



National Coordination

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#DecadeofData
#ELIXIRis10

National Coordination

Anne-Françoise Adam-Blondon

Head of Node, ELIXIR France

The French Institute of Bioinformatics (IFB) is ELIXIR-FR, the French Node of ELIXIR

IFB is a distributed French National Research Infrastructure

- 36 platforms and research teams spread all over France

Coordination: IFB-core

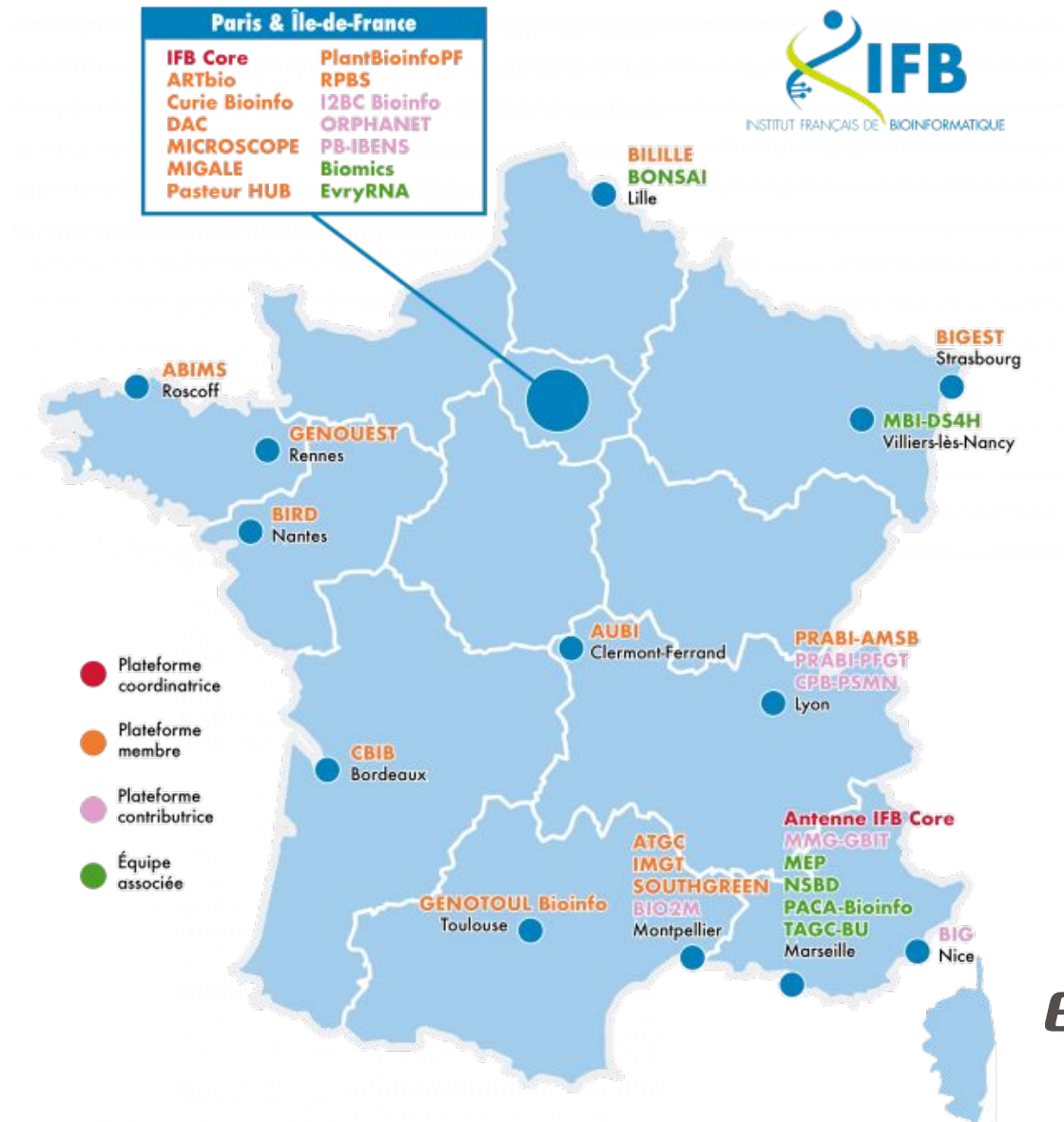
- Multi-research organizations : CNRS, Inserm, INRAE, CEA

Common resources

- Supported by the French Ministry of Higher Education and Research since 2012

A large set of expertise in bioinformatics

- >400 experts (~200 FTE)



IFB/ELIXIR-FR has a large set of domain of applications

IFB's domains of application encompass the three scientific priorities of the 2024-2028 programme of ELIXIR



Enabling and responding to
advances in cellular and molecular
research will drive life science

