

CONFERENZA GARR 2025  
FRONTIERE DIGITALI

# **BIOREPOSITORY@ELIXIR-IT**

A COMPUTATIONAL ENVIRONMENT FOR STORING AND SHARING  
HUMAN GENETIC DATA

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**CNR Bari – Elixir-Italy**

- Increasing accessibility of nucleic acid sequencing technologies
- Applications: precision medicine, personalized medicine, pharmacogenomics
- Challenges: technical, legal, and ethical
- Goal: secure and efficient platform for managing human genetic data



☰ | TGR Puglia Bari BAT Brindisi Foggia Lecce Taranto

Bari

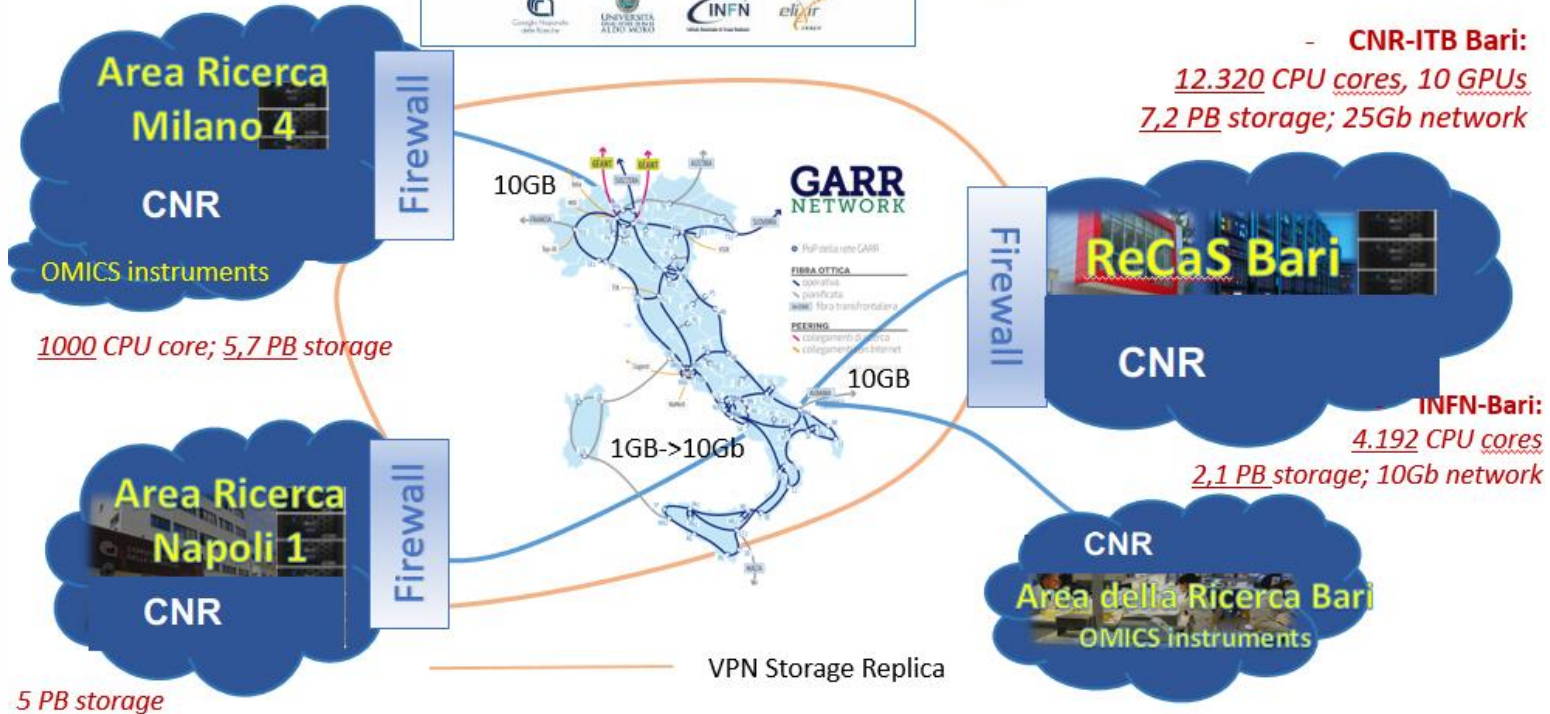
## Nel campus dell'università il più avanzato sequenziatore di Dna al mondo

*Il macchinario consentirà di sequenziare più di 100 genomi umani in 48 ore; il nodo italiano di Elixir, l'infrastruttura europea di ricerca per le scienze della vita, si conferma un centro di ricerca all'avanguardia*

