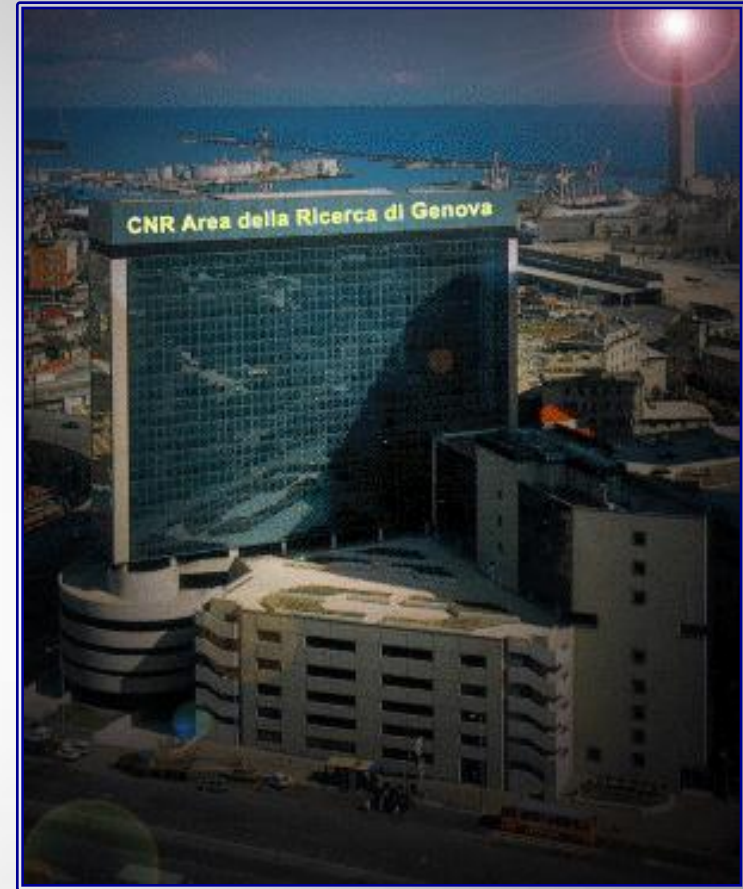


Regional initiatives of CNR in the biomedical domain

Bianca Falcidieno

Consiglio Nazionale delle Ricerche

President of the Research Area of Genova



