EMBO WORKSHOP

Computational models of life: From molecular biology to digital twins

Interview with the PerMedCoE grant recipient Federica Chiappori

Federica Chiappori is a computational biologist working in the bioinformatics group of the Institute for Biomedical Technologies of the Italian National Research Council (CNR - ITB).

What is your main professional interest?

II work principally in the field of molecular modelling, employing molecular dynamics and docking to define structure to function correlation and interaction analysis of proteins and non-coding RNAs. In detail, to evaluate the effects of mutations, PTM and binding of biomolecules involved in human disease; and with a particular interest to the drug design aspects, considering as drugs both small molecules and RNAs. I was also involved in metagenomics and transcriptomics analysis and in the application of recently AI methods to molecular modelling.

What were your expectations from the EMBO Workshop "Computational models of life: From molecular biology to digital twins"?

I expected to understand more deeply the development of higher order models, like organ and tissue models until digital twins. Moreover, I expected to hear about the more recent applications of modelling and the recently developed tools.

Have these expectations been met?

Yes, I received a lot of information, suggestion and several contact to improve my research. I also expected some practical session during this course, that can be useful to apply the described tools to a personal case study, for example, but unfortunately no practical session was scheduled.

What is your feedback regarding gender balance and equality in this workshop?

Gender balance and equality was maintained for the speaker, the organizers, as well as for the participants.