BiobankCloud project will develop a cloud-computing **platform as a service (PaaS)** for the storage, analysis and inter-connection of NGS data from biobank samples.

**Challenges:**
- Regulatory framework and data model for biobank data sharing
- Scalable, highly available storage infrastructure
- Data-intensive computing workflows
- Cross-cutting security platform
- Inter-connection of biobanks
- Connection with public clouds
- Validating with real-world, parallelized analysis pipelines
- Integration of all these components as a PaaS

**Examples of use cases:**
- Traditional bioinformatics workflows
- Inter-connection of biobanks
- Query NGS data from multiple biobanks
- Run workflows over multiple biobanks
- Secure long-term storage of NGS data
- Privacy-preserving hybrid cloud usage

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