CNR Research Organization in Liguria

3

Institutes

11

Research Units

1

Research Area

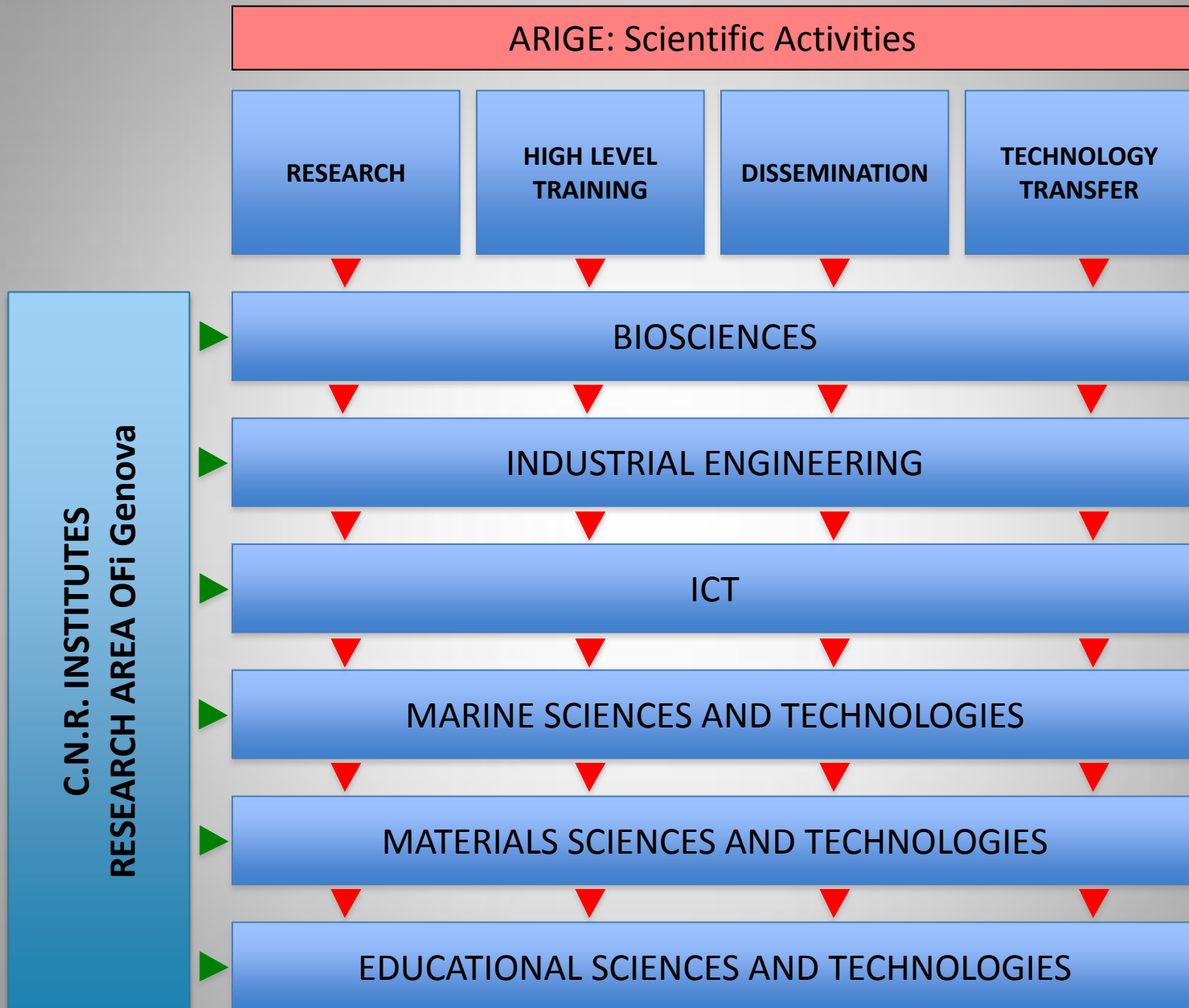


≈ 400 people

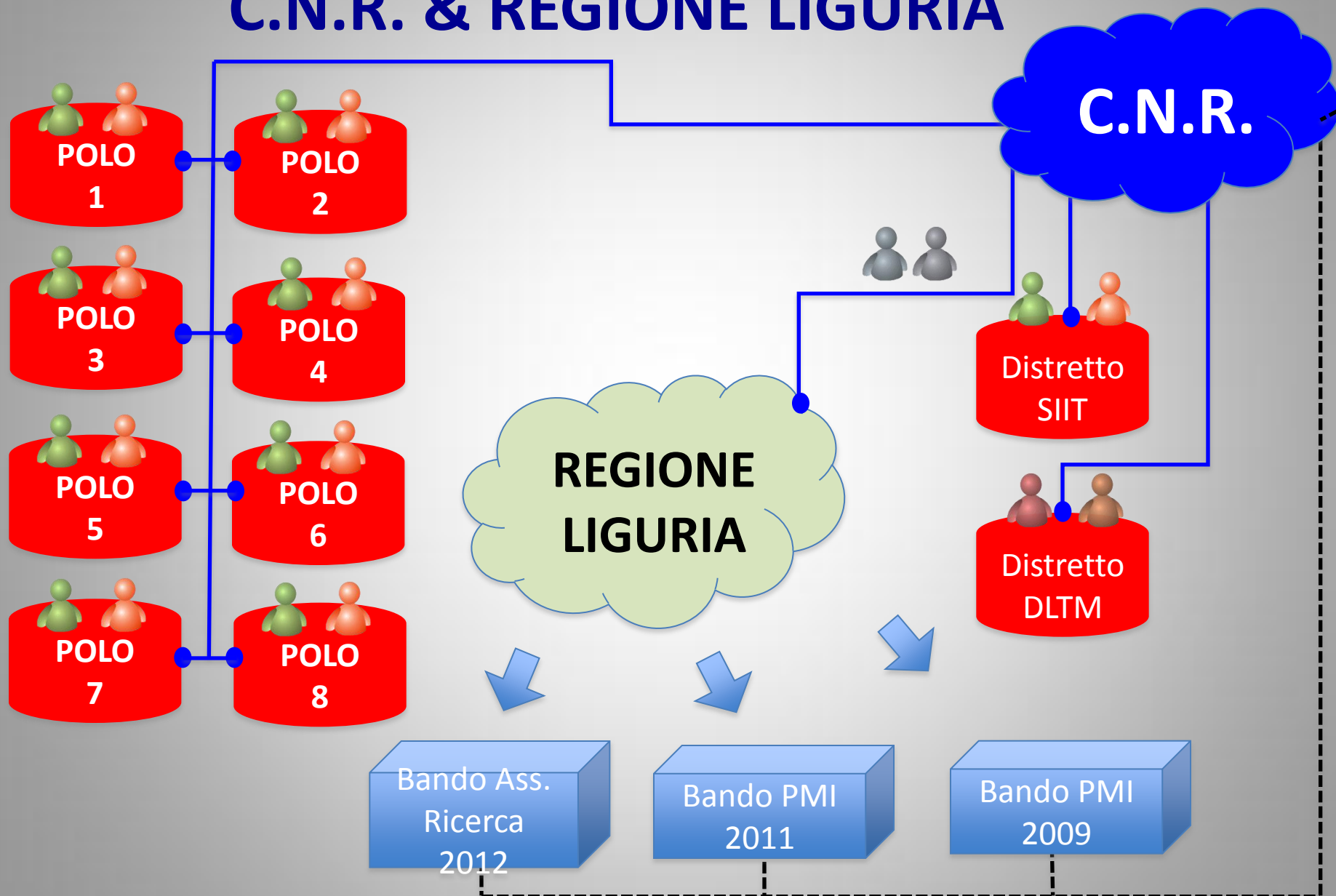
≈ 230 employees

≈ 100 research fellows

