

**Ph.D. in Neuroscience, Psychological and psychiatric sciences and Movement sciences**

**Three-year Ph.D. positions** available @ University of Verona for 2 projects

Supervisor: Mirta Fiorio

**Ph.D. position for the project “The cognitive-motor interplay in a virtual reality environment”**

The project will investigate the neuro-cognitive mechanisms of the bidirectional link between movement and cognition (mainly attention and expectation) in a virtual reality environment. Neurophysiological techniques (TMS and EEG) will be used to tackle the underlying neural networks. The project will provide basic knowledge necessary to develop ad-hoc cognitive training for improving motor functions in the elderly population.

**Ph.D. position for the project “Markers of physical and cognitive fatigue in healthy and pathological conditions”**

The project will search for potential markers of physical and cognitive fatigue in healthy and clinical populations. Sensory attenuation will be considered as a first potential marker, and a combined TMS-EEG approach will be used to tackle the neural network involved. On a theoretical level, the project will allow developing a predictive coding framework for fatigue. The project will also provide basic knowledge necessary for the development of strategies useful to prevent and reduce fatigue in clinical conditions (like Parkinson’s disease and functional neurological disorder), in which this symptom may interfere with the quality of life.

For both projects, ideal candidates would have a background or strong interest in cognitive neuroscience, cognitive sciences, movement sciences, or computational neuroscience; prior experience in data collection; knowledge of neurophysiological techniques and computer programming, preferably in Matlab; fluency in English.

Deadline for applications: 6<sup>th</sup> July 2023

For more information, please contact Mirta Fiorio [mirta.fiorio@univr.it](mailto:mirta.fiorio@univr.it)