

BIOROBOTICS RESEARCH AND INNOVATION ENGINEERING FACILITIES









Panel di riferimento: DIGIT

Titolo della Proposta: Biorobotics Research and Innovation Engineering Facilities

Codice della proposta: IR0000036

Tipologia: (i) - Empowering Proponente:SANTANNAPISA

Infrastruttura di Ricerca: BRIEF - Biorobotics Research and Innovation Engineering Facilities

Importo totale: **24.796.244,20€**

Di cui al Sud: 9.505.783,70€ (38,34%)

Abstract:

BRIEF aims to enrich an existing Distributed Infrastructure which has been already identified as a high priority infrastructure by the PNIR. Based on these optimal premises, the current project will strengthen the original infrastructure with a double approach:

1) enlarging the BRIEF coordinating network. In addition to the Scuola Sant'Anna (SSSA) and the BioRobotics Institute at SSSA (BRI-SSSA), the current BRIEF proposal involves up to 17 operational units connected to SSSA or to BRISSSA as joint labs. There is also the involvement of south Italian regions, with 2 units at the University Federico II in Naples and 3 at the Politecnico of Bari;

2) strengthening the infrastructures by offering a full set of opportunities for experiments in the field of biorobotics to external researchers accessing to BRIEF.

In this framework, BRIEF will set up standardised procedures and interfaces for a wider, simplified and harmonised access to the best research facilities in Italy and in Europe, across geographical and disciplinary boundaries and within the broad field of biorobotics.

During a 30-month project lifetime, BRIEF will provide a practical and theoretical backbone for the quickly growing community of researchers aiming at a science- grounded biorobotics. So far, the fragmentation of existing infrastructures makes it difficult in most cases (with the exception of some excellence centres outside Europe) the implementation of correct experimental methodologies and to achieve the needed statistical significance of results. This situation hampers scientific progress, result exploitation, and limits the possible exploitation and translation into concrete case studies (which will be mainly related to health and sustainability). BRIEF will also establish synergies with Competence Centers and European Digital Innovation Hubs in foster socioeconomic impact with science-grounded innovations in biorobotics.



Elenco partecipanti alla Proposta:

- Politecnico di Bari
- Scuola Superiore Sant'Anna Pisa
- Università degli studi di Napoli Federico II