≈ 100 associated researchers



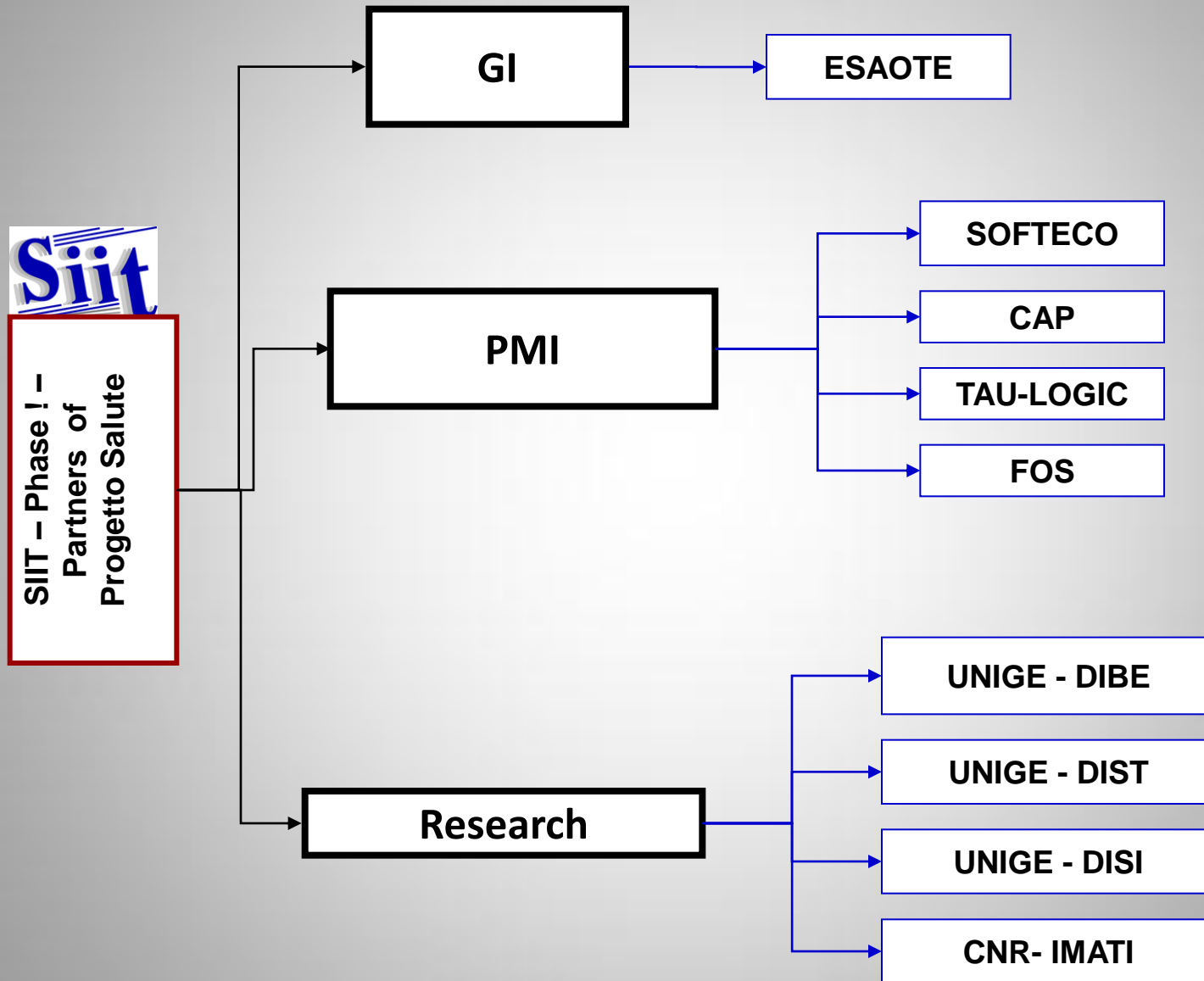
C.N.R. & REGIONE LIGURIA





SIIT Project: Intelligent systems for the patient management in the diagnostic and therapeutic cycle

