MEchanismS of Injury and Sleep-like cellular dynamics), coordinated by Maurizio Corbetta, is seeking **3 postdoctoral fellows** and **1 PhD candidate**. The project will be based in a leading European institution, the University of Padova (Italy) in collaboration with Marcello Massimini at the *University of Milan* (Italy), Gustavo Deco at the *Pompeu Fabra University* of Barcelona (Spain), and Mavi Sanchez-Vives at *Pi i Sunyer Biomedical Research Institute* (IDIBAPS) of Barcelona (Spain), providing an excellent opportunity for highly motivated and talented individuals to further their research career in a collaborative and dynamic environment.

The projects aims to: 1) understand the neurophysiology of stroke; 2) create biologically inspired computer models of the injury and its effects on brain network dynamics; 3) correct these functional abnormalities using invasive and non-invasive brain stimulation in both human and animal models.

**1 Human imaging postdoctoral position:** The successful candidate will have expertise in structural/functional MRI and/or analysis of EEG signals, including proficiency in relevant software packages (e.g. FSL, SPM, EEGLAB, etc.). The postdoc will focus on the use of advanced MRI techniques to investigate changes in brain structure and function in stroke and the integration with TMS-EEG signals to understand the dynamics of neural activity. Experience in TMS will be considered a plus. The ideal candidate will have a MD/PhD in a relevant field (e.g., neurology, neuroscience, medicine, psychology, biology, cognitive science) with both technical and clinical knowledge.

**1 Mouse model postdoc position:** The post-doc will work on mouse models of stroke to investigate behavioral and neural mechanisms using both correlation and causation approaches. The ideal candidate will have a PhD in a relevant field (e.g., neuroscience, biomedical engineering, biology, biotechnology). The research activities will be carried out in a multi-disciplinary environment at the crossroad of behavior, imaging and electrophysiology combined with the computational knowledge from human studies.

**1 Data analyst postdoc position:** The postdoc will be involved in the analysis of large multimodal datasets from both animal and human data. Knowledge of programming languages (e.g., Python, Matlab, R, or Julia) is essential. The ideal candidate will have a PhD in a relevant field (e.g., neuroscience, biomedical engineering, physics, math, statistics), experience in biological data analysis, particularly in the context of time-series analysis, and strong statistical/machine learning background.

**1 Mouse model PhD position:** The candidate will work with the post-doc on behavioral and physiological studies in animal models of stroke. The ideal candidate will work together with neurologists, neuroradiologists, psychologists, neuroimagers, and clinicians in an international and multidisciplinary project. The current position offers an exceptional opportunity for students who plan to pursue a career in neuroscience.

Send your CV, one motivation letter, and two letters of references to: [andreeastefania.radu@unipd.it](mailto:andreeastefania.radu@unipd.it)

These positions are available immediately and are funded for (minimum) two years. We look forward to receiving applications from outstanding candidates with passion for neuroscience research.