The Barcelona Supercomputing Centre, Life Sciences Department hosts the Computational Bioinformatics Node (GN6) of the National Institute of Bioinformatics. The National Institute of Bioinformatics (INB) is part of the ISCIII’s Platform of Biomolecular and Bioinformatics resources, and the Spanish National Node of the European infrastructure for bioinformatics Elixir.

The node manages INB’s computational infrastructure, databases, servers and the associated applications. INB’s computational node develops applications related to data management in large genomic and biomedical projects, and provides support in the use and adaptacion of bioinformatics applications to HPC environments, and helps in the application of Elixir recommendations to national bioinformatics projects.

Objectives

Support

- Support large scale bioinformatics projects including genomics and personalized medicine initiatives
- Support for the use of HPC in bioinformatics. Develop and maintain e-infraestructures for biological research.

Development and Research
- Develop strategies for biological data management
- Develop advanced strategies for protein-Ligand, protein-Nucleic Acids docking
- Develop algorithms for functional prediction of protein variants

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