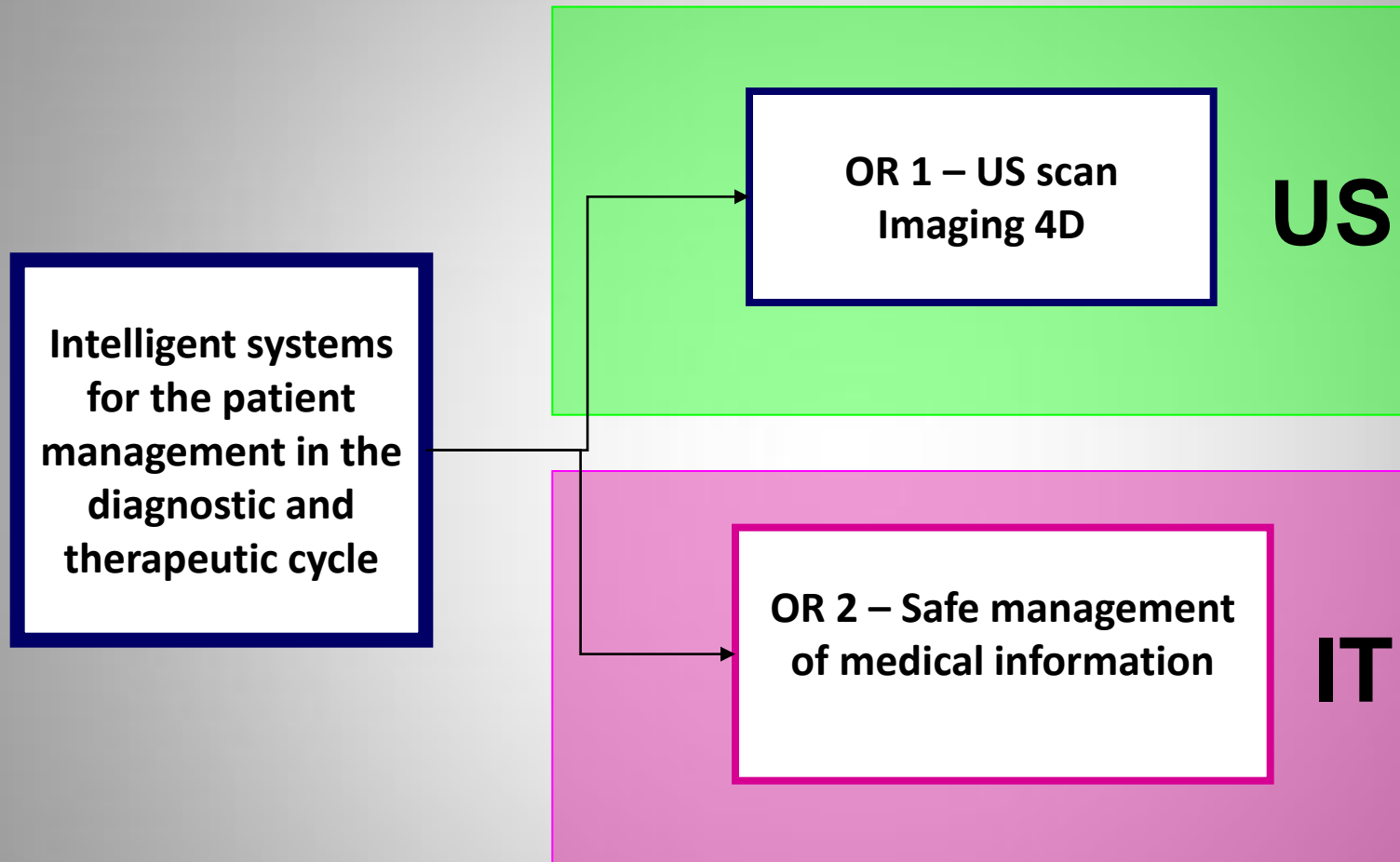
Partners



Main goal

- A system integrating in a «smart» way:
 - new sensors and interactive systems for diagnosis and monitoring
 - new efficient and secure technologies to plan, coordinate and monitor patient diagnosis and management,
 - new devices optimizing the timely and minimally invasive treatment of the patient

2 Objectives



Project duration: 3 years

OR1 – US Scan Imaging 4D - goals

- Industrial research
 - new technologies for the 4D visualization and «navigation» of the examined body area from every point of view, to obtain a global morphological evaluation and a more accurate intervention planning
 - new acquisition/processing techniques to obtain high-quality scan images which, in combination with 4D imaging, enhance the US scan diagnostic potential
- Pre-competitive development
 - Development of a prototypical method of 4D scan imaging to be integrated in the ESAOTE platform

REGIONE LIGURIA: INNOVATION POLES INITIATIVE

This measure, part of the ROP ERDF 2007-2013, is aimed at the establishment and strengthening of the Regional Innovation System, in accordance with the provisions of Regional Law n. 2/2007 and the "Three-year Program for university, research and innovation".

