

IHI Call Days | Call 12

AI Factory for Biotech Innovation (AI4BioTech)

Transforming biomedical data into life-saving
therapies through AI



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[AI4BIO proposal](#) | [Participant profile](#)



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.

AI Factory for Biotech Innovation

THE VISION

The AI Factory for Biotech will provide a secure, end-to-end environment that **empowers life science organizations to fine-tune and deploy AI models on large-scale biomedical data** with a “data in → model out” experience

**HEALTH
DATA**

DATA SERVICES

Strategy

Regulatory

Models

DATA PLATFORM

Federation

Curation

AI Sandbox

DATA INFRASTRUCTURE

GPUs

Storage

Network

**AI USE
CASES**

Is your project suitable for IHI?

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



Pharma & Biotech

Domain problems and real-world use cases



AI Specialists

Tech sector expertise in data analytics



Supercomputing Centers

Infrastructure and computational power



Academic/Clinical

Scientific rigor and patient-centered focus

Outcomes and Impact

Key Results

A platform that enables secure AI model fine-tuning 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 multi-dimensional 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
- AI Technology specialists
- Supercomputing Infrastructure
- Academic/Clinical institutions
- Legal & Ethics experts



In-Kind Contributions (IKOP) Available

Let's Build the Future Together

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

Get in Touch

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