ELIXIR Europe - Overview

ELIXIR is an intergovernmental Research Infrastructure (RI) that brings together life science resources such as:

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

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

ELIXIR Services: https://elixir-europe.org/services

450+
More info at the ELIXIR booth!

+ several other ELIXIR folk at this event!
ELIXIR & Global Data Communities

ELIXIR collaborates globally in the life sciences data community
○ https://elixir-europe.org/collaborations

Examples of formal & informal collaborations:
○ Life science infrastructures: NIH ODSS/Australian Biocommons/H3ABioNet/+ 
○ Life science organisations: GA4GH/Global Biodata Coalition/+ 

ELIXIR collaborates globally in the cross-domain data community
○ Data Together Collaboration: with a current RDA focus 
○ EOSC: EOSC projects/Task Forces/EOSC Association/+
ELIXIR & Global Data Community - Engagement

How? → ELIXIR RDA Activities Focus Group

Purpose
To ensure that ELIXIR works with the global RDA community

Global RDA community?
- Life-science data communities outside of ELIXIR
- Technical/data communities working on data handling
  - Life-sciences focus
- Data policy makers and standards/database developers
  - Ensure promoting/cataloguing of resources in FAIRsharing
  - Life Science Data Infrastructure Interest Group - co-chair
ELIXIR RDA Activities Focus Group

Focus Group website
https://elixir-europe.org/focus-groups/rda-activities

ELIXIR’s RDA collaboration
https://elixir-europe.org/collaborations/rda

When?
Monthly call

Steering Committee

[Images of Allyson Lister, Wolmar Nyberg Åkerström, Bengt Persson, Susanna-Assunta Sansone, Fotis Psomopoulos]
ELIXIR RDA Activities Focus Group – In action!

**Meet**
- Monthly
- Discuss/share
- Collaborate
- Coordinate

**Survey & Monitor**
- Landscape analysis
- Adoption of RDA outputs

**Facilitate Travel**
- ELIXIR travel grant
- 4x ELIXIR members
- 2x RDA Plenaries /yr
- International Data Week

**Report**
- For each Plenary
- Disseminate & highlight info
- Life science focused
RDA Plenary Event Reporting

Past Plenary reports

- 19 collaborative reports to date

- Deposited online for ELIXIR members: https://elifir-europe.org/focus-groups/rda-activities/documents

- Now also on Zenodo: https://zenodo.org/record/7053714

All RDA Plenaries covered!
Further synergies - Data Together & EOSC

- **ELIXIR EOSC Focus Group** - a parallel ELIXIR leverages for engaging global data communities

- Benefits of engaging Data Together & EOSC as a Research Infrastructure

- e.g.: Grants ([Ambassadorships](https://example.com)), open calls ([EOSC IF](https://example.com)), projects ([RDA Tiger/WorldFAIR](https://example.com)), +...
Perspectives from the ELIXIR Proteomics and Metabolomics Communities

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

Community Handbook: https://f1000research.com/documents/12-69
ELIXIR Proteomics and Metabolomics Communities - Links to HUPO PSI

History and Connection to ELIXIR

- HUPO founded in 2001 to drive global proteomics research
- Proteomics Standards Initiative established to develop community standards for data comparison, exchange and verification (data and metadata), currently five active WGs
- PSI-MS WG for mass spectrometry data standardization
- Cross-connection to other MS-related research communities and organizations, like Metabolomics and Lipidomics and ELIXIR Communities, e.g. via implementation studies
- Standards adopted as submission formats for EBI and other repositories

Main activities

- PSI-MS controlled vocabulary curation
- Bottom-up, driven by community requirements
- Collaborative development of data formats and metadata specifications, documentation and reference implementations to simplify community uptake
- Specification document review process with external reviewers