The Poles are defined as hubs of public and private actors (companies, research centers, universities) in specific sectors and geographical areas. These facilities operate in carrying out industrial research projects of significant impact on regional socio-economic context, exchanging knowledge and experiences, facilitating technology transfer and networking between the different actors.

The thematic areas identified by the Liguria Region are: transport and logistics, energy, intelligent automation, marine technologies, **life sciences and biotechnology**.

The measure supports the expansion and creation of new Poles (including infrastructures such as buildings, machinery, equipment), as well as activities of the Poles already created (eg management, technology transfer, marketing, etc)..

Ligurian Pole for medical technologies





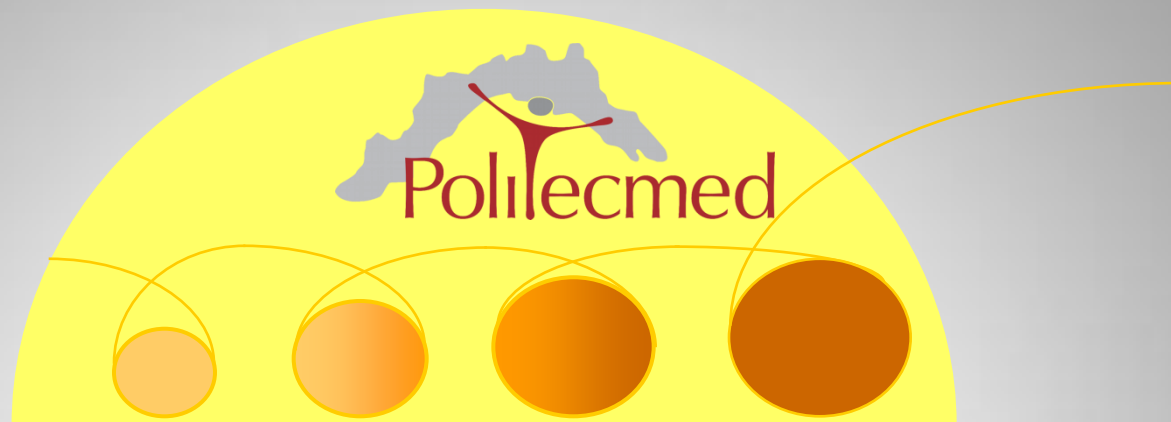
Vision

- ✓ To help the Region to develop a European Smart Specialization Strategy in the biomedical field
- ✓ To promote the creation of new technologies in Life Sciences

