Invite Lecture Abstract Research Center for the Mathematics on Chromatin Live Dynamics (RcMcD)

Structure-Based Drug Discovery in pharmaceutical industry

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Small molecule Drug discovery start with the search for the biological active compound against the disease-relevant target proteins, which is followed by the intensive optimization by medicinal chemists. Thanks to the advance in Structural biology, information/technology on the three dimensional structure of the protein has become one of the key discipline both in lead discovery and lead optimization process. In this presentation, I will describe how we are taking advantage of the structure biology such as crystallography and computer simulation in pharmaceutical industry and also would like to discuss difficulties we expect to overcome in the near future.