

2017 Fall Semester

School of Life Sciences Seminar

Thursday, October 12, 2017 at 16:00pm to 17:30pm



Life Science Building Jukhyun Bio Auditorium(Rm.121)



When Computer Meets Bio?

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Host: Prof. Mi Sun Jin (T. 3562)

Language: English/Korean

Abstract

Why and how a normal cell becomes a disease cell? The main research effort in my lab is to develop and apply innovative computational methods for elucidating the mechanisms and driving factors of biomolecular interactions related to human diseases and cellular functions at a molecular-level. The fluctuating thermodynamics technology recently developed in my group offers a practical means for the thermodynamic characterizations of the folding, misfolding, and aggregation of the various proteins associated with human diseases. The use of fluctuating thermodynamics has the potential to provide a comprehensive picture of fluctuating phenomena in diverse biological processes. In this talk, I will present the detailed concepts and applications of our recent computational technologies for elucidating biological processes. These tools and new paradigm provide a unified view on how biomolecules operate and are applied to design a new function of specific interest in cellular network.