Mission

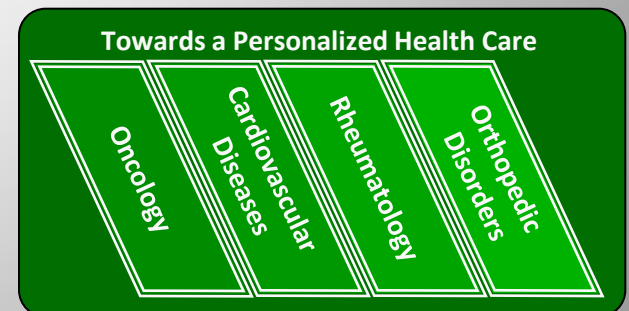
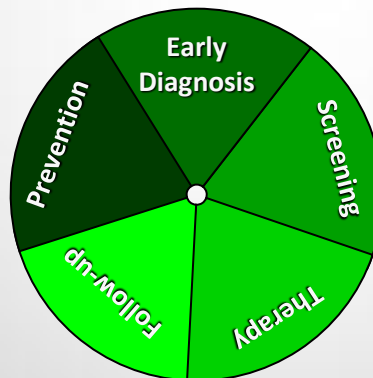
- ✓ Promotion of research activities in synergy with potential end users, focusing on improvement of living conditions
- ✓ Design and implementations of innovation technologies
- ✓ Creation of new healthcare and well-being products and services



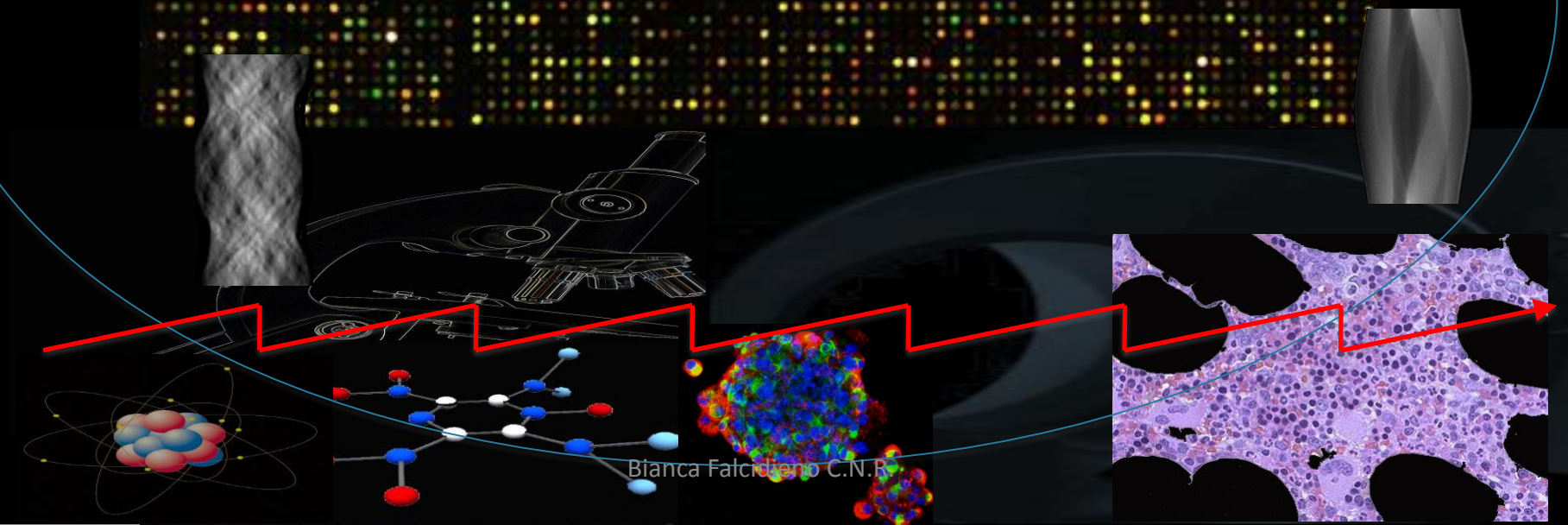


Bianca Falcidieno C.N.R.





TECNOBIONET



Bianca Falciandri C.N.R.

