



# ELIXIR - and the Galaxy Community



 @ELIXIREurope

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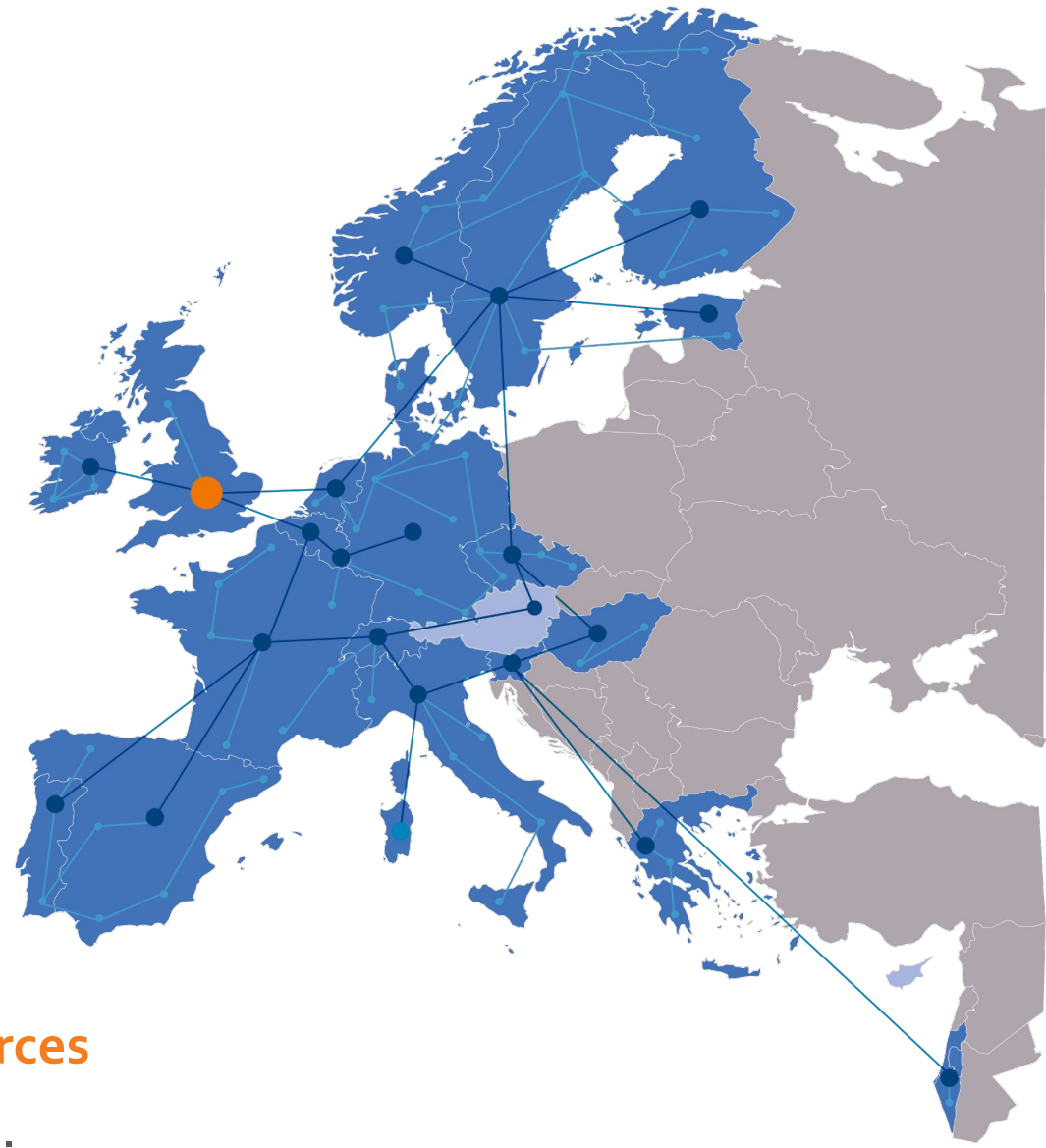
[www.elixir-europe.org](http://www.elixir-europe.org)

# ELIXIR Europe

ELIXIR is an intergovernmental organisation that brings together life science resources such as

- databases
- software tools
- training materials
- interoperability resources
- compute resources
- data management support

The goal of ELIXIR is to **coordinate bioinformatics resources from across Europe so they form a single infrastructure.**



