BioMedIT Network: Swiss Federation of Trusted Research Environments

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SIB Swiss Institute of Bioinformatics

A project of

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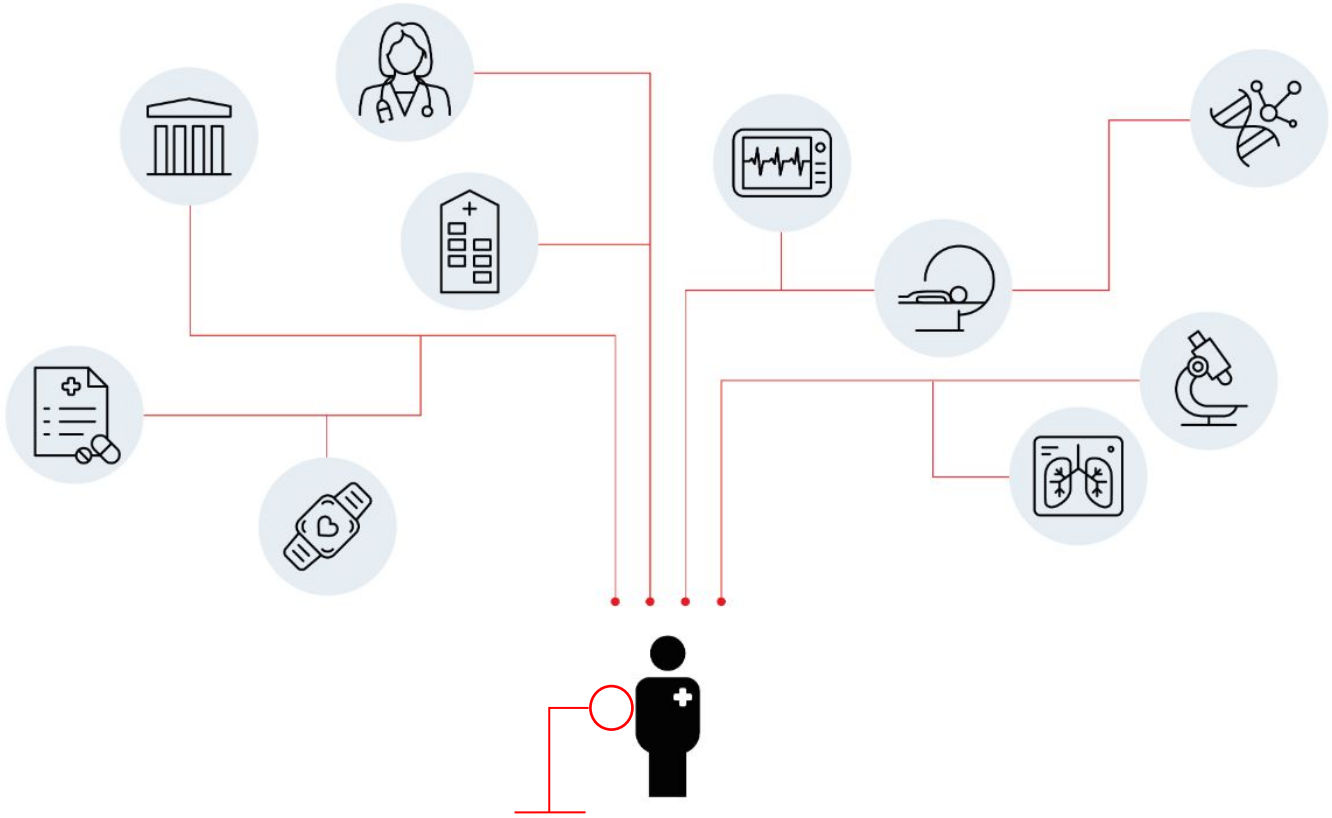
Personalized Health Research: Need for TREs

