

TORINO NEW TEACHING AND RESEARCH HOSPITAL (TRH)

Torino, 18.10.2018



RATIONALE

PSRI - Parco della Salute della Ricerca e dell'Innovazione – Torino New Teaching and Research Hospital, is a unique opportunity:

- ✓ to accelerate the processes grounded on genomic revolution and the derived concept of precision medicine to modify the public health in Torino area,
- ✓ to create a template for similar projects in Italy,
- ✓ to launch a versatile hub to efficiently resolve the emerging clinical needs,
- ✓ to generate economic benefits through involvement of biotechnology and technology enterprises.

- **international center of reference for diagnosis and treatment of major diseases**
- **active site for the technological transfer of biomedical discoveries to industry**

KEY PLAYERS OF THE RESEARCH PROJECT



UNIVERSITÀ
DEGLI STUDI
DI TORINO



POLITECNICO
DI TORINO

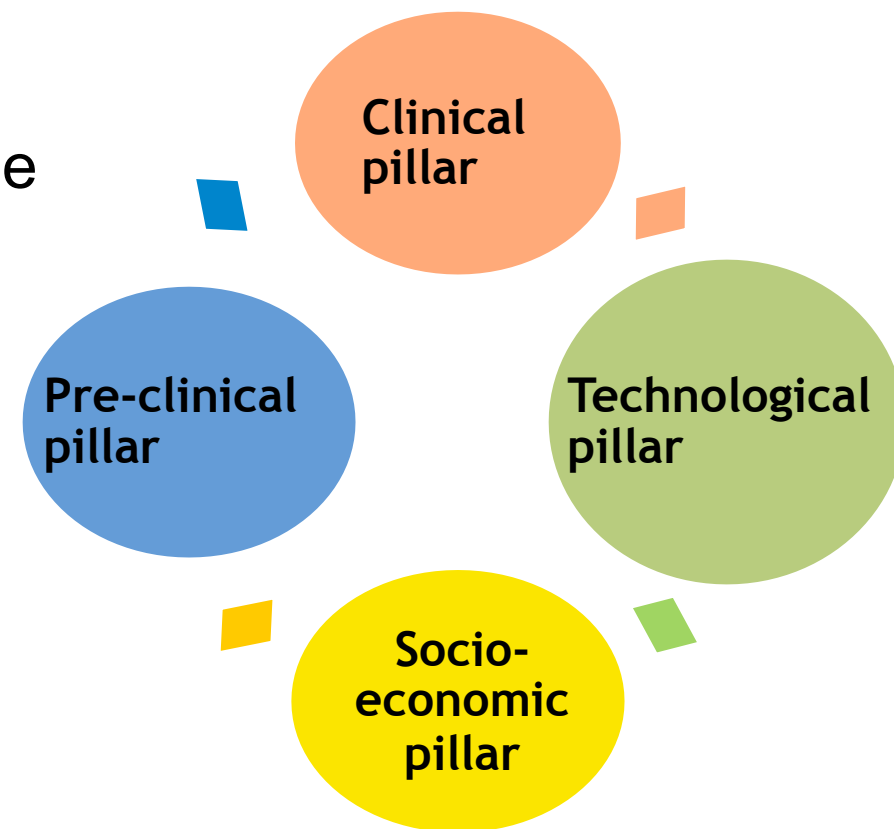


SCIENTIFIC, CLINICAL AND PRE-CLINICAL EXCELLENCES

- ✓ Oncology
- ✓ Neuroscience
- ✓ Organ transplantation and regenerative medicine
- ✓ Cardiovascular and metabolic disorders

plus

- ❑ Bioengineering
- ❑ Big data analytics and telemedicine
- ❑ Socio economic aspects



FROM THE BED TO THE BENCH

RESEARCH EXCELLENCE

UniTo 10,680 publications in “general medicine” subject


2013-2017	UniTo	ITALY
Publications in top 10% most cited worldwide	34,3%	27,4%
Citations per publication	11,2	8,9

