



## 2-years post-doc position In Data Science & Computational Biology

We are seeking a postdoctoral Data Scientist and Computational Biologist fellow to work on the excellence project CHRONOS - CHRONical multifactorial disorders explored by NOvel integrated

Strategies (<https://www.btbs.unimib.it/it/dipartimento/progetto-eccellenza-chronos>), of the Department of Biotechnology and Biosciences of the **University of Milan Bicocca**, under the supervision of **Chiara Damiani**

**Subject:** The qualified candidate will participate in the design and implementation of algorithms to analyze and integrate -omics data, with particular regard to metabolomics and transcriptomics datasets, to enable new understanding of metabolic alterations in cancer and other complex diseases.

The person hired for this position will join the team in the following efforts:

- Prediction of alteration in metabolic fluxes from alterations in metabolite abundances, by means of machine learning approaches combined with metabolic network modeling and simulation
- Computational modeling and simulation of 3D cell populations
- Unsupervised clustering of metabolic phenotypes in heterogenous cell populations from single-cell RNA-seq data

These projects are collaborative efforts between the Department of Biotechnology and Biosciences and the Department of Informatics Systems and Communications and the Joint Research Unit ISBE-IT.

This position is likely to present diverse and flexible opportunities - from deeper and more complex data science problems, to becoming more involved in the bioinformatic and analytic aspects of predictive modeling.

### **Requirements:**

- A Ph.D. in in a quantitative discipline such as Computational Biology, Computer Science, Biophysics/Physics, Systems Biology, Bioinformatics, Mathematics and/or Statistics together with significant experience in computer programming and a strong background in data science.
- The candidate must be enthusiastic about life science problems.
- Experience in computational biology and a biological background are welcomed but not necessary.
- Experience managing and curating large datasets with machine learning techniques is desired.

Outstanding candidates will have demonstrated the ability to work and think independently and as part of an interdisciplinary team, good verbal and written communication skills and problem solver attitude.

**How to apply:** Applicants should preliminary send their academic CV to [chiara.damiani@unimib.it](mailto:chiara.damiani@unimib.it) best before March 20<sup>th</sup>. They will be then kept informed about details on the official selection procedure.