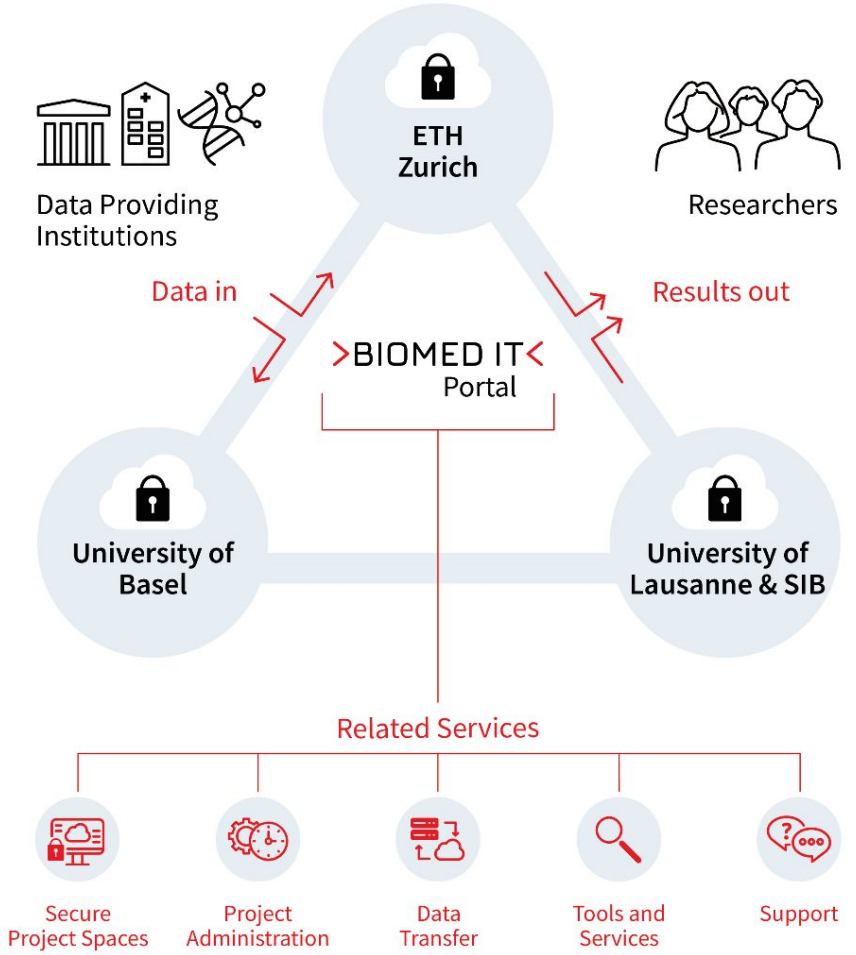


- Hefty civil, criminal and administrative penalties possible otherwise.
- Obligation to research subjects.
- Maintain trust of public & funders.
- Trusted Data management solutions strengthens grant proposals.
- Trust can improve subject recruitment.

Research on Personalized Health Data requires special security measures: protect individual's privacy and ensure confidentiality of data OVER THE FULL DATA LIFECYCLE

BioMedIT: Switzerland's Trusted Research Environment

- Integral part of SPHN, Launched in 2017.
- Secure Cloud & HPC offerings.
- BioMedIT Portal as entry point, central tools and collaborative services.
- Secure mobilization, processing and storage of sensitive research data.
- 3 physical nodes providing scientific IT services.
- Central coordination (DCC).
- Operating under one Information security policy.



