

Tap into our expertise and services

Whether you are part of :

- a start-up
- a hospital or a clinic
- a pharma/medtech company
- an academic institution or public-private consortium

We can collaborate within different frameworks, incl. Innosuisse, European or national project, collaboration agreement/service mandate.



Biostatistics & bioinformatics analysis

We integrate, mine and analyse all kinds of life science data, including complex multi-omics datasets, thanks to tailor-made solutions and AI/machine learning capacities.



Software development

Our experts harmonize and optimize data handling processes through the customization and development of analysis pipelines or software tools. This includes multi-site data pipelines, diagnostic tools and more.



Training

Our comprehensive and constantly evolving course portfolio provides hands-on experience of the most up-to-date bioinformatics techniques and resources. It can be tailored to the needs of your organization and offered as on-site or online private courses.



Sensitive data processing

Biomedical research relies on a critical mass of heterogenous sensitive data from patients or clinical trials spread across institutions. We enable the secure sharing and processing of interoperable data.



Data stewardship & management

We assist you with Data Management Plans and in making your data FAIR*. We help you reach data interoperability targets and ensure the long-term management of your biological and biomedical data. This is done by annotating them and building custom-made tools.



Knowledge representation

Get novel and faster insights by accessing the big picture of the available data. Our expertise in knowledge graphs and ontology engineering acts as an accelerator for data integration and FAIRification.

You can also rely on our **multi-site coordination skills and our process optimization ability.**

*FAIR : Findable, Accessible, Interoperable, Reusable

- Mass spectrometry
- Molecular imaging
- Multi-omics and spatial analyses: genomics, metabolomics, lipidomics, proteomics, transcriptomics, microbiomics
- Nanostring and protein arrays
- Single-cell and bulk RNAseq, TCRseq, CITEseq, ChIPseq, ATACseq
- Text

We love data

We are data science experts, software developers, biocurators and computational biologists with a passion for biological and biomedical data and the latest associated technologies. The data we regularly handle include:

- Clinical (collected in routine, from clinical trials or cohorts)
- Mass cytometry (CyTOF)

More than a scientific project partner:

Our 360° approach

SIB delivers a comprehensive scientific expertise...



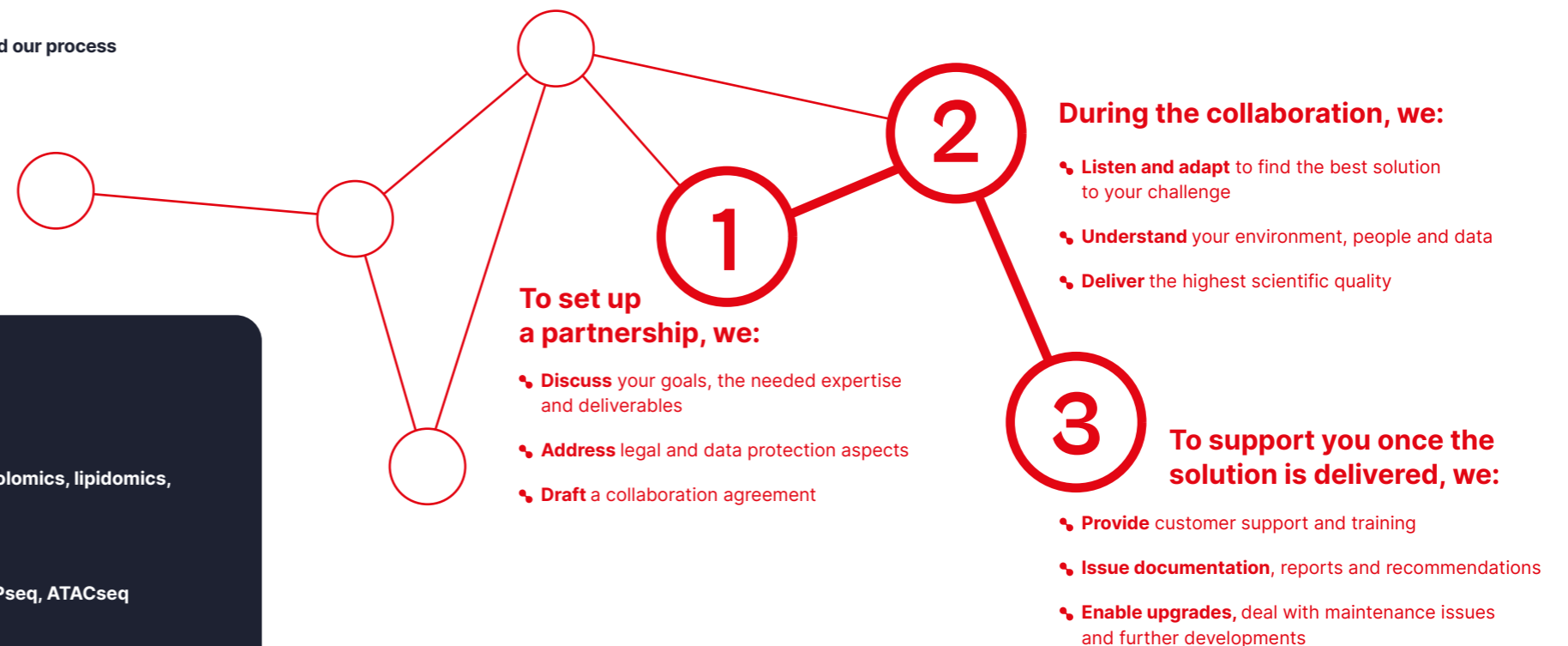
From your data...