Connect the latest developments and
established data resources to realise
the potential of cellular and molecular
biology



Biodiversity, food security and
pathogens are interrelated
societal challenges

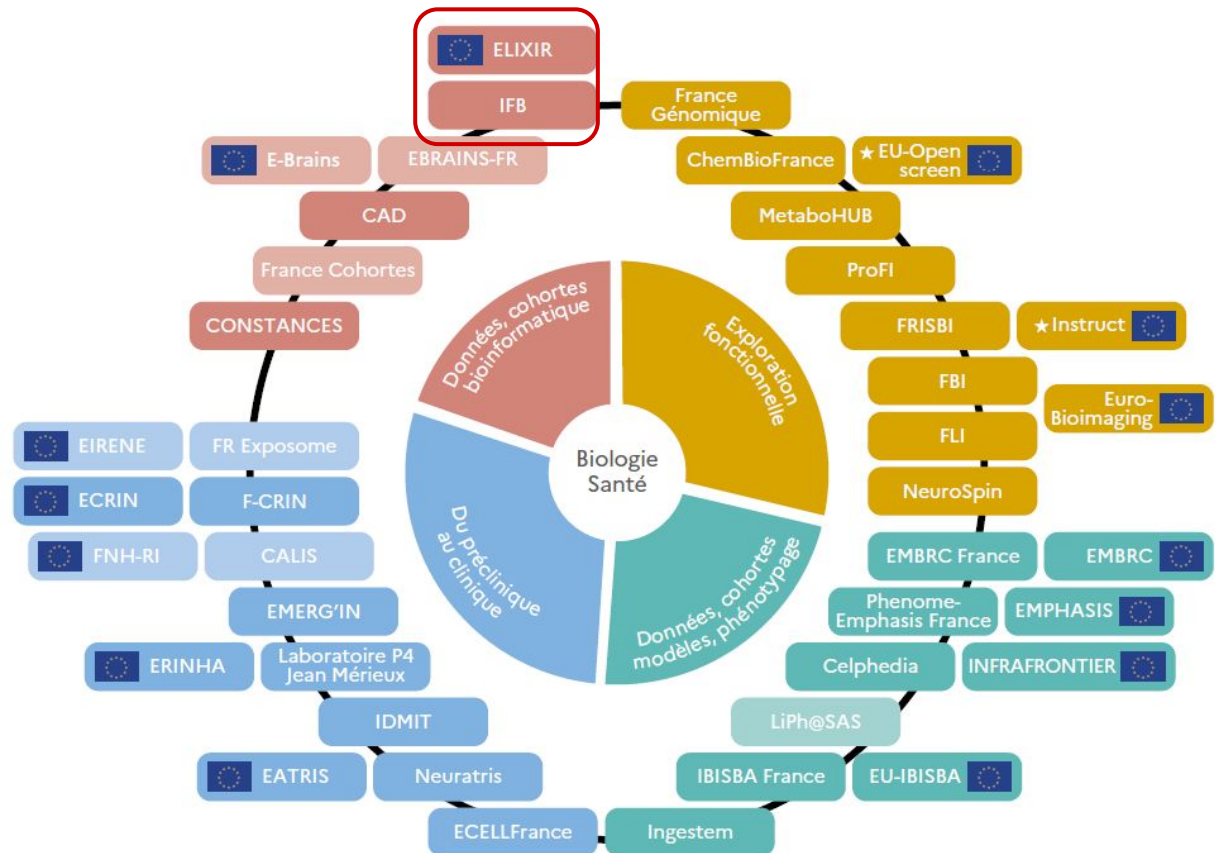
Mobilise and integrate molecular data
to support transnational research
programmes in biodiversity, food
security and pathogens




The promise of genomics
research to improve health
and disease outcomes

Provide the infrastructure to support
the discovery, access, sharing and
analysis of human genomics data and
linked data on a massive scale

- **Contribution to transversal activities addressing common challenges**
 - Multi-research organizations governance
 - FAIR data management and data interoperability
- **Partnership in large national projects**
- **Enhance partnerships in ELIXIR activities and in European projects**



IFB-ELIXIR-FR is contributing to ELIXIR's activities

- **Liaising and networking** with all platforms and most of the communities and contributing to their activities
- **Co-coordinating and contributing to the strategic planning** of some of them => 
- Contributing to **European projects**: 9 since 2020



Technology

Platforms

ELIXIR Platforms bring together experts from Nodes to develop ELIXIR's technical vision and coordinate activities in defined technical areas. There are five Platforms: Data, Tools, Interoperability, Compute and Training.



Tools Platform



Helps researchers find the best software tools to analyse their data.



Interoperability Platform

Develops and encourages the adoption of standards to describe life science data.



Data Platform

Aims to identify key data resources across Europe and support the linkages between data and literature.



