2-years research fellowship In Data Integration and Artificial Intelligence for Life Sciences

We are seeking a Data Scientist and Computational Biologist research fellow (S.S.D INF/01) 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** (https://sites.google.com/view/chiaradamiani/).

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 a 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 alterations in metabolic fluxes from variations in metabolite abundances, by means of machine learning approaches combined with metabolic network modeling and simulation
- Data-driven multiscale modeling and simulation of complex 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, the Department of Informatics, Systems and Communication 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 bioinformatics and analytic aspects of predictive modeling.

Requirements:

- A Ph.D. and/or a Master's degree in in a quantitative discipline such as Computational Biology, Computer Science, Biophysics/Physics, Systems Biology, Bioinformatics, Mathematics and/or Statistics
- 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.

Period: The position will start on January 1st 2021
Salary: 25.000 per year, including social security and accident insurance costs
How to apply: The announcement of selection will be published soon on https://bandi.miur.it/. The deadline will be 30 days after the publication day. The interviews will be held on December 11th.
If you want to be notified about the selection announcement and/or for any inquiry about the position please write to chiara.damiani@unimib.it.