Central Services

Terminology Service

SPHN DCC Confluence

Schema Forge

SPHN Schema Forge

SPHN Federated Query System

GitLab

>BIOMED IT< sett

Portal git

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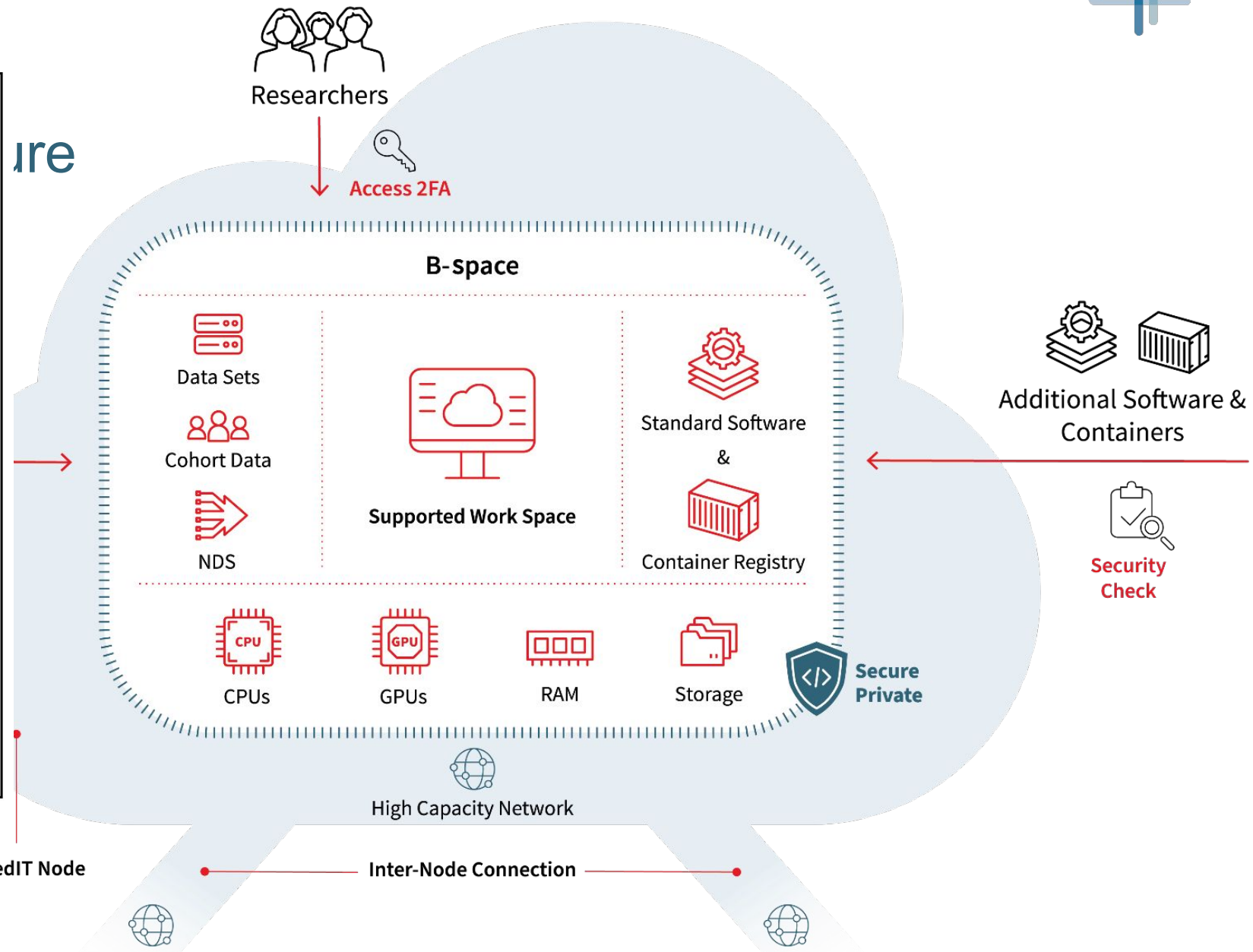
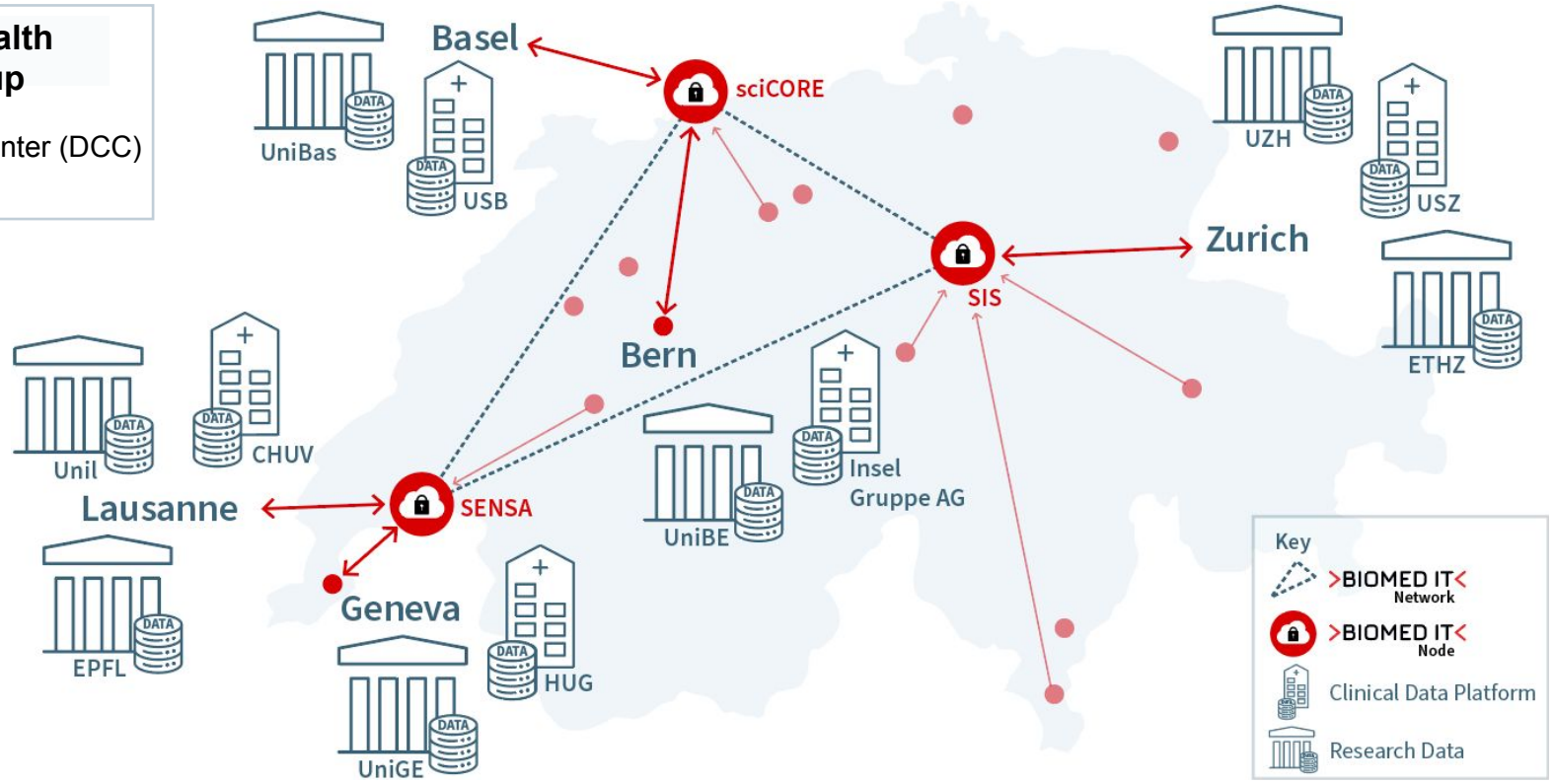
Tools & Resources