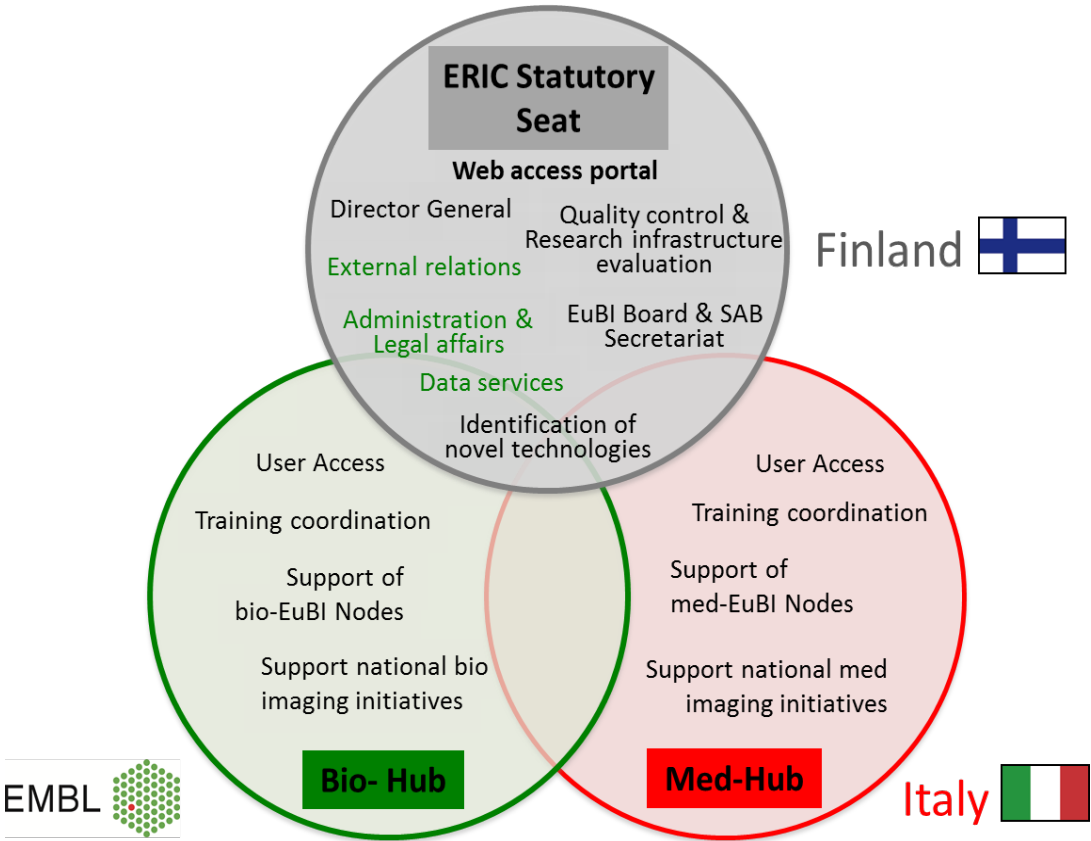
PoliTo 1,578 publications in “biomedical engineering” subject

2013-2017	PoliTo	ITALY
Publications in top 10% most cited worldwide	19.5%	17.3%
Citations per publication	7.8	7.2

EUROPEAN RESEARCH AND INDUSTRY NETWORK



	FP7	H2020 (up tp now)
UniTo	29 (10 M€)	32 (16 M€)
PoliTo	6 (2 M€)	9 (7 M€)



