WHAT IS POLARIS

Managed by Sardegna Ricerche, Polaris is a system of advanced facilities and services fostering innovation, development and the industrialisation of research.

It is one of the largest science and technology parks in Italy, and specialises in three main areas:

- Biotechnologies: ranging from biomedicine to agroindustrial biotechnologies and bioinformatics
- ICTs
- Renewable energies.











POLARIS is managed by



SARDEGNA RICERCHE

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this is **POLARIS** the Science & Technology Park of Sardinia



500

researchers

tenant organisations

campuses

biotech laboratories

CRS4

clinical trial services

47-tflop computing cluster



CUTTING-EDGE FACILITIES & SERVICES

In its two campuses, set against a pristine countryside facing the sea, Polaris supports companies, research centres and agencies wishing to carry out research and pre-competitive development activities. In particular, it is open to entrepreneurs and researchers wishing to set up new companies or pursue innovative projects exploiting the results of research.

For this purpose, it makes available **multifunctional spaces**, **equipped laboratories**, reception, logistic and general support services, as well as specialised technology development and innovation **services**. Furthermore it hosts **one the most powerful computing clusters** in Italy: 47 TFlops and more than 1.5 PB Disk Space.

The Park is also equipped with:

- Technology Laboratories. In particular, the following labs are available for the Biotech sector: Bioinformatics; Genotyping and Gene Expression Profiling (with an Affymetrix platform and an Illumina Genome Analyzer System); Pharmacology (with a 900-sqm animal holding facility); Prototyping and Medical Devices (with 3D scanners and rapid prototyping machines); Nano-Biotechnologies (with Nano-SAXRD and a motorised inverted fluorescent microscope); Proteomics (with high processivity systems for IEF and 2D-PAGE, imaging systems, nanoHPLC-nanoESI-Q-TOF, MALDI TOF, peptide design, synthesis and purification devices); Bioanalytics technologies; Molecular Imaging and NMR (with a Bruker Avance 600 MHz and a MRI, Bruker Avance 300MHz); Molecular Immunology (with a FACS Canto II BD); Biosensors and Telemetry; Food Technology and Microbial Biotechnolgy (with various pilot plants for food processing and packaging); ICTs for Medicine.

- A technology incubator for start-up and spin-off biomedical companies (**Bioincubator**).
- A Business Farm for ICT enterprises.
- A **PATLIB centre** (EU network of patent information centres).
- A Documentation centre.
- A centralised **Science Library**.

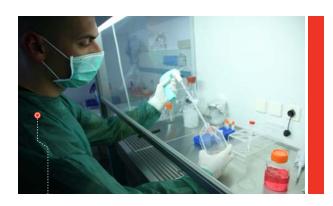
Polaris is a member of the Association of Italian Science & Technology Parks (APSTI) and of the International Association of Science Parks (IASP). It is also a member of Assobiotec and the Enterprise Europe Network, is a seat of the Agency for the Promotion of European Research, and is engaged in collaborations with numerous universities and research centres at a local, national and international level.

SARDINIA: A GLOBAL PLAYER

According to a recent report by Assobiotec - Ernst & Young, **Sardinia ranks 1st** among regions in Southern Italy as to number of biotech companies. The thriving status of the Biotech sector on the island is mostly due to:

- a **strong institutional support** for and investments in R&D by the Regional Government of Sardinia;
- state of the art infrastructures such as the Science & Technology Park;
- local scientists of international standing;
- genetic drift phenomena (the so-called genetic isolates), the result of thousands of years of geographical isolation, which make Sardinia the ideal place for studying complex diseases.





SARDEGNA BIOVALLEY

The Sardinian Biomedicine and Health Technology Cluster, known as Sardegna Biovalley, is based in Southern Sardinia (in the areas of Cagliari and Pula). The Cluster, created thanks to a public-private investment of more than 40 million Euro is one of the only three Italian Biomedicine clusters **officially recognized** by the Italian Ministry of University and Research.

The Cluster promotes and organises conditions fostering synergies between research, businesses and the healthcare system, facilitating the conception, testing, validation, development and implementation of **new diagnostic and treatment procedures** in the advanced healthcare and personalised medicine sectors. In particular it supports research on **complex diseases** with high regional incidence and health impact, such as type I diabetes, multiple sclerosis and thalassemias, which have a strong genetic component.

The Cluster can count on the presence of **Fase 1**, the first public company in Italy that pursues technical-financial investment in innovative projects to carry new potential diagnostic and treatment agents to a more advanced stage of preclinical and clinical industrial development.

Moreover the company delivers high-quality services and funding for attracting national and international Phase I and IIA clinical trials to the Island by means of international calls for proposals which are published yearly on its official website. Finally it promotes the development of scientific know-how in the field of clinical trial and drug development in Sardinia.