

Computational Genomics



The main focus of our group is to decipher and understand the biology of genomes. Genomes, as the molecules of life, contain the necessary information for the development and evolution of living organisms.

Despite this information is encoded in a four-letter code; it presents different levels of coding possibilities and complexity.

The analysis of genomic and derived sequences allows us to uncover the general rules and patterns that control and make life possible. Our research activity uses computational and experimental approaches to reach these goals by finding answers to specific molecular, evolutionary and biomedical questions.

For more information, please visit <http://cg.bsc.es>.

Objectives

The activity of our group is centered in the development and application of bioinformatics tools to answer specific biomedical questions related to genomic and molecular mechanisms behind disease.

In the frame of a Supercomputing environment, we face challenges related to big biological data management and analysis in order to uncover causes of disease and to contribute to the generation of more personalized and efficient diagnosis and therapeutic protocols for disease.

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