

PHD POSITIONS ON MEDICAL ROBOTICS WITH PARTICULAR FOCUS ON EXOSKELETON, PROSTHESIS AND IN GENERAL SOFT WEARABLE ROBOTS @ DIETI/UNINA

The **BRIEF (Biorobotics Research and Innovation Engineering Facilities)**, **Project** aims at promoting scientific discoveries, in the context of biomedical sciences, microsciences and nanosciences and transferring basic research to development of enabling technologies. The goal is to upgrade a network of biorobotics research infrastructures that sees how leads the Scuola Superiore Sant'Anna, together with the partners Federico II University of Naples and Bari Polytechnic. The aim is to encourage discoveries of new materials, sensors, measurement and control systems and intelligent data processing, in view of the creation of biorobotic platforms to increase wellbeing and health and to promote environmental sustainability. One of the newly established laboratories in BRIEF will be called B2R Laboratory, Biomimetic and Biohybrid Robotic Lab, and will welcome researchers from all over the world who want to develop and test their technology with the aim of raising the level of technological maturity.

B2R will deal with the design and construction of prostheses and exoskeletons and biological interfaces to communicate with the Human Body. This includes the adoption of biocompatible materials and components, such as sensors and actuators, as well as methods of bio-inspired design and motion control strategies that exploit human interaction and cooperation.

In the framework of the BRIEF Project, there will be a public call for 1 PhD student at Department of Electrical Engineering and Information Technology (DIETI) of University of Naples Federico II (call expected by the end of October). The student will be under the supervision of the Medical Robotics group and he/she can choose to work on one of these topics: prostheses, exoskeletons and soft robotics for medical applications. The background of the candidate can be in bio-inspired control, alternatively in mechanical design and fast prototyping using innovative materials.

The call is open to both graduated Master students or to students that will get the degree by December 2022 (specific admission requirements will be detailed in the call).

Perspective candidates can contact Prof. Fanny Ficuciello (fanny.ficuciello@unina.it) for more information.