... to your discoveries, publications & innovation

... and a professional support

Legal and technology transfer • Project management
Coordination • IT infrastructure
Data security • Customer service
Data protection and GDPR

Our experience spans the discovery steps following the generation of data, from R&D to applications.



Solving data challenges to enable discoveries

We have over 25 years of experience in successfully delivering life science data services, solving data-related challenges in large European public-private partnerships, SMEs, pharmaceutical, chemical or food companies. Read more on the solutions we provide and how we could collaborate in future.



Fostering precision medicine through multi-omics data integration

Your challenge: Translating multi-omics big data into functional insights.

Our solution: We conduct powerful data integration to help you improve disease prevention, early detection and prediction, monitor progression; and design personalized treatments. For instance, we used innovative multi-omics analysis integrating lipidomics, transcriptomics and clinical data to identify potential biomarkers of Type 2 diabetes.

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Making your data FAIR to let you focus on research and discovery

Your challenge: Increasing the reliability in data analysis and the innovation potential through well annotated data and reproducibility. Companies, universities, funders, and publishers are increasingly expecting data to be FAIR.

Our solution: Whatever biological or biomedical data you have, we have a proven expertise in making them FAIR and packaging them in a publication-ready way. This is what we do as part of a number of endeavours, such as several Innovative Medicines Initiative projects on diabetes, cancer, arthritis, as well as others projects dealing with multiple -omics or data from diverse biological origin (e.g. plants, bacteria, fungi).

Clinical software development

Your challenge: Robust and user-friendly software is required for data collection in routine laboratory activities. Your analytical processes may rely on a range of disconnected tools developed over the years that slow down your research. But creating a complete software solution for collecting, processing, analysing and visualizing your data may not be your core business.

Our solution: With our agile, iterative and collaborative approach, we can build a proof of concept with a powerful prototype, before embarking on a full-scale development project.

