



Empowering FAIR Life Science Data

Collaborative Research Data Management – Insights from the de.NBI & ELIXIR Germany Network

Helena Schnitzer & Nils-Christian Lübke

Forschungszentrum Jülich GmbH



Conference on
Research Data Infrastructure

August 26th – 28th, 2025

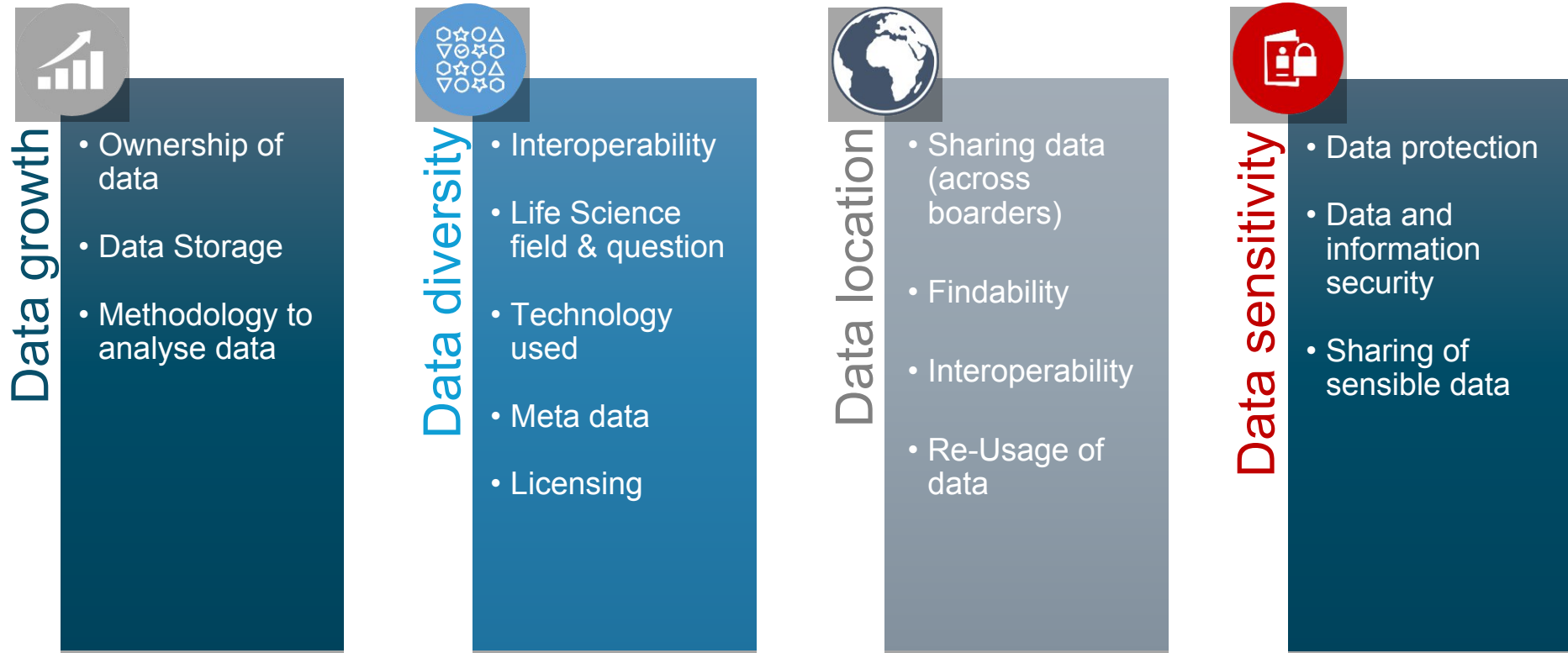
RWTH Aachen, Germany



GERMAN NETWORK FOR BIOINFORMATICS INFRASTRUCTURE



Data related questions – holistic and specific



Graphics taken from ELIXR standard slides – Feb 2024



Call for action

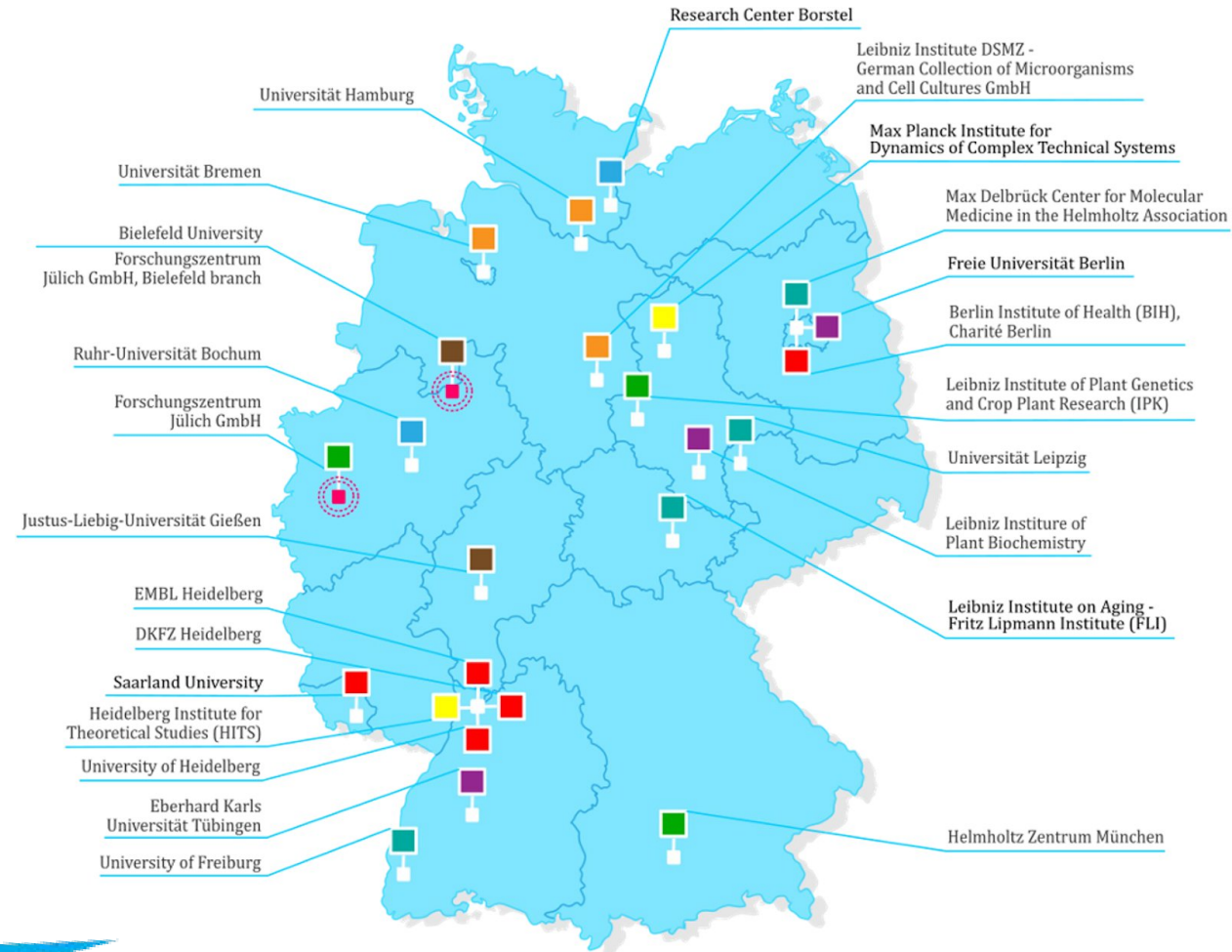
How can Research Data Management improve your work life?

How can you improve Research Data Management?

-> Community actions, questions, solutions

About de.NBI – The German Network for Bioinformatics Infrastructure

- **Federated academic research infrastructure** since 2015, funded by the BMFTR
- **24 contractual partners**
- **8 Service Centers**
- Scientific expertise in a wide range of bioinformatics topics



About **ELIXIR** Europe

What?

The ESFRI Infrastructure for life science data

An intergovernmental organization

How?

Connecting and developing a **network of experts**

Providing hundreds of interoperable, high-quality **services and resources**

Sustaining a distributed infrastructure, freely available to all

Why?

