MISSIONE 4
ISTRUZIONE
RICERCA

STRENGTHENING OF THE BIOBANKING AND BIOMOLECULAR RESOURCES RESEARCH INFRASTRUCTURE OF ITALY

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani
PIANO NAZIONALE DI RIPRESA E RESILIENZA

Panel di riferimento: ***H&F***

Titolo della Proposta: **Strengthening of the Biobanking and Biomolecular Resources Research Infrastructure of Italy**

Codice della proposta: ***IR0000031***

Tipologia: **(i) - Empowering**

Proponente:***CNR***

Infrastruttura di Ricerca: **BBMRI - Biobanking and BioMolecular Research Infrastructure**

Importo totale: ***23.396.591,43€***

Di cui al Sud: **11.310.742,41€ (48,34%)**

Abstract:

Biobanks collection of well-preserved human biological materials and the related high quality data are the fundamental backbone of effective and reproducible translational research.

The Italian node of BBMRI-ERIC (BBMRI.it) is a distributed infrastructure including 97 biobanks and biological resource centers located throughout Italy. To support biobanking BBMRI.it has developed a web portal, a Help Desk and Common Services for ICT, Quality and ELSI to support the network.

Given the constrains of the call, only CNR and University biobanks will profit from this unique funding opportunity, nevertheless, all biobanks of the national network will be strengthened to face the digital era. While the already active biobanks will be upgraded and connected with core services, new biobanks will be created and developed also in a south region. Biobanks will include not only an expansion of the biobank digital datasets but will be enhanced to include omics data through the development of omics Core Facilities that will ensure molecularly characterized biobanked sample.

One critical outcome of the project will be the digital and participatory infrastructure of the BBMRI Common Service ELSI and its shift towards a RRI integrated common service based on a digital community of practices for biobanking and Life Sciences.

The development of a digital informed consent via SPID and pathways of consenting access and returning results integrated to the e-health record and /or to the APP IO will represent a shift in terms of harmonization and data/results access, as well as of “digital well-being”.

Moreover, the data infrastructure and the project platform implementing the FAIR principles, will be a reference also for the industry. Novel facilities to be developed within this project

include 4th generation biobanks (Biobanking 4.0) of models including organoid, microbiome and induced pluripotent stem cells (iPSCs) and adult progenitor cells.

Elenco partecipanti alla Proposta:

• Consiglio Nazionale delle Ricerche
• Università degli Studi Alma Mater - Bologna
• Università degli studi di Napoli Federico II
• Università degli Studi di Trento
• Università degli Studi di Verona