







Project title. ELIXIR x NextGenerationIT: consolidation of the Italian Infrastructure for Omics Data and Bioinformatics

Acronym ELIXIRxNextGenIT

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Description

Quality training in bioinformatics is essential to achieve excellence in life science research. As bioinformatics rapidly evolves, researchers and developers need up-to-date skills to effectively manage and analyse datasets that can be both vast and complex. High-quality training ensures that scientists can fully leverage bioinformatics tools, adopt best practices, and contribute to innovative discoveries. By addressing the growing demand for specialised knowledge, training programs play a critical role in empowering researchers to meet complex challenges in life sciences.

Aims:

The project includes several units organised in 4 WPs: WP1: Management, exploitation, access program and integration in the Life Science RI Network; WP2: Consolidating ELIXIR-IT Platforms for better and more resilient services; WP3: Empowering the ELIXIR-IT Integrative Omics Infrastructure; WP4: Enhancing ELIXIR-IT communities and services. The IBPM unit, in WP4, aims to identify and address the training needs in bioinformatics of researchers and developers. Through community surveys, we will design tailored courses focusing on bioinformatics tools, data management, interoperability, pedagogical skills, and open software best practices. Collaboration with national and international institutions, e.g. ELIXIR-IT and ELIXIR Europe, will ensure high-quality training.

Expected results:

We expect to deliver 10-15 training events annually, covering key bioinformatics topics. The training quality and impact will be assessed via questionnaires, studying both short- and long-term effects on learners. Collaborations with ELIXIR and other institutions will help develop *FAIR* training materials, strengthen capacity, and support the *Train the Trainer* program, promoting excellence in bioinformatics education.

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