



**BIOINFORMATICS 2017 Spring SEMINAR SERIES**

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**MONDAY, March 20, 2017**  
**3:30pm**  
**DBI Room 102**

# **Predicting Protein-Protein Interaction Using Deep Learning Techniques**

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**ABSTRACT:**

Protein-Protein interactions (PPIs) play essential roles in cellular processes. Detection of PPIs and reconstruction of networks formed by all PPIs inside a cell (a.k.a., interactome) has become a central task in systems biology. Due to the high cost and limitations associated with the current high throughput technologies in determining PPIs experimentally, computational methods have been developed for predicting PPIs based on protein sequence, structure, and other relevant information. In this talk, I will briefly introduce some recent developments in my research group about PPI prediction using deep learning techniques: specifically, a) identifying residue contact between two interacting proteins and b) identifying de novo PPIs based on incomplete interactome.