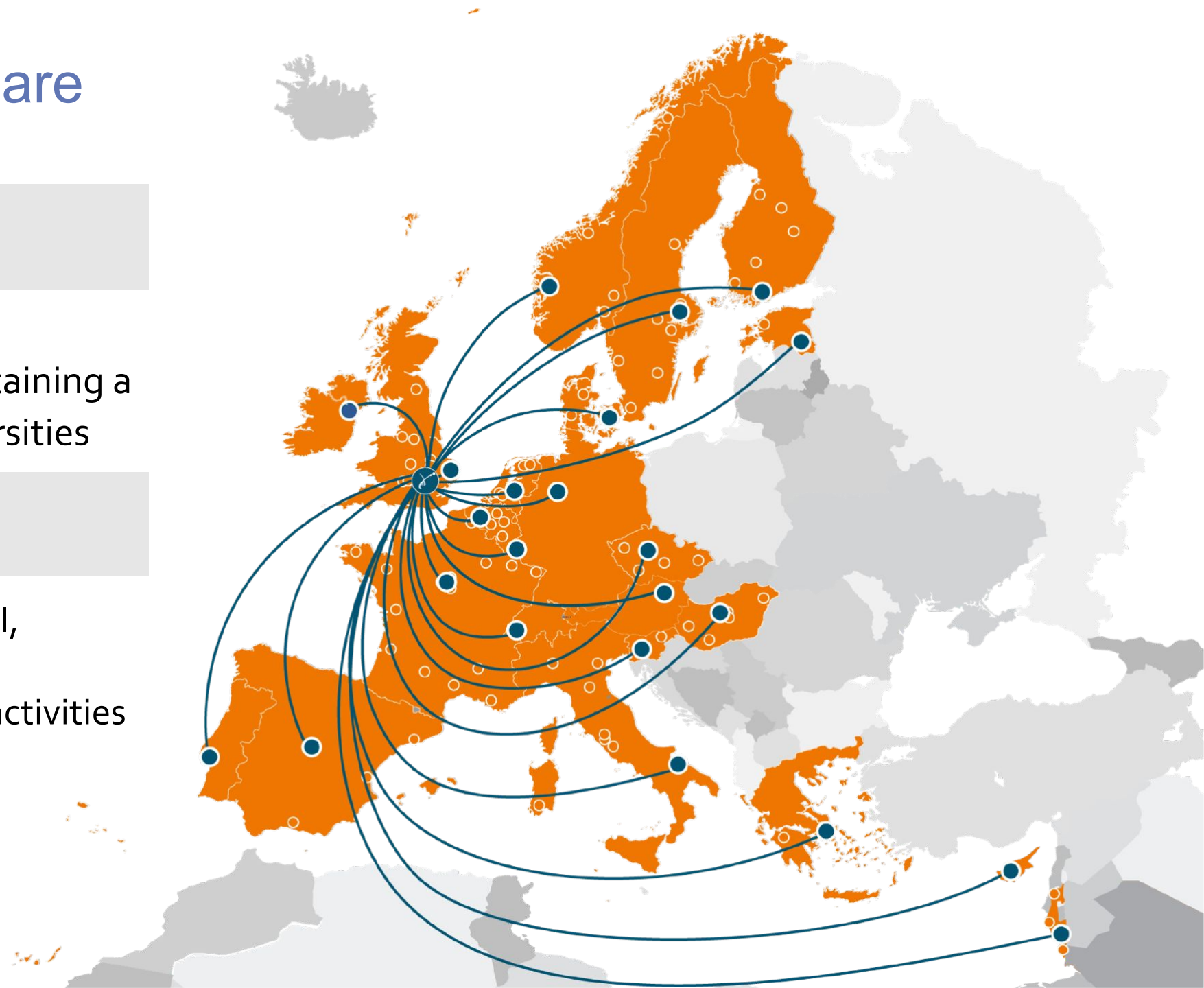
# ELIXIR – who we are

## 24 Nodes

ELIXIR Nodes form national networks of excellence, containing a total of **245** institutes/universities

## 1 Hub

The Hub, located at EMBL-EBI, Cambridge, UK, provides the secretariat and coordinating activities for ELIXIR



# Together we accelerate the understanding of life

As a foundational data infrastructure, we  
serve science

Life scientists in academia and industry are  
key stakeholders

## Together

We connect national infrastructures to  
mobilise data for life sciences in the  
European Research Area



# ELIXIR Platforms

**Platforms** bring together experts from Nodes to develop ELIXIR's technical vision and coordinate activities in defined technical areas. There are five Platforms:

## Compute

Builds and integrates **cloud, compute, storage and access services** for the life-science research community

## Data

Drives the use, re-use and value of life science data by providing **robust, long-term sustainable data resources** within a coordinated, scalable and connected data ecosystem