To accelerate **life science research** and its impact on society

21

Nodes

ELIXIR Nodes form national networks of excellence, containing over **250** institutes/universities

1

EMBL-EBI Node

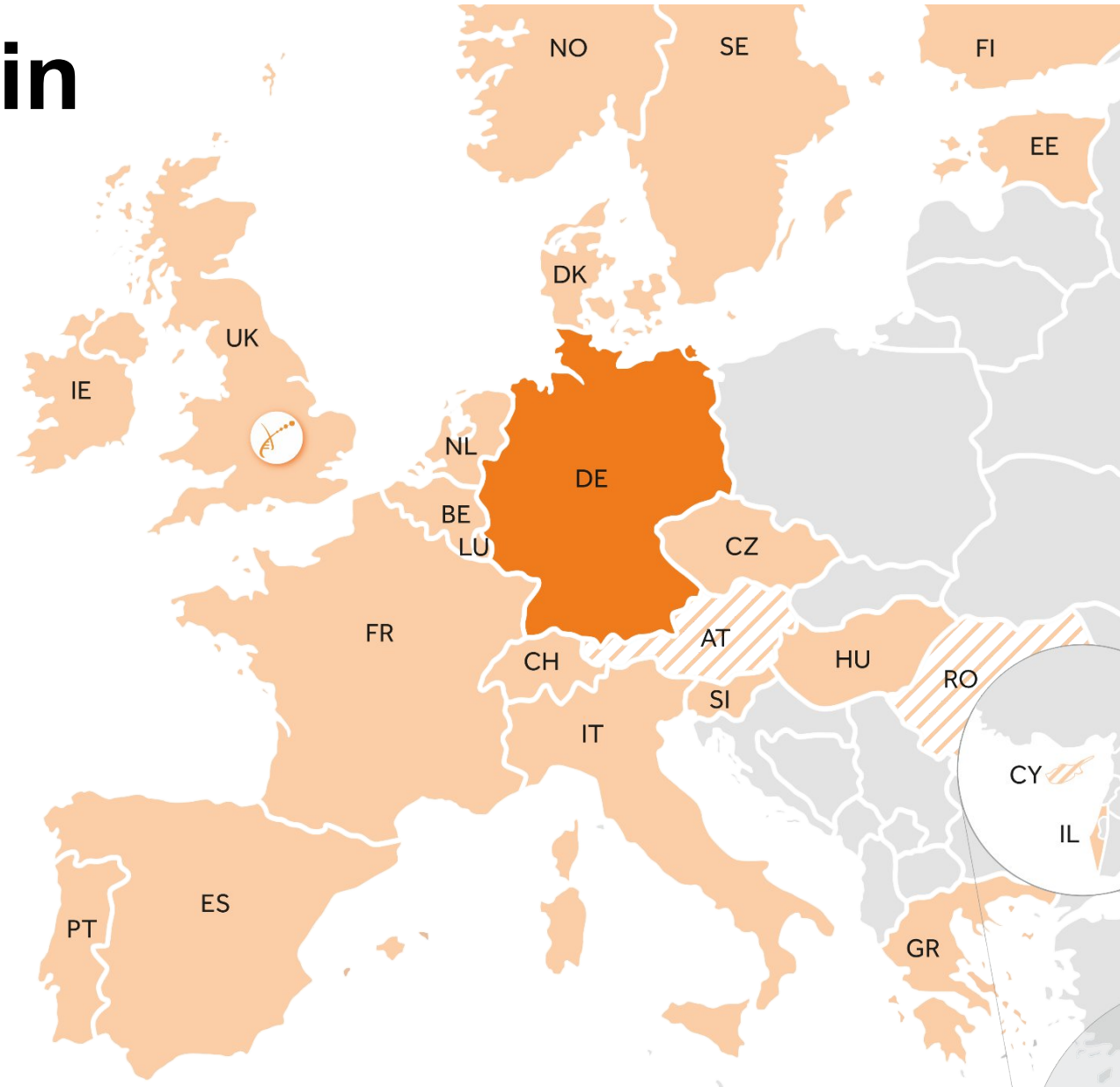
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Observer Countries