Image production, integration, representation and interpretation

Neuroscience

**Drug Discovery
Delivery
Development**

**Stem cells &
cell therapies**

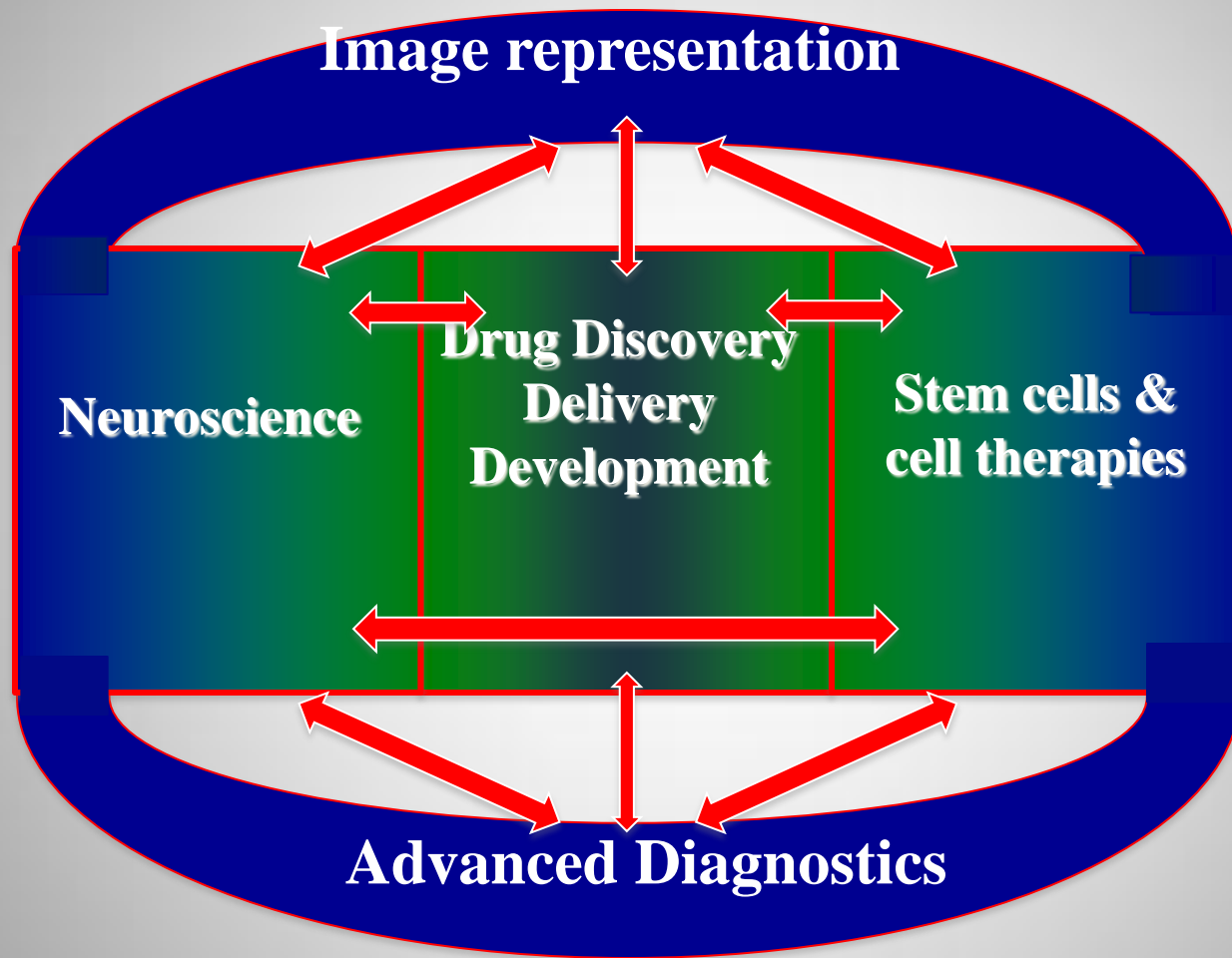
Advanced Diagnostics; Molecular biology

Partners

1. UNIGE	UNI
2. AOU S. Martino	OTH
3. EO Galliera	OTH
4. Ist G.Gaslini	PUR
5. IST	PUR
6. Ist Biofisica del CNR	PUR
7. Ist Italiano di Tecnologia	PRC
8. CBA	PRC
9. C Sper Ass Agricola (CrSAA)	PRC
10. CNRB	PRC
11. Az Chim Riunite Angelini Francesco ACRAF S.p.A.	IND
12. Bureau Veritas S.p.A.	IND
13. Carestream Health Srl	IND
14. Analisi & Controlli S.p.A.	IND
15. Paramed Srl	SE
16. Arrow Diagnostics Srl	SE
17. Biorigen Srl	SE
18. Mastelli Srl	SE
19. Omega Srl	SE
20. Sirius-biotech Srl	SE
21. Tib Molbiol Srl	SE

Bianca Falcidieno C.N.R.