## Tools

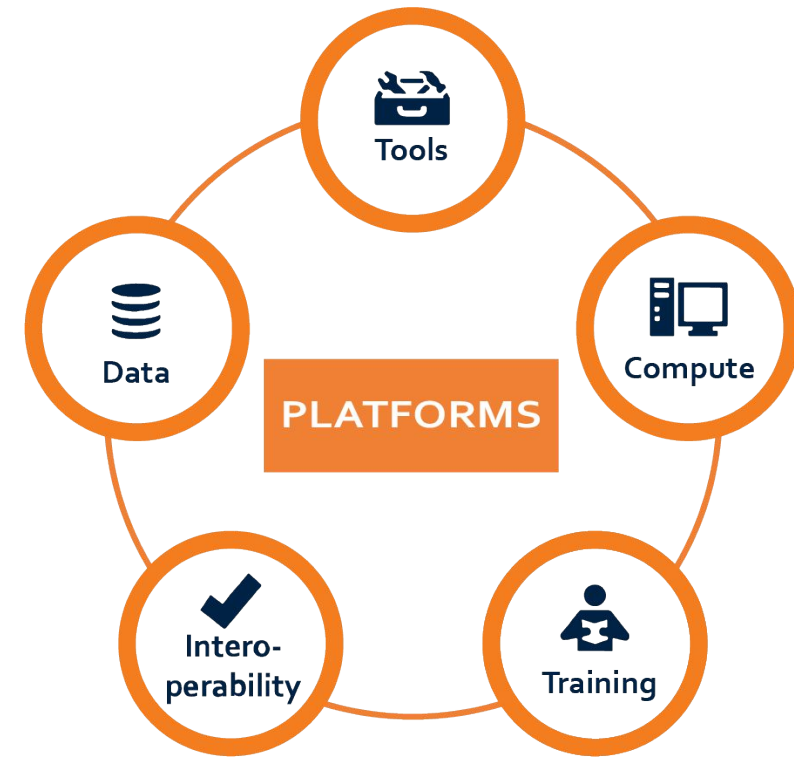
Helps communities **find, register and benchmark** software tools; maintains information standards and produces, adopts and promotes **best practices for tool development**

## Interoperability

Helps people and machines to **discover, access, integrate and analyse biological data**; encourages the life science community to adopt **standardised file formats, metadata & vocabularies**

## Training

Strengthens **national training** programmes; grows bioinformatics **training capacity and competence across Europe**; empowers researchers to use ELIXIR's services and tools



# ELIXIR Communities – connecting infrastructure & life science experts



Formed around domain experts in ELIXIR Nodes (including non-ELIXIR partners)



Provide a mechanism for long-term collaborations with other ESFRIs and large-scale initiatives



Drive service developments in the ELIXIR Platforms



Provide a framework to develop and maintain community standards



# Purpose of Communities in ELIXIR

- **Enable** ELIXIR to capture user needs into formal requirements
- **Drive** service development and uptake (standards, tools, workflows) in user communities (across ELIXIR entities) for alignment and collaboration
- **Support** collaborative standards development
- **Foster** collaboration between Nodes via transnational expert networks
- **Facilitate** consortium building for funding applications
- **Provide** a mechanism for long-term collaborations with other ESFRIs and large-scale initiatives



# Community embedding in the Infrastructure



A bi-directional  
conversation

**Communities &  
Platforms**



# Galaxy

## Mission/Vision

Fosters a **Galaxy community in Europe**, together with Galaxy resources and training. Monitors and fosters the use of Galaxy in ELIXIR.

## Goals

- Build a **European network** of Galaxy communities.
- Extend Galaxy **training** provision.
- Create a Galaxy **cloud infrastructure** across Europe.
- Make it easier to **access and transfer data**.
- Improve tools and data **integration**.
- Promote **FAIR** principles in Galaxy.

## Implementation Studies (Community-led)

- 06/2018 - 05/2020: "[Implementation Study - Galaxy Community](#)"
- 06/2019 - 05/2021: "[Expanding the Galaxy: meeting \(the needs of\) ELIXIR Communities](#)"
- 06/2021 - 05/2023: "[Strengthen Data Management in Galaxy](#)"

## Community Leads

- Björn Grüning (DE)
- Frederik Coppens (BE)
- Nicola Soranzo (UK)

Hub contact: Katharina

## History

- 2015: Working group [here](#)
- 2018: Community established (12M Implementation Study)

## More information

- [ELIXIR Website](#)