The German Node within **ELIXIR** Europe

- **ELIXIR Germany** is a national Node of the European ELIXIR infrastructure since 2016.
- The Node is constituted by the **German Network for Bioinformatics Infrastructure (de.NBI)**
- Two names, but one consortium

Bioinformaticians
Data & software stewards
Data Scientists
Coordinators
Research software engineers
Life scientists
System administrators
IT operations
Administrators
Trainers
Infrastructure specialists
More than 1,000 experts



de.NBI & ELIXIR Germany – Key Areas and Resources



Service

Bioinformatics
tools & services
for life sciences



Training

Bioinformatics
training with a broad
range of courses



Cloud

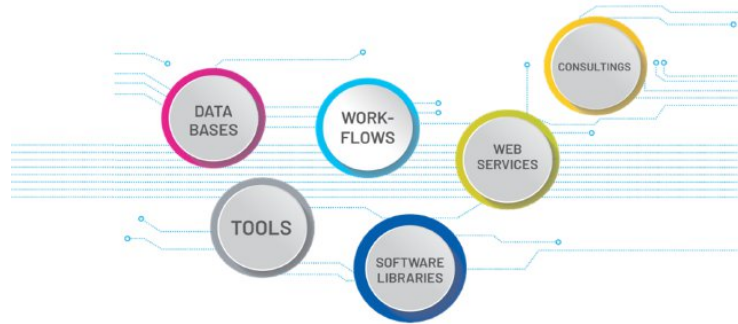
Compute resources
for academia in
Germany



Industrial Forum

Transfer of expertise
between academia
and industry

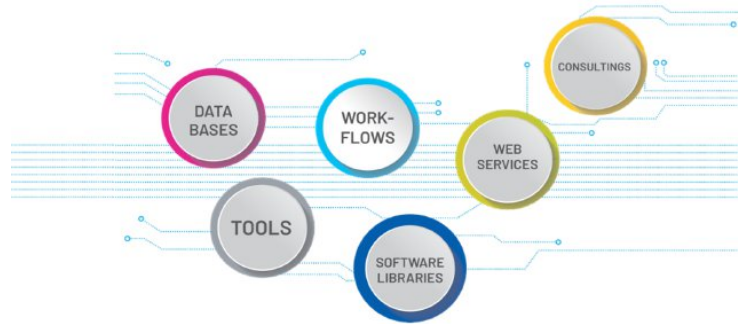
de.NBI & ELIXIR Germany – Services



- Support of **development**, **quality** and **sustainability** of software tools
- >160 bioinformatic **services**, **workflows**, **tools**, **online databases** and **software libraries**



de.NBI & ELIXIR Germany – Training



- Support of **development, quality** and **sustainability** of software tools
- >160 bioinformatic **services, workflows, tools, online databases** and **software libraries**



online



hybrid

Resources



elixir this is an ELIXIR - Training platform resource



- Workshops
- Courses
- Events
- Conferences
- Guidelines



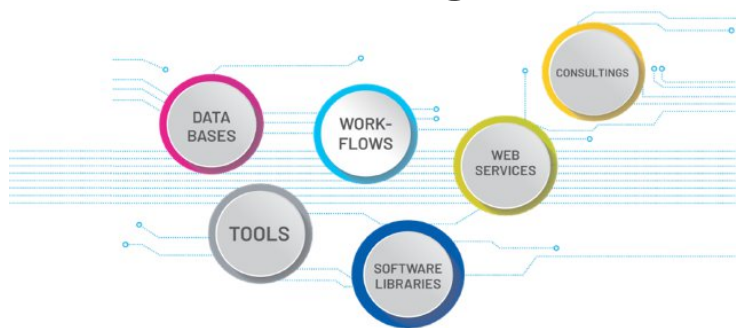
de.NBI & ELIXIR Germany – Training



Services



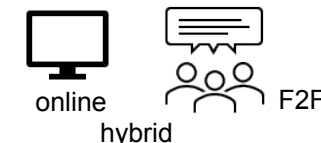
Training



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- Workshops
- Courses
- Events
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- Guidelines



Resources



The Research Data Management toolkit for Life Sciences
Best practices and guidelines to help you make your data FAIR (Findable, Accessible, Interoperable and Reusable)

What can we help you find?

