



Monday February 16, 2009, 1:00 PM, Clark 110

(Will be teleconferenced to Traylor 709)

Light lunch will be provided at 12:00 in Clark 110



Protein-protein Interactions: What is the Preferred Way for Proteins to Interact?

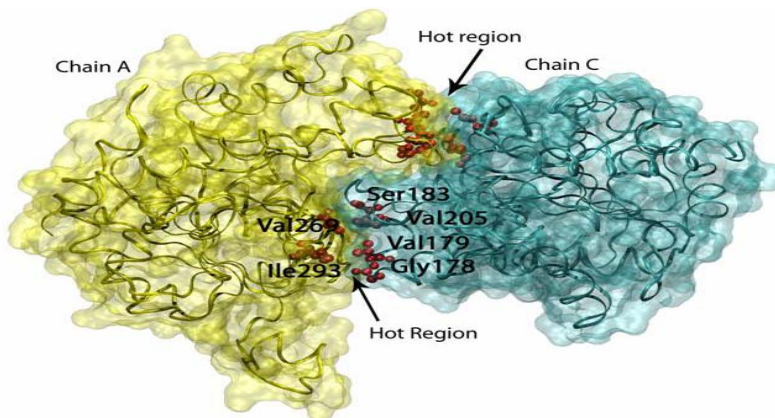
Ruth Nussinov, PhD

Professor, Dept. of Human Genetics
School of Medicine, Tel Aviv University
and

Senior Principal Scientist & Principal Investigator
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Hosted by Rachel Karchin

Abstract: Proteins are the working horse of the cellular machinery. They are responsible for diverse functions ranging from molecular motors to signaling. The broad recognition of their involvement in all cellular processes has led to efforts to predict their functions from sequences, and if available, from their structures. A practical way to predict protein function is through identification of the binding partners. Since the vast majority of protein chores in living cells are mediated by protein-protein interactions, if the function of at least one of the components with which the protein interacts is identified, it is expected to facilitate its functional and pathway assignment. Through the network of protein-protein interactions, we can map cellular pathways and their intricate cross-connectivity. Since two protein partners cannot simultaneously bind at the same (or overlapping) site, discovery of the ways in which proteins associate should assist in inferring their dynamic regulation. Identification of protein-protein interactions is at the heart of functional genomics. The talk will describe our recent work in this direction.



Interfaces Can Contain Cooperative Hot Regions

Upcoming Seminar:

February 23: Xiao-Jing Wang, Yale University

<http://www.hopkinsmedicine.org/ibbs/news/events.html>

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