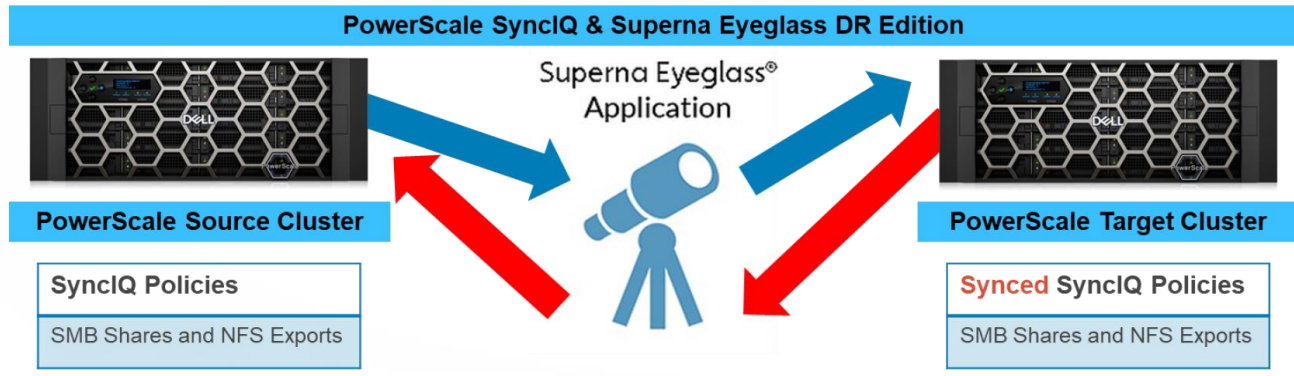
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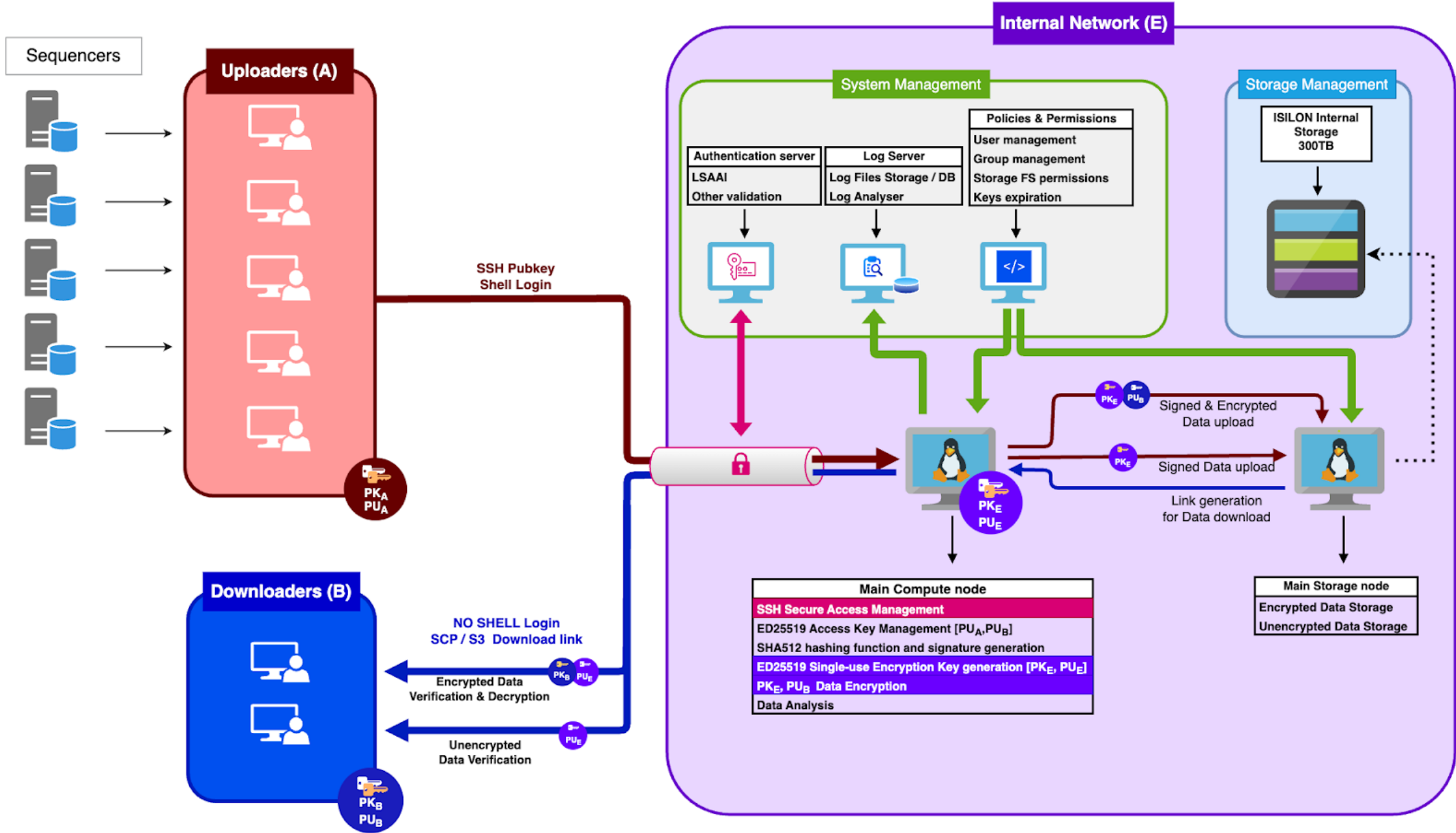
- Developed by ELIXIR-IT, based on ReCaS (Bari) infrastructure
- Federated node of the European Genome-Phenome Archive (EGA)
- Supported by PNRR, EOSC, ICDI initiatives
- Ensures GDPR compliance, security, and accessibility





- Total Capacity**  
5 PB of raw data
- Security**  
Data-at-rest encryption  
Geo-redundant replication (CNR-ITB Milan, CNR-ICAR Nap.)
- Availability & Integrity**  
Ensured for raw and processed data
- Resources for Analysis**  
Up-to-date bioinformatic databases available





<https://elixir-italy.org/>



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Services

ALL SERVICES



- The service was offered for free until April 30 as part of the testing phase, with up to 10 TB of storage per account.
- We are now in the production phase: access will remain free for the next three months.
- After that, a subscription model will be introduced—details and pricing will be shared soon.
- Data uploaded during the test phase will be preserved; users will have one month to retrieve their data after subscription ends before permanent deletion.