Search RDMkit

Browse all topics by

Data life cycle

Start here to get an overview of research data management based on stages in the data life cycle.

Your role

Identify your role in research data management, find data management resources relevant for you, and information to help you progress in your career path.

Your domain

Learn about data management tasks that affect your domain or research community, and the solutions adopted to address them.



How can TeSS help you?

Search the portal for courses, events, videos, presentations, learning pathways, handbooks...
All types of resources at all levels for leveraging computational resources in the life sciences.

Search TeSS...

Browse the catalogue

Events

Discover the latest training events and news from ELIXIR nodes and 3rd party providers.

Start browsing →

Training Materials

Browse the catalogue of training materials offered by ELIXIR nodes and 3rd party providers.

Start browsing →

Learning Paths

Follow organized pathways of training resources leading you towards specific learning objectives.

Start browsing →



Cloud meets RDM: Unlocking Research Data Management in the Cloud

• Gatersleben

Educators:
de.NBI Trainer Team

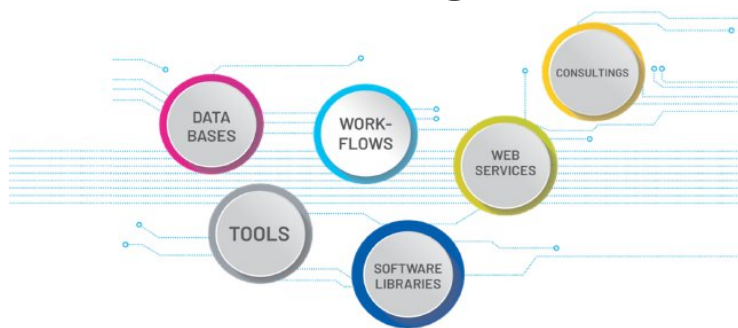
Location:
IPK Gatersleben – Please note that this workshop takes place in collaboration with the Gatersleben Research Conference – 19th International Symposium on Integrative Bioinformatics (<https://meetings.ipk-gatersleben.de/grc-ib2025/>)

Date:
8 - 9 September

de.NBI & ELIXIR Germany – Cloud



Services



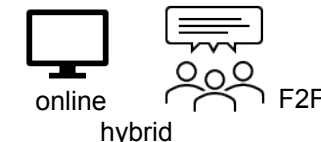
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Training



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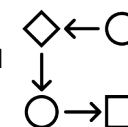
Resources



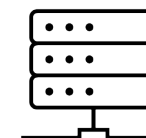
Cloud

- Free compute resources for life sciences in Germany
- 8 **federated** cloud centers, one common governance
- SSO via **Life Science Login** and **eduGAIN**
- **ISO27001** ISMS certification for secure data operations
- Backbone for projects (**TRL9** in ELIXIR, **EOSC**, 6 **NFDIs**)

Workflows and Automation



Secure Data Management



Federated Data Storage



Integration of RDM tools



A network diagram with a central pink circle. It is connected to two grey circles, one on the left and one on the right. Each of these grey circles is further connected to several smaller grey circles, creating a radial network structure. The background is white.

➤ Collaborations, Networks & Projects



National RDM
Initiatives



**RIs & other
Initiatives**



**Life Science
Research Node**
(ELIXIR, EMBL,
Euro-Bioimaging,
INSTRUCT-ERIC)



Collaborative work and exchange



National RDM
Initiatives



RIs & other
Initiatives



➤ **Goal: Create synergies, streamline efforts, and share best practices & guidelines**



Mission: Connect and improve

Action: Share knowledge, expertise, and voices.

Goal: Create synergies, streamline efforts, and share best practices & guidelines

Thank you & let's connect!

 [linkedin.com/company/de-nbi](https://www.linkedin.com/company/de-nbi)

 [@denbi.bsky.social](https://bsky.social/@denbi)

 [@denbi@mastodon.science](https://mstdn.social/@denbi)



<https://www.denbi.de>



<https://elixir-europe.org/>

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The de.NBI & ELIXIR Germany administration office.



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and Space