

CLUST-ER HEALTH & WELLNESS

EMILIA-ROMAGNA REGION

ITALIAN LIFE SCIENCES' LANDSCAPE

BOOSTING THE COMPETITIVENESS OF THE HEALTH & WELLNESS INDUSTRIES IN EMILIA-ROMAGNA



**1ST REGION
FOR...**



INNOVATION

(European Innovation Scoreboard 2021 and Transatlantic Subnational Innovation Competitiveness Index 2022)



**EFFICIENCY OF THE
HEALTHCARE SYSTEM**

(Demoskopika, 2022)



SILVER

Cluster Management Excellence

DEDICATED TO CLUSTER EXCELLENCE

113
MEMBERS

SUPPORTING THE COMPETITIVENESS OF THE HEALTH AND WELLNESS INDUSTRIES OF EMILIA-ROMAGNA

- BIG COMPANIES
- SMEs
- UNIVERSITIES
- RESEARCH CENTERS
- HOSPITALS
- HEALTHCARE SERVICE PROVIDERS
- TRAINING INSTITUTIONS
- PATIENT ASSOCIATIONS



VALUE CHAINS

New Generation Medtech and Prosthetics

Regenerative and Reparative Medicine

Pharmaceutical and Omics Sciences

Technologies & Services for Healthy & Active Ageing

HEALTH ASSETS IN EMILIA-ROMAGNA

Identified by **EY**

7 ASSETS

- RELEVANCE AT INTERNATIONAL LEVEL
- POTENTIAL
- OPPORTUNITY TO ATTRACT SCIENTIFIC AND BUSINESS COLLABORATIONS



PHARMA
& ATMPs



BIOMEDICAL
TECHNOLOGIES



BIG DATA
& DIGITAL
HEALTH



ORTHOPEDICS



NEUROSCIENCES



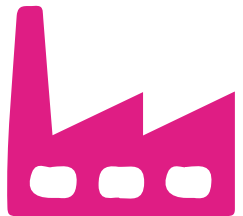
NUTRACEUTICALS



ANIMAL
HEALTH



PHARMA & ATMPS



PHARMA: 1.4 billion euros in turnover
More than 4,035 jobs



ATMPs: University of Bologna ranks 95th on 160 with 1,852 publications



The world's first stem cell-based drug was created by Holostem

GLOBAL TREND

(2020 – 2025)



KEY PLAYERS & EXCELLENCES



ADVANCED THERAPIES REGIONAL NETWORK

Thanks to the multidisciplinary competences of regional stakeholders, the network is able to deal with every aspect of the development of ATMPs and regenerative medicine products.

Advanced Therapies and Regenerative Medicine are a strategic priority for the Emilia Romagna Region, involving local stakeholders as universities, specialized research centers and companies.

INNOVATION AREAS

- New therapies and diagnostic systems
- Cell types characterization
- Self repair of tissue and organs
- Use of biomaterials and scaffolds, cell derivatives, biosensors, drugs
- Advanced training courses
- Logistics

THE NETWORK

Universities & Research Center

Centro di Medicina Rigenerativa "StefanoFerrari"



SCIENZE DELLA VITA E TECNOLOGIE PER LA SALUTE



Companies



Hospitals

SERVIZIO SANITARIO REGIONALE EMILIA - ROMAGNA
Istituto Ortopedico Rizzoli di Bologna
Istituto di Ricovero e Cura a Carattere Scientifico



SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA
Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori
Istituto di Ricovero e Cura a Carattere Scientifico

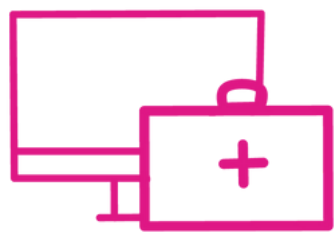


SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA
Azienda Ospedaliero - Universitaria di Modena

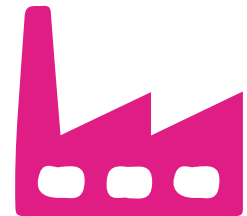
SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA
Azienda Ospedaliero - Universitaria di Parma

SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA
Azienda Ospedaliero - Universitaria di Bologna
IRCCS Istituto di Ricovero e Cura a Carattere Scientifico

POLICLINICO DI SANT'ORSOLA



BIG DATA & DIGITAL HEALTH



91 million euros in turnover
More than 1,300 jobs



More than 90% of supercomputing resources for public research in Italy are managed by Emilia-Romagna's Big Data Association members



Emilia-Romagna owns one of the most complete EHR database in Italy, collecting data from patients for more than 30 years

GLOBAL TREND

(2020 – 2025)



KEY PLAYERS & EXCELLENCES



BIG DATA TECHNOPOLE

The region concentrates investments and skills qualifying it as a 'European Data Valley' with top world supercomputers.

