

Data-Driven Genomic Computing: Making Sense of the Signals from the Genome

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The GeCo Project (ERC Advanced Grant, 2016-2021) has the objective of revisiting genomic computing through computational models, languages, and instruments. In the first 3 years of the project, we developed a data management used to store and query genomic datasets. The system can be accessed from several interfaces (Web-based, Python, R) and is currently running on Cineca and on PoliMi servers. The results of GeCo include a repository of public, open data, which integrates, normalizes and enriches datasets from ENCODE, TCGA, Epigenomic Roadmap and other sources, supported by a simple Web-based search interface. Several examples of use of these tools will be presented, targeted to biology and to precision medicine. During the final 2 years of the ERC project, we will focus on user-friendly environments for data extraction, analysis and visualization, addressed to biologists and clinicians.

27th of January 2020
14:00 – 16:00 pm

Lecture room 3, Bldg
A, Campus Hunimed

Introduction
Prof. Carmelo Carlo-Stella