



## **PREDOC/POSTDOC POSITION IN NEUROMECHANICS AT THE UNIVERSITY OF MILANO-BICOCCA**

The University of Milano-Bicocca is offering a predoc or postdoc position to investigate the neuromechanics of sport-related injuries and their consequences on motor control.

### **Project description**

The project will investigate the sensorimotor alterations following the rupture of the anterior cruciate ligament in the athletic population. Movement biomechanics and neuromuscular activity of patients who suffered a lesion to this ligament will be recorded and closely analyzed, with the goal of evaluating the sensory role of the anterior cruciate ligament on motor control. Experiments will be conducted using tools to monitor movement biomechanics and neuromuscular activity (motion capture, bipolar and high-density EMG). Advanced computational methods will be used to analyze the collected data.

### **Qualification**

Ideal candidates should be highly motivated and have a strong scientific interest in motor control.

Preferred skills: Matlab or Python programming.

Desirable but not compulsory skills: motion capture system, signal analysis, basic knowledge of biomechanics.

### **Research team**

The selected candidate will work at the School of Medicine and Surgery of the University of Milano-Bicocca, under the supervision of Dr. Cristiano Alessandro. They will be involved in a collaborative project across three universities, interacting with engineers, sport scientists, sport medicine physicians and physical therapists.

### **Positions**

- Duration: 19 months
- Start date: January 1<sup>st</sup>, 2024
- Gross salary (tax-free): 40'000 Euro

### **Contacts**

This is a call for expression of interest. Interested candidates should send an email to Dr. Cristiano Alessandro ([cristiano.alessandro@unimib.it](mailto:cristiano.alessandro@unimib.it)) and attach: CV, a brief cover letter (shortly outlining motivations, experience and qualifications), contact details of professional references.