- *>90% SUPERCOMPUTING RESOURCES FOR PUBLIC RESEARCH IN ITALY MANAGED BY BIG DATA ASSOCIATION MEMBERS*
- *140 EUROPEAN FUNDED PROJECTS*
- *>2.1 BLN€ TOTAL COSTS OF THE PROJECTS (160 MLN€ EU FUNDS)*
- BIG DATA ASSOCIATION
- CINECA
- BI-REX COMPETENCE CENTER



LEONARDO SUPER COMPUTER

4th place on world's Top500.org Supercomputers:

- 240 pFlops HPL
- 4992 calculus nodes with liquid cooling
- 111 pByte di storage

FOCUS

LIFE SCIENCE & HEALTHCARE
CLIMATE, WEATHER & SUSTAINABILITY
INDUSTRY 4.0
SMART CITIES,
SMART MOBILITY

CINECA  **EDU &
TRAINING**

Founded by
the European Union

MASTER DEGREES
AI ACADEMY MUNER
PHD COURSES
RESEARCH FELLOWSHIPS BD&AI
DATA LABS



Smart Specialisation Platforms



Wireless ICT



Personalised Medicine



Medical Technology

SMART HEALTH VANGUARD INITIATIVE



EUROPEAN NETWORKS



CEBR
COUNCIL OF EUROPEAN BIOREGIONS

Over **40** European
Clusters on life
sciences & medtech



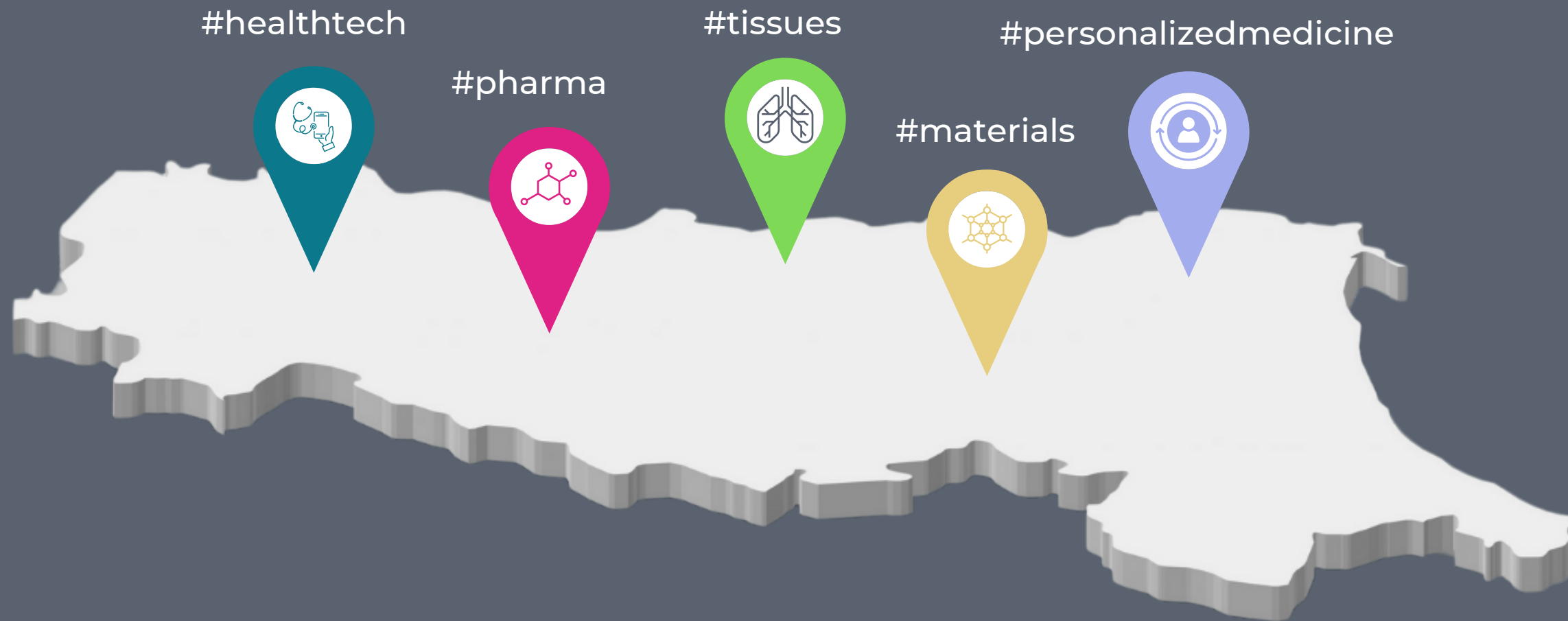
Board Members

HEALTH & LIFE SCIENCE PROJECTS

Support for collaborative research projects between research laboratories and universities with companies

12 projects funded

6 mln € of contribution from regional fund





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