

# ELIXIR-ITA: a growing support to national and international research in life sciences

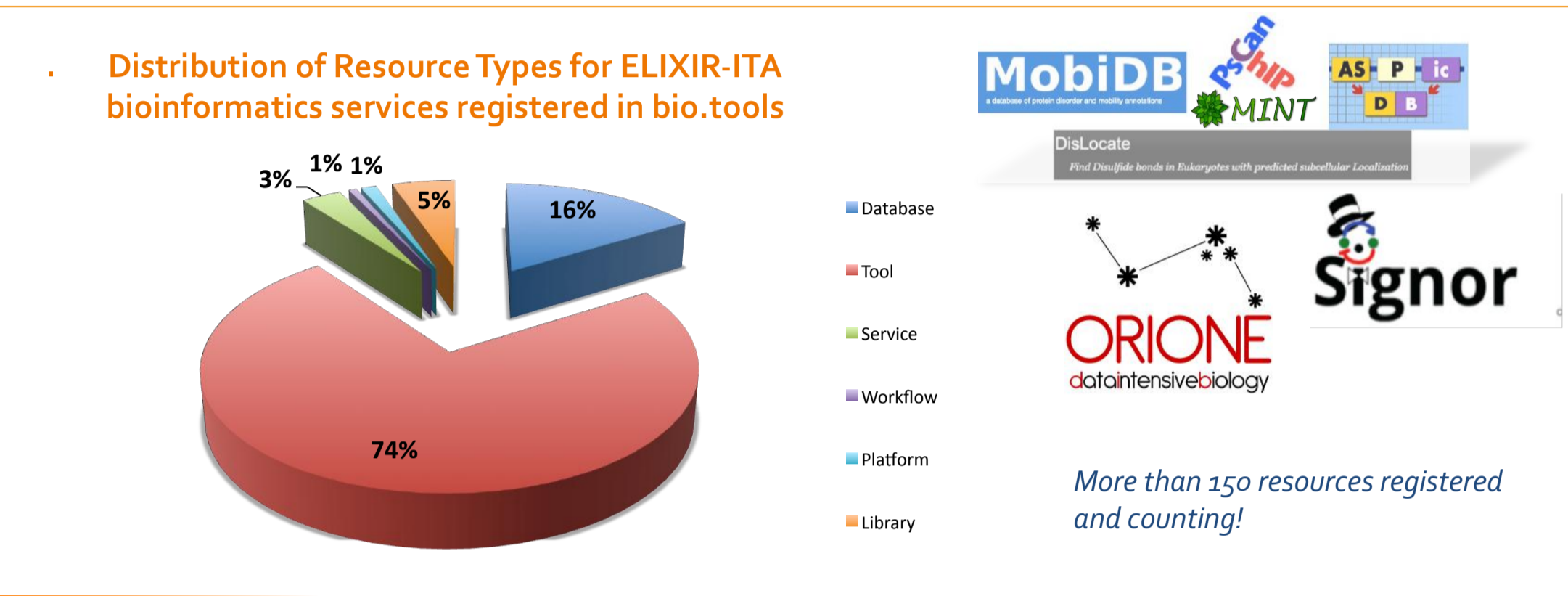


ELIXIR-ITA gathers most of the excellence centres for bioinformatics in Italy and is striving to assume a pivotal role for the national and international life science communities. This is reflected by the growing number of bioinformatics services,

initiatives and projects supported or participated by ELIXIR-ITA, including H2020 grants and a number of training efforts delivering state of the art courses on basic and advanced topics. In this poster we highlight some of these activities.

## Technical support / capacity building

## Training activities



The **ELIXIR-ITA Training Programme** is building a thriving community who strongly believes that quality training in bioinformatics is essential to achieve excellence in life science research. Thanks to a very motivated group of people, our programme is engaging an increasing number of passionate scientists interested in taking part in our training initiatives, activities and discussions (<http://bioinformaticstraining.pythonanywhere.com>)

**ELIXIR-ITA Call 2015**  
ELIXIR-ITA supports its members providing financial resources to maintain and improve their key bioinformatic resources. Nine grants have been awarded in 2015 through a peer reviewed selection.

