

## IHI Call Days | Call 12

## Al Factory for Biotech Innovation (Al4BioTech)

Transforming biomedical data into life-saving therapies through Al





## Challenges and objectives

#### **Data Overwhelm**

Massive volumes of genomic sequences, lab results, and health data are generated daily...

#### **Insight Gap**

...yet researchers struggle to translate this wealth of data into actionable treatments

#### Addressing SO2 and SO4

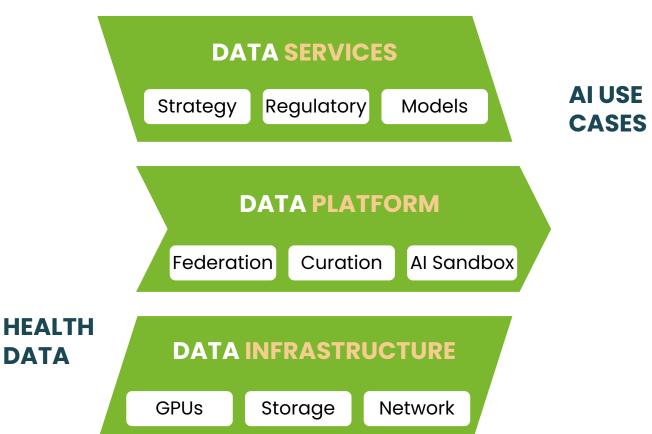
By enabling cross-sector data sharing and AI model fine-tuning, the AI4Bio project addresses **unmet needs** in data-heavy domains like **oncology, rare diseases, and vaccine development** – fields where ample data exists but new insights and therapies are urgently needed.



## Al Factory for Biotech Innovation

#### **THE VISION**

The Al Factory for
Biotech will provide a
secure, end-to-end
environment that
empowers life science
organizations to finetune and deploy Al
models on large-scale
biomedical data with a
"data in → model out"
experience





## Is your project suitable for IHI?

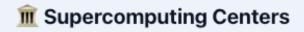
The project will bring together the **pharmaceutical/biotech industry** (which provides domain problems and data), the **tech sector** (Al and data analytics expertise), and **public research infrastructures** (supercomputing centers, universities) in a large-scale partnership.



Domain problems and real-world use cases



Tech sector expertise in data analytics



Infrastructure and computational power



Scientific rigor and patient-centered focus



## Outcomes and Impact

#### **Key Results**

A platform that enables secure AI model finetuning on biomedical datasets

Successful demonstration studies in several disease areas

Established data pipelines and libraries for handling common biomedical data types

A set of documented MLOps workflows and best practices for biomedical AI

#### **Impacts**

#### Scientific

How to extract insights from complex multidimensional data



#### Societal & Health

Shrink time to translate a biomedical discovery into a therapy



#### Economic & Industry

Strengthen the European health industry's competitiveness in the era of AI and big data



## What We Bring to the Table

## Our Expertise

- Real-World Evidence (RWE) generation
- AI/ML deployment on clinical data
- Health data harmonization (FHIR/OMOP)
- Initial consortium of partners ready

### Seeking Partners

- Biotech & Pharma companies
- Al Technology specialists
- Supercomputing Infrastructure
- Academic/Clinical institutions
- Legal & Ethics experts





# Let's Build the Future Together

Join us in creating the Al Factory that will revolutionize biotech innovation

#### **Get in Touch**

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