ELIXIR - and the Galaxy Community

Katharina F Heil
Programme Manager Communities & Training

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
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

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 (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
GCC summary

GCC 2023 is a wrap!

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

91 in-person participants
40 virtual participants
21 countries represented
许多考拉被拥抱了

316 authors
48 talks
49 posters
14 training workshops

See you next year in Brno!

https://galaxyproject.org/

ELIXIR support:
- Two staff exchange proposals were supported
- 14 ELIXIR members attended GCC
- News item
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/](https://biohackathon-europe.org/)
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

www.elixir-europe.org

@ELIXIREurope

linkedin.com/company/elixir-europe