TRASPLANTATIONS CENTRE



Transplant activity in Piedmont 30.4.2018

Transplanted organs = 9.187

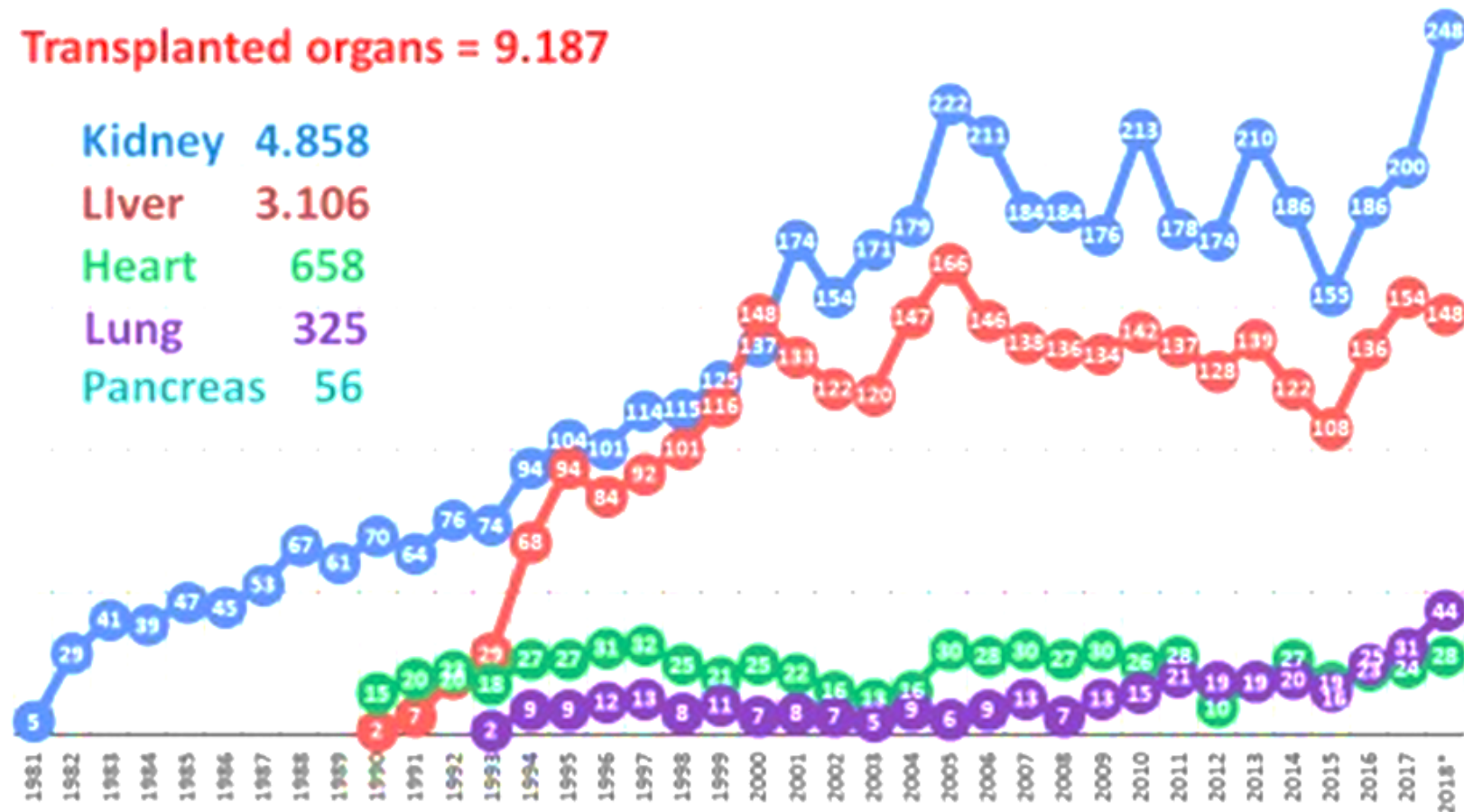
Kidney 4.858

Liver 3.106

Heart 658

Lung 325

Pancreas 56



*Projection on data at april 30 2018

HUMAN CAPITAL

UniTo and PoliTo dedicated to biomedical research

- 500 professors and researchers 200 postdoctoral fellows
- 400 PhD students
- 400 administrative staff
- Città della Salute (Molinette, S.Anna, Regina Margherita, CTO)
- 1,318 medical doctors and physicians and 167 other doctors 3,720 nurses and 167 rehabilitation professionals
- 659 specialised technicians and tech managers 1,989 technicians
- 1,311 administrative, including managers

1,500 R&D +
companies

9.500 for clinical
activities

BUSINESS LANDSCAPE



35 companies



80 members including



21 startups in health domain



10 startups in health domain

ONGOING R&D PROJECT

Advanced therapies for cronic fibrouses (EV-ER)

Digital tEchnology For Lung Cancer Treatment (DEFLECT)

The Home inside the (Health) Park (telemedicine and telemonitoring)

(CANP)

BIObanking and Electronic records for iMAging and Genetics in Oncology (BIO-e-MAGO)

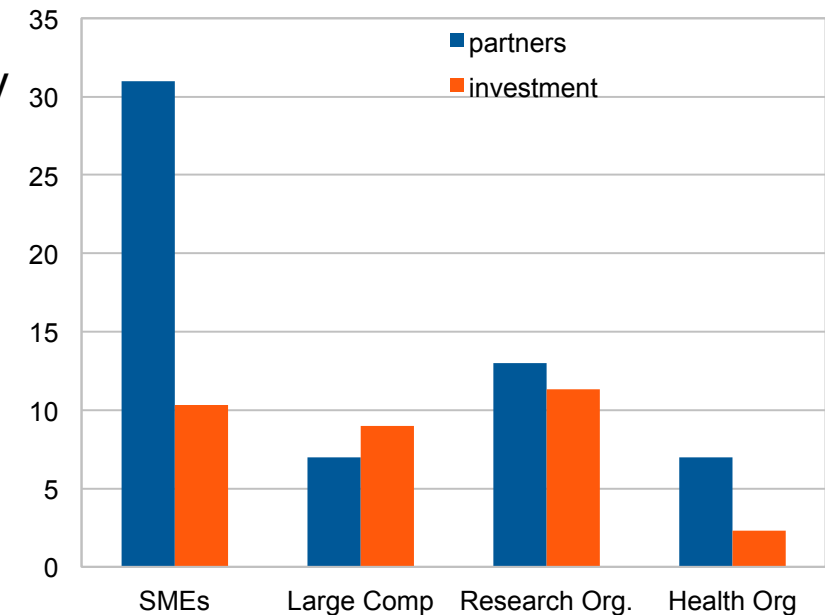
ICT solution for remote rehabilitation of cognitive and motor disabilities_{1s0} from neurological disease (ReHome)