National Landscape

Personalized Health Informatics Group

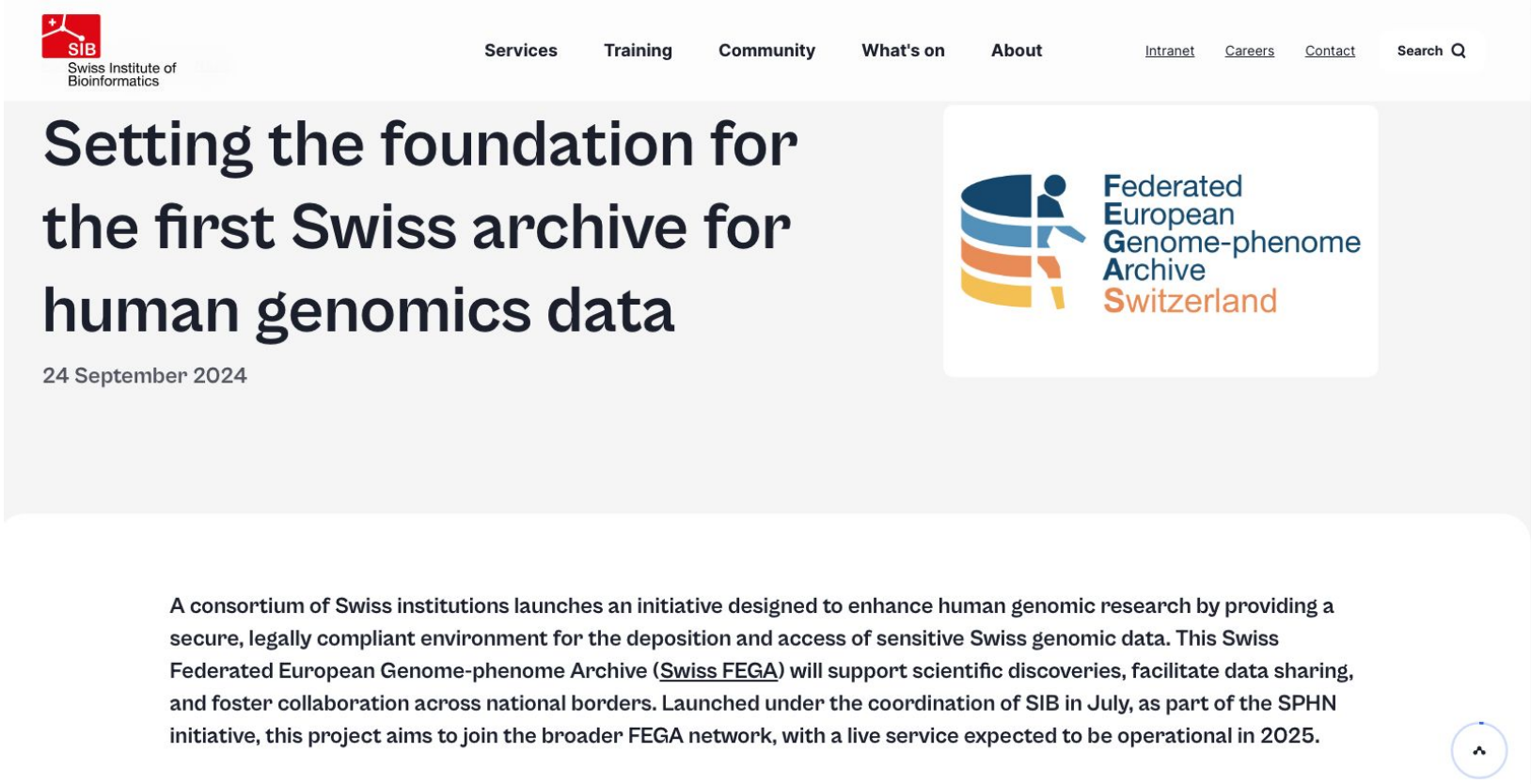
SPHN Data Coordination Center (DCC)
BioMedIT Network



> 120 national and international projects
> 30 data providers connected
> 800+ users

