MOSBRI
Molecular-Scale Biophysics Research Infrastructure

End User Short Course

Advanced kinetics approaches to unravel protein structure and function

2nd–4th October 2023
Sapienza University of Rome, Italy (DSB-UROM)

This course will be focused on the application of advanced kinetics techniques (stopped flow binding and folding experiments, FRET, T-Jump) to study protein structure and functions and to dissect several kinetics mechanisms.

Understanding the links between protein structure and function is a critical task of Molecular Biology. Such a goal has critical scientific implications, spanning from basic research to practical applications such as drug discovery and the development of new therapies. In this perspective, advanced kinetic approaches have emerged as powerful tools for unravelling these features: the ESC4 course "Advanced Kinetics Approaches to Unravel Protein Structure and Function" covers a range of kinetic and spectroscopic techniques that may help scientist to unveil the subtle links between protein structure and function. These techniques include stopped-flow, T-jump and Forster resonance energy transfer (FRET) experiments.

Thanks to these techniques, it is possible to dissect the kinetic mechanism involving protein-protein interactions, protein (un)folding, enzyme activity, ligand binding, and FRET. With the knowledge and skills gained from this course, scientists will be better trained to tackle the challenges in biochemical and biophysical research.

Other details:
Participants will receive financial support to attend the course, including a contribution to their travel, lunch, dinners and 2 nights of accommodation (accommodation will be booked by the organizers).

Visit the website to find out more and to apply to take part in the course.

https://www.mosbri.eu/training/end-user-short-courses/esc4/

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