Compute Platform

Develops services to make it easier to store, share and analyse large datasets.



Training Platform

Helps scientists and developers find the training they need, and also provides that training.

Communities



Science



3D-Bioinfo



Biodiversity



Food and nutrition




Galaxy



Intrinsically Disordered Proteins



Marine Metagenomics 



Metabolomics



Microbial Biotechnology



Plant Sciences

litate crop and



Proteomics



Single-Cell Omics



Systems Biology



Toxicology




R

Human Data Communities



Federated Human Data




Human Copy Number Variation 

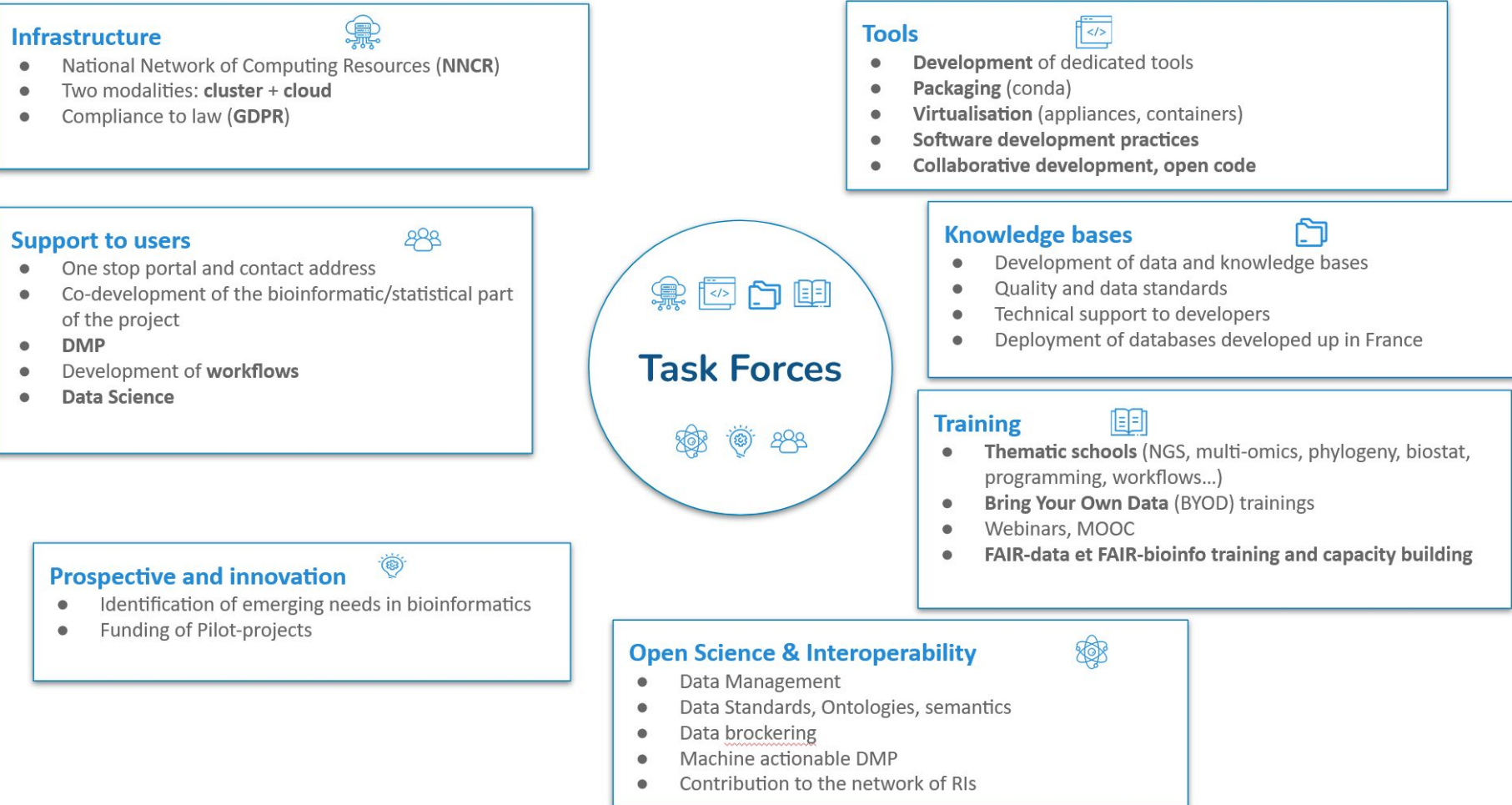


Rare diseases



Cancer Data (focus group) 

IFB-ELIXIR-FR's 2022-2025 road map and organisation in transversal Task Forces



Develop with the task forces a strategy that integrates national and ELIXIR's activities for node's benefice



National activities

- **Software development task force**
 - Sharing good practices for development
 - Sharing recipes for deployment
- **Deployment of environments for analysis**
 - E.g. [Usegalaxy.fr](https://usegalaxy.fr) (metabolomics, proteomics, covid19, ...)