What's Next

– Setting up of Swiss FEGA



SIB Swiss Institute of Bioinformatics

Services Training Community What's on About Intranet Careers Contact Search

Setting the foundation for the first Swiss archive for human genomics data

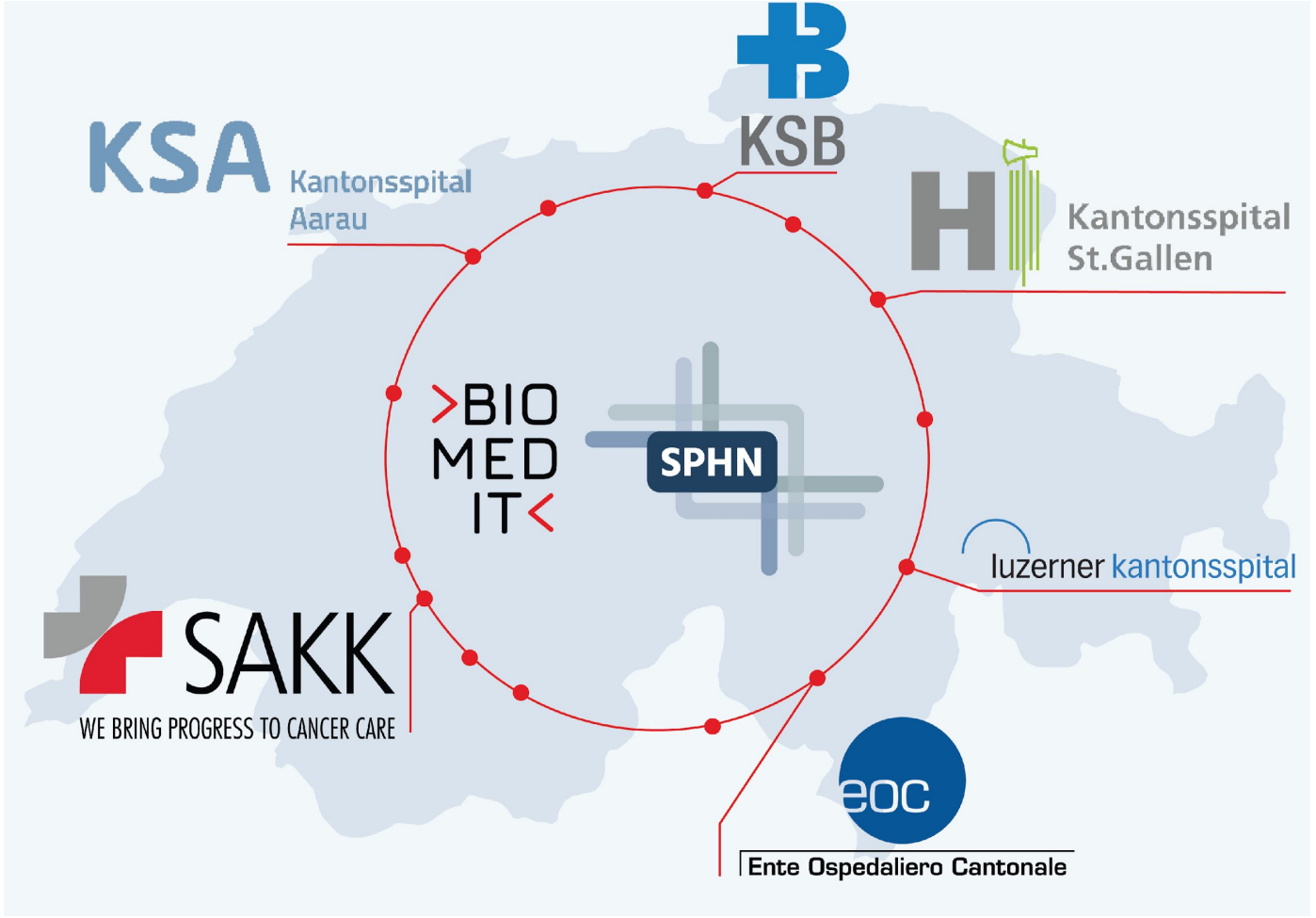
24 September 2024

Federated European Genome-phenome Archive Switzerland

A consortium of Swiss institutions launches an initiative designed to enhance human genomic research by providing a secure, legally compliant environment for the deposition and access of sensitive Swiss genomic data. This Swiss Federated European Genome-phenome Archive (Swiss FEGA) will support scientific discoveries, facilitate data sharing, and foster collaboration across national borders. Launched under the coordination of SIB in July, as part of the SPHN initiative, this project aims to join the broader FEGA network, with a live service expected to be operational in 2025.

What's Next

– Expansion of Network



What's Next

– BioMedIT Whitepaper(s)

>BIOMED IT<

Versatile Trusted Research Environments: An approach for Switzerland

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Executive Summary

Widespread adoption of versatile Trusted Research Environments (TREs) is essential for conducting research analysis involving sensitive personal data, which plays a pivotal role in advancing research across healthcare, social sciences, and humanities in order to meet societal challenges.

Despite the immense potential of sensitive data analysis, there are substantial risks linked to its use as well as

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