40 M€ investments – 20 M€ grants

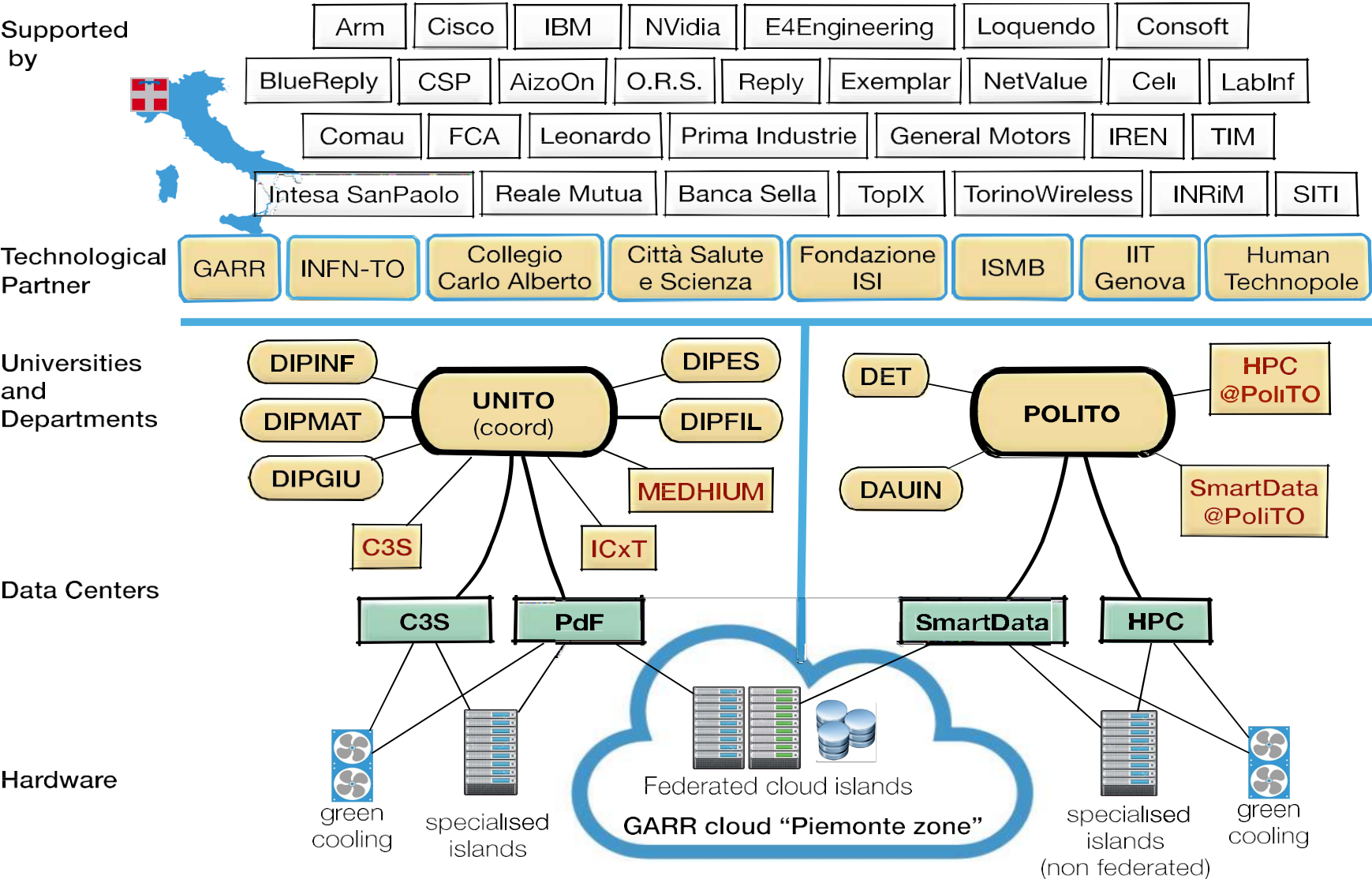
Bracco Imaging - Gadoplus (development of new contrast agent) – 9 M€ (3M€ grant)

10 R&D and Tech Transfer projects for 5 M€ by SMEs at Innovation Clusters (2.5 M€ grants).

5 open large research infrastructure on health domain (public/private) for 15 M€ (7.5 M€ grant)



EXAMPLE OF COOPERATION



NEXT STEPS

- Italian government committed 90 M€ to Regione Piemonte for clinical and preclinical research connected at the new Research City Hospital
- 30 M€ for enlarging the preclinical research site
- 60 M€ for research projects connected to research infrastructures in collaboration between companies, RTOs and health organisations
- Call for projects expected early 2019