Tools development and deployment	2021	2022
New tools	19	16
Number of unique users of the platforms web tools	573 244	352 644
Number of uploads of the tools developed by the platforms	16 912	24 307



Vincent Lefort



Hervé Ménager
ELIXIR Tools PF coord
EDAM steering committee



Anthony Bretaudeau
Elixir Galaxy community



Olivier Sallou
Elixir Tech Coord

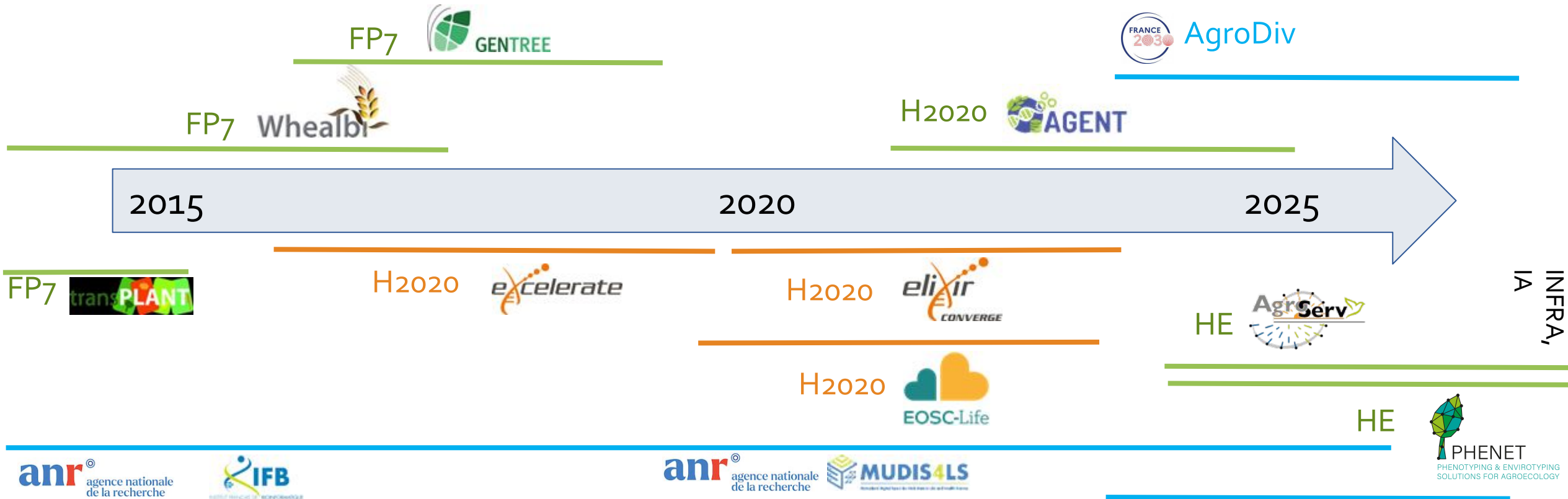
International/ELIXIR activities

- **Service Delivery Plan ELIXIR-FR:** labelling of French services
- **Involvement in the coordination of the ELIXIR Tools Platform** (Hervé Ménager): contribution to the strategic planning, coordination of activities, outreach, good practices
- **Involvement in strategic projects for the ELIXIR Tools platform: BioContainers** (Olivier Sallou) Dynamic deployment of virtual environments



- Involvement in the **ELIXIR Galaxy community** (Anthony Bretaudeau): contribution to usegalaxy.eu

Data management in the Plant Science community: another example of synergy



-Independent standards: MIAPPE, BrAPI
-POC: portal for a wheat data federation

-Interoperable and well specified standards: MIAPPE, BrAPI, ISA
-On boarding forest trees
-Tested training resources
-FAIDARE: plant data portal

- DM guidelines in RDMkit validated by a project
-FAIR Cookbook recipes
-Learning path

- DM interoperable between national RIs
- on boarding domestic animals



IFB/ELIXIR-FR in the national « ecosystem » supporting Open Science

- 2022: the French Ministry of Research and Higher Education launches Recherche Data Gouv
- IFB/ELIXIR-FR is mandated to organize a « thematic reference center » for Life Science data :
 - Development and dissemination of data standards
 - Support to data management and data curation
 - Data brokering
 - Harvesting data for the national data catalog

Recherche Data Gouv at a glance



Modules to support research teams on all issues linked to data:

- Data management clusters
- Thematic reference centres
- Resources centres
- Institutional reference centers

Modules to deposit, publish and disseminate data:

- A repository to deposit and disseminate data
- A registry to search for data published in the repository itself or other external repositories