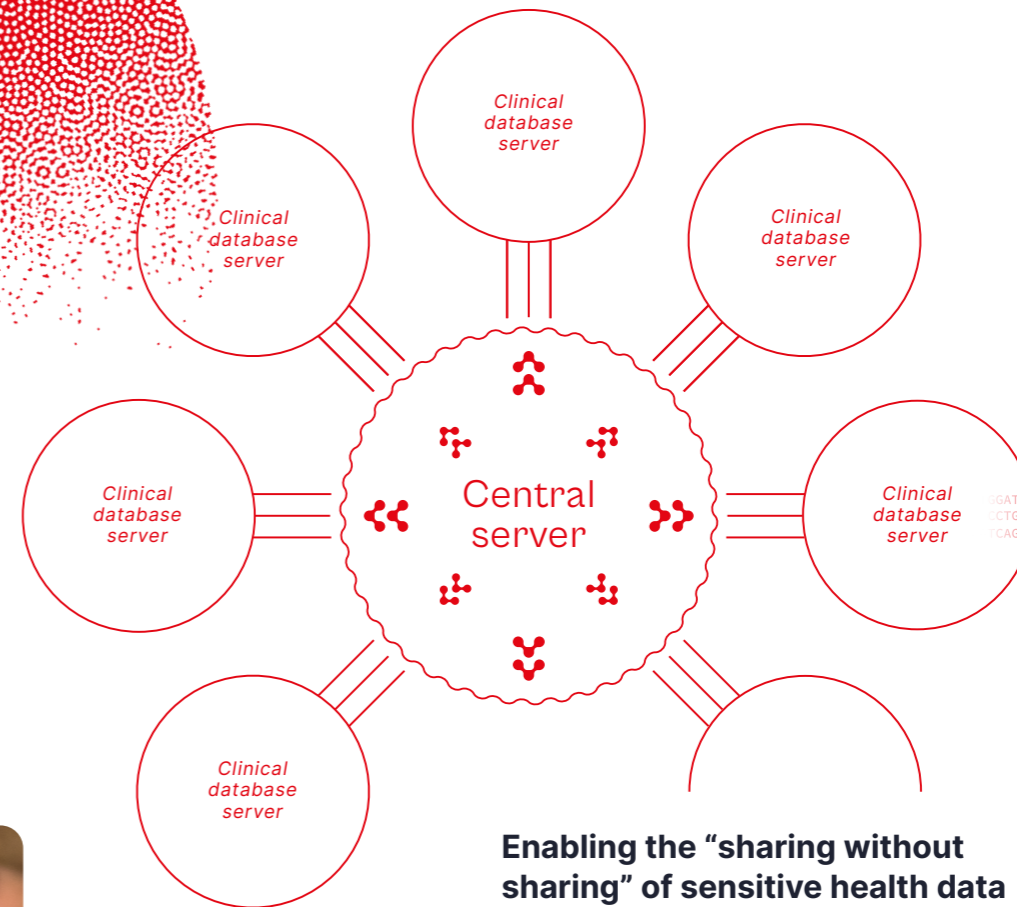


Tailored training for your employees

- Your challenge:** Onboarding a group of employees with mixed skills levels in R programming language and RNA-seq data analysis, and on a tight schedule.
- Our solution:** We adapt courses to create a training path adjusted to your schedule constraints and team-specific needs.

Customizing open science tools to your needs

- Your challenge:** Deploying local instances of leading life science databases and software tools, fit for integration with in-house data and workflows.
- Our solution:** All SIB databases and tools can be tailored to specific needs or proprietary data. For instance, the orthology database OMA, part of Swiss Orthology, was customized to the needs of the chemical company BASF. This enabled them to develop various traits in crops such as soybean and wheat, by inferring homologous relationships between genes using both public and proprietary genome sequences.



Enabling the “sharing without sharing” of sensitive health data

- Your challenge:** Making sensitive patient data accessible for biomedical research in accordance with specific regulatory frameworks.
- Our solution:** We help you achieve greater value in your health research projects by analysing sensitive data collaboratively and safely, using our innovative federated database for remote analysis. This approach enables researchers to access data without physically sharing it.

We are trusted by

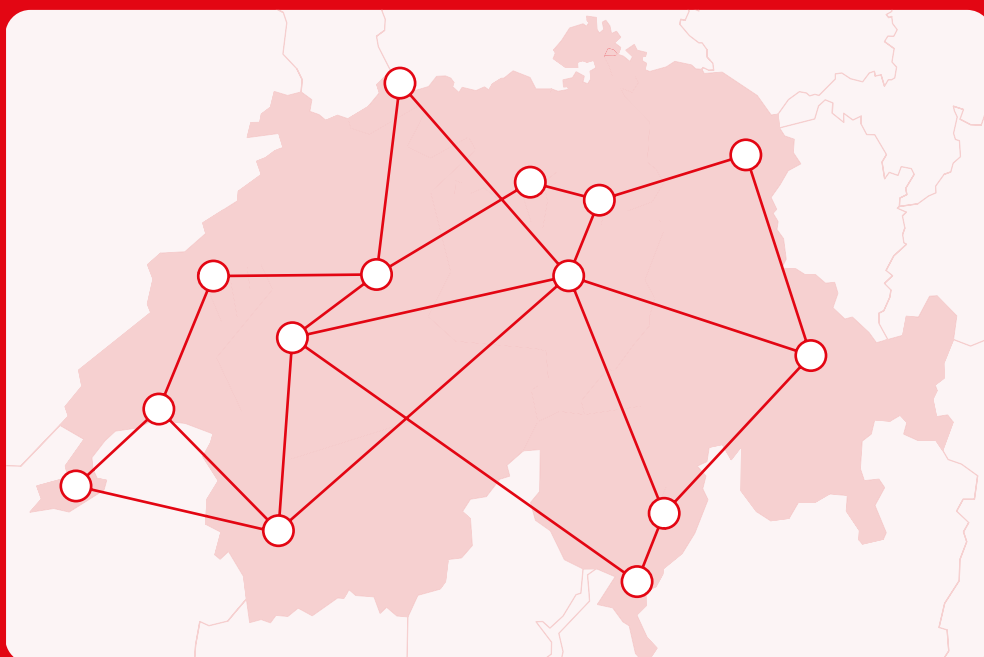


and many more ...

About SIB

The SIB Swiss Institute of Bioinformatics is an internationally recognized non-profit organization dedicated to biological and biomedical data science. Since 1998, our data scientists provide essential databases and software platforms as well as bioinformatics expertise and services to academic, clinical, and industry groups. The institute contributes to keeping Switzerland at the forefront of innovation by fostering progress in biological research and enhancing health.

Data scientists for life



88
groups

900
members
including

190
employees

28
institutional partners

We unlock access to national expertise through institutional partnerships and with our teams closely collaborating or nested within academic groups.

Contact us



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