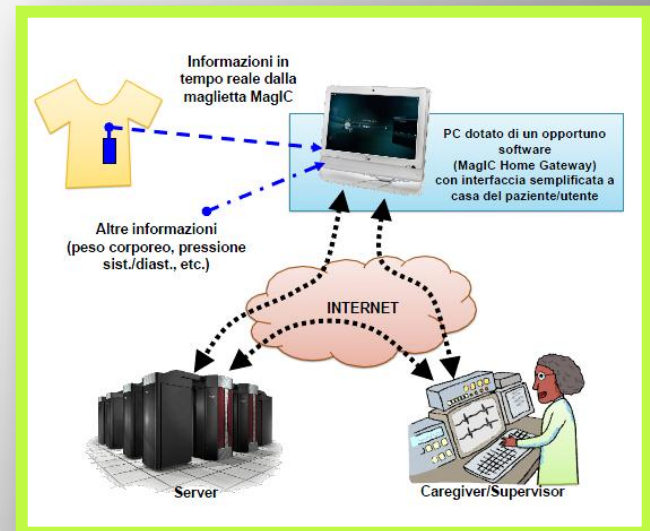
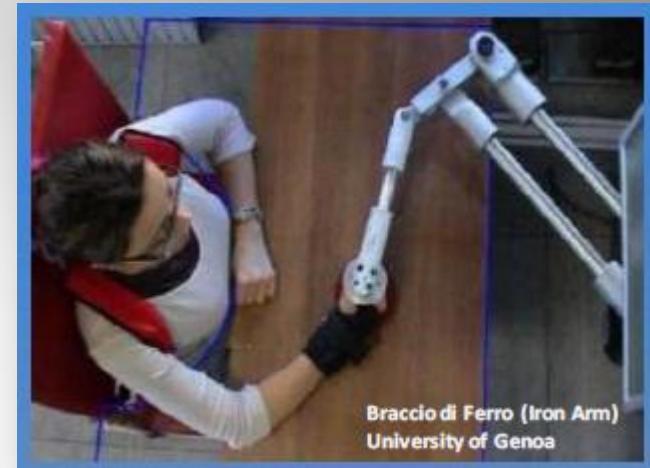
Research Fields



SI4Life - Science and business together for quality of life

SI4Life: an international hub for life quality

- SI4Life includes big RTD, big enterprises, SME and association active **in rehabilitation of people with disability**, SME active in the Information & Communication Technology field and Electronics industry.



SI4Life Partners

Italian Institute of Technology (IIT)
University of Genoa
Italian National Research Council (CNR)
Fondazione Don Carlo Gnocchi Onlus
International Hospital Istituto Gaslini
Istituto David Chiossone Onlus
Cepim Centro Italiano Down
Fides Medica S.p.A.
Linear S.r.l.
Optics International s.a.s.
CAP S.p.A.
Celin S.r.l.
Elsel S.r.l.
ETT S.r.l.
GGallery S.r.l.
IFM Group
Smart Group S.r.l.
Soft Jam S.p.A.
Telerobot S.p.A.



SI4Life mission and focus

- SI4Life wants to create systematic **synergies and technological transfer between Companies, Research Institutions and Health Facilities.**
- Through high-level research, SI4Life objectives are to develop **new tools, aids and prosthetic products** enhancing social integration and achievements, recovery skills, autonomy and quality of life for elderly people and individuals with sensory (vision, hearing), neuromotor and cognitive disabilities, when combined with innovative rehabilitation and educational re-training methods.



Currently focused primarily on

- ***smart environments and solutions for chronic disease and home care***
- ***remote health monitoring***
- ***prosthetic aids (artificial ear, artificial robotic motor, tactile substitutes...)***
- ***smart assistive technology to enhance mobility and participation***
- ***serious games in healthcare and rehabilitation.***