

Call for expressions of interest for a Post-Doc position (SSD ING-INF/06) at the Department of Neuroscience of the University of Padova

The Rehabilitation, Neuroscience and Technologies Laboratory (ReNeT Lab, <https://www.neuroscienze.unipd.it/renetlab>) of the Department of Neuroscience of the University of Padova is looking for a highly motivated and capable postdoctoral researcher for activities falling within the SSD ING-INF/06 (Bioingegneria Elettronica ed Informatica) domain.

The post-doc will be involved in the projects in the field of Neurorehabilitation and Neurorobotics currently active at the ReNeT Lab and funded by PNRR and PRIN initiatives. Research topics may include one or more of the following areas (but not limited to):

- Identification of neurophysiological markers of Loss of Balance
- EEG signatures of recovery after stroke
- Motor primitives trajectories after stroke
- Neurophysiological biomarkers of the embodiment for exoskeletons

Candidates should have a solid knowledge, gathered during a previous PhD programme, of one or more topics among:

- EEG and EMG analysis (linear and nonlinear) and integration
- Quantification of high-density EEG time-varying connectivity in the source space (i.e., estimation of EEG source dipole orientation for connectivity analysis; graph methods for the analysis of functional/effective connectivity matrices).
- Neurophysiology, neurorobotics, clinical biomechanics, wearable devices
- MatLab and/or Python and possibly C++ programming

Strong team working skills, capacity to respect deadlines and interdisciplinary scientific curiosity are preferential selection criteria. English writing and speaking skills are mandatory. A good propensity for teaching and co-tutoring students is appreciated.

The salary can range between net 1450 € to 1650 € / month depending on the experience of the selected candidate.

Informal expressions of interest should be sent to both giovanni.sparacino@unipd.it and alessandra.delfelice@unipd.it. Deadline November 15th. Please include

- A detailed curriculum vitae (including a list of publications and link to Scopus / Scholar profile);
- Link to the PDF file of the PhD thesis;
- Two letters of reference (with email and phone number)

A call for formal applications will be opened in December 2023 (details will be given at due time at <https://www.neuroscienze.unipd.it/renetlab>).

More information on ReNeT Lab can be obtained at the link

<https://drive.google.com/file/d/1p2fIngwniUEDeau6P1howtTqzzHSTGht/view?usp=sharing>