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IDPfun2 - Integrating novel data, artificial intelligence and molecular behaviour to expand functional characterization of intrinsically disordered proteins

Data and AI to understand intrinsically disordered proteins.

Intrinsically disordered proteins (IDPs) challenge the conventional notion that well-defined protein structures are necessary for function. These proteins can take on various shapes and play critical roles in molecular processes. However, our understanding of them is limited due to experimental challenges. While recent AI-based protein structure prediction has increased awareness of IDPs, reliable prediction and functional explanation remain unexplored. The EU-funded IDPfun2 project will use AI-based computational technology and novel data to advance understanding of IDPs and their molecular behaviour. The project seeks to establish new standards and formats to comprehend IDP complexity and benefit the scientific community. It involves collaboration with the ELIXIR IDP Community and the ML4NGP COST Action.

Coordinator: Università degli Studi di Padova

UNIPD Supervisor: Silvio Tosatto

Department: Department of Biomedical Sciences

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Project Duration in months: 48

Find out more: https://cordis.europa.eu/project/id/101182949