- Courses 2016**
1. NGS for evolutionary biologists: from basic scripting to variant calling, **May**
  2. Gene Expression profiling with HTS: RNA-Seq data analysis, **June**
  3. Writing advanced pipelines in bioinformatics on HPC, **July**
  4. Analyse your NGS data with Galaxy, **September**
  5. Python programming for biological data analysis, **October**
  6. Data analysis with R – Bioconductor, **November**
  7. Metagenomics data processing and analysis, **November**
  8. Biomedical data analysis, interpretation and representation, **December**

**Node organization: LTeC Group and ELIXIR-ITA Web site**  
The coordination of a Node comprising so many institutions is a challenge by itself. We are tackling it with the aid of the Local Technical Coordinators Group. Ensuring a proper information flow and team work is vital for our Node.

Courses, which are free, are limited to 20 participants to allow high interactivity and intensive practical work. Priority is given to candidates from ELIXIR Node's member institutions. Instructors are selected among experts in the course's topic with experience in the application of advanced training ideas and techniques.



- Other activities**
- We collaborate with other ELIXIR nodes in activities such as Train the Trainer, eLearning, EXCELERATE use cases' training support and we have a pilot to provide training support to extra-European countries.
  - Train the Trainer session @the University of Salerno on **Enhancing academic teaching through training ideas and techniques**, Jun 2016
  - Bioinformatics "October Fest" in Rome, 24-28 Oct 2016
  - Training and eLearning support in Mozambique and Nigeria

- Pilot projects 2016**
- CRS4 integrating ELIXIR AAI within ORIONE Galaxy platform.
  - CINECA offering 2 000 000 HPC core hours and 200 TB through ELIXIR-ITA to national and international PIs. Candidate projects will be reviewed by Node members to ensure scientific soundness.

## Working in...

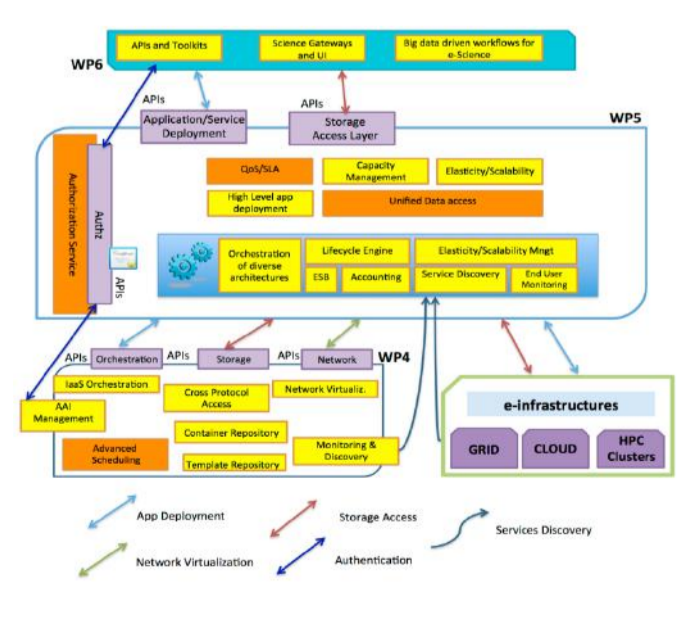
- excelerate**
- WP5: The ELIXIR Interoperability Backbone
  - WP6: Use case: Marine metagenomic infrastructure as driver for research and industrial innovation
  - WP8: Use case: ELIXIR infrastructure for Rare Disease research
  - WP11: The ELIXIR Training Programme



- Call: H2020-INFRADEV-1-2014-1**  
EMBRIC - European Marine Biological Research Infrastructure Cluster to promote the Blue Bioeconomy
- Call: H2020-EINFRA-2014-2**  
INDIGO - INtegrating Distributed data Infrastructures for Global ExpLOitation

ELIXIR-ITA use case on Galaxy cloudification: prototype ready!

- Training grant proposals**
- ITN2015 – PopulatioN Genomics of EurAsia
  - EMBO Practical Course on Population genomics: background and tools



## Contacts

Graziano Pesole (head of node)  
g.pesole@ibbe.cnr.it  
Federico Zambelli (technical coordinator)  
f.zambelli@ibbe.cnr.it  
Allegra Via (training coordinator)  
a.via@ibbe.cnr.it