# Galaxy - Highlights

 Galaxy Europe

## A global network:

- > 180,000 Galaxy Users
- > 240,000 Workflows
- > 900,000 Workflow Invocations
- > 200 free tutorials about data analysis ([Galaxy Training](#))
- International Collaborations (e.g. collaboration with Australian BioCommons)
- International - cross-timezone training events
  - [Smörgåsbord 2023](#) - Free, Global, Online Week of Galaxy Training (May 2023)
- European Galaxy Server: [usegalaxy.eu](http://usegalaxy.eu) (2018), hosted in Freiburg (de.NBI)
- Community co-lead/s leading/involved in EuroScienceGateway project
  - Deliver a robust, scalable, seamlessly integrated open infrastructure for data-driven research

 Galaxy  
PROJECT

## Smörgåsbord 2023

Free, Global, Online Week of Galaxy Training



Australian  
**BioCommons**


 EOSC | EuroScienceGateway

# GCC summary



Thank you to all the authors, presenters,  
and sponsors.



91 in-person participants  
40 virtual participants  
21 countries represented  
 many koalas hugged

316 authors  
48 talks  
49 posters  
14 training workshops

## ELIXIR support:

- Two staff exchange proposals were supported
- 14 ELIXIR members attended GCC
- [News item](#)

See you next year in Brno! 

<https://galaxyproject.org/>





30/10 - 03/11 2023  
Barcelona, Spain  
#BioHackEU23

# Biohackathon 2023

## 2022:

- 35 projects (out of 65 applications, some proposals were merged)
- 170 F2F and 160 virtual participants

## • 2023:

- 80 project proposals were received
- 35 projects selected
- 180 people registered (full capacity)

More information: <https://biohackathon-europe.org/>



Bringing together life scientists to work collaboratively on bioinformatic projects

More Information



Call for projects: 27 February - 10 April

Projects submitted can be at any stage of development, from blue-sky ideas to more mature projects, and cover the following points:

1. **Scope** and **Vision** of your project
2. **Alignment** with **ELIXIR efforts** and beyond
3. **Feasibility** of your proposal



Registration opens: Early June

- FREE registration
- Accommodation cost: 560€ + VAT for single room; covering accommodation and including 3 meals

In 2022...

35 projects  
 330 hackers  
(bioinformaticians, data analysts, FAIR experts, ...)

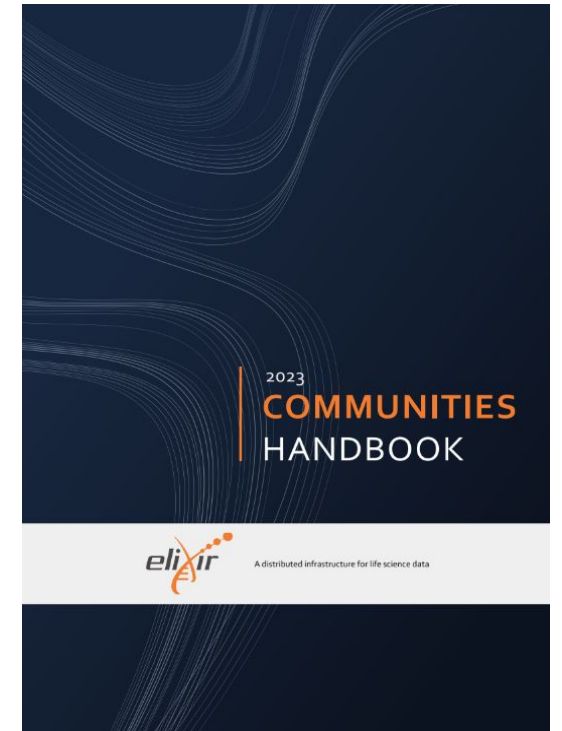
Past 3 years...

39 preprints

# Community resources

- The ELIXIR Communities [Handbook](#)
  - Outlines the role and purpose of ELIXIR Communities.
  - Shall be considered the go-to document with regards to Communities, including their responsibilities and benefits and related processes
  - Links to key documents related to ELIXIR Communities

The ELIXIR Communities handbook shall be considered the point of reference for ELIXIR Community related questions. It is applicable under the ELIXIR 2019-2023 Programme.



- Communities [Poster](#)
- ELIXIR Communities webinar
  - [Recording](#)
  - [Slides](#)



# The Galaxy Community F2F/hybrid meeting

Thank you to the organisers!

An opportunity to

- Share your scientific talks, advances, challenges, ... !
- Get together to share updates and progress
  - On general efforts as well as Implementation Study work
- Identify possible concrete next Community activities





# Thank you

Get in touch: [katharina.heil@elixir-europe.org](mailto:katharina.heil@elixir-europe.org)

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