

Beijing Symposium on Protein Folding, Function and Dynamics

July 4-7, 2005

Beijing, China

Schedule

Monday	July 4
08:30-08:40	Welcome Remarks
08:40-09:40	Michael Levitt (<i>Stanford University</i>) Using Toys Models to Explore the Protein Universe
09:40-10:15	Zhixin Wang (<i>Tsinghua University</i>) TBA
10:15-10:35	Tea Break
10:35-11:10	Martin Gruebele (<i>UIUC</i>) Downhill Folding on Rough Free Energy Surfaces: physics and evolution at work
11:10-11:45	Hiroshi Kihara (<i>Kansai Medical U</i>) Alpha-helix-rich folding core of beta-sheeted proteins
12:00-13:30	Lunch
13:30-14:05	Ruhong Zhou (<i>IBM/Columbia U</i>) Dewetting Transition and Hydrophobic Collapse in Protein Aggregates
14:05-14:40	Hue Sun Chan (<i>Toronto U</i>) Desolvation is a Likely Origin of Robust Enthalpic Barriers to Cooperative Protein Folding
14:40-15:15	Jianpeng Ma (<i>Baylor/Rice</i>) New Methods for Simulating Protein Dynamics at Multi-resolution and Multi-length Scales
15:15-15:50	Jin Wang (<i>SUNY Stony Brook</i>) Diffusion Dynamics of Protein Folding
15:50-16:10	Tea Break
16:10-16:45	Junmei Zhou (<i>Inst. Of Biophysics, CAS</i>) Molecular Chaperone Function of Escherichia coli Trigger Factor
16:45-17:20	Yi Liang (<i>Wuhan University</i>) Mixed Macromolecular Crowding Accelerates the Oxidative Refolding of Reduced, Denatured Lysozyme: Implications for Protein Folding in Intracellular Environments
17:20-17:55	Changwen Jin (<i>PKU</i>) Solution Structures and Functional Insights of an Arsenate Reductase from <i>Bacillus subtilis</i> : Reversible Conformational Switch Associates with the Arsenate Reduction
Tuesday,	July 5
08:30-09:30	Alan Fersht (<i>Cambridge University</i>) How Small Proteins Fold

09:30-10:05	Yunyu Shi (USTC) Protein structure and protein-protein interaction studied by NMR
10:05-10:25	Tea Break
10:25-11:00	Valerie Daggett (University of Washington) Protein Unfolding and Refolding at Atomic Resolution
11:00-11:35	Yong Duan (UC Davis) Folding and aggregation: A physics-based all-atom modeling
11:35-11:50	Sarah Perrett (Inst. Of Biophysics, CAS) Factors influencing the function, folding and fibril formation of the yeast prion protein ure2
12:00-13:30	Lunch
13:30-14:05	Feng Gai (UPenn) Understanding the Folding Mechanism of β -Hairpins
14:05-14:40	Yongzhang Luo (Tsinghua U) Refolding of Proteins from <i>in vitro</i> to <i>in vivo</i>
14:40-15:15	Zengyi Chang (PKU) Immediate response to stress conditions for the structure and activity of molecular Chaperones
15:15-15:50	Chi-Ming Chen (National Taiwan Normal University, Taiwan) Structure Prediction and Folding Dynamics of Bacteriorhodopsin
15:50-16:10	Tea Break
16:10-16:25	Yuguang Mu (Nanyang Technological University, Singapore; ShanDong University, China) Intermediate states of forming binding protein WW domain: explored by replica-exchange simulation
16:25-16:40	Chung-I Chou (Chinese Culture University, Taiwan) A Study on Protein Folding Energy Landscape by Using the Knowledge-based Evolution Algorithm
16:40-16:55	Bin Lai (Stony Brook University) Translocation of Diphtheria Toxin T Domain-Induced Translocation of the Diphtheria Toxin Catalytic Domain (A Chain) Across Membranes: Role of Changes in Protein Folding/Unfolding
16:55-17:10	Rongzheng Wan (Shanghai Institute of Applied Physics, CAS) Controllable water channel gating of nanometer dimensions
17:10-17:25	Ming Lei (Beijing University of Chemical Technology) Role of conformational change in initial partial disrupted path of V14N/V16E mutant of transthyretin: Insights from molecular dynamic simulation
17:25-17:40	Xiaohong Shi (Huazhong University of Sciences and Technology) A Finding Maximal Clique Algorithm for predicting Loop of Protein Structure
Wednesday	July 6
08:30-09:30	Chih-Chen Wang (Inst. Of Biophysics, CAS) Dimerization and chaperone activity of thiol-protein oxidoreductases
09:30-10:05	Yawen Bai (NIH) Hidden Intermediates at Atomic Resolution: Implications for Protein Folding

10:05-10:25	Tea Break
10:25-11:00	Wei Wang (<i>Nanjing U</i>) Folding of small proteins using simplified Go-model and all-atom model
11:00-11:35	Emily Ching (<i>Chinese U of HK</i>) Characteristic patterns in amino acid sequences and their use in the prediction of protein structures
11:35-11:50	Aoneng Cao (<i>PKU</i>) Mechanism of the folding and chaperone-like activity of the small heat shock protein rom <i>Methanococcus jannaschii</i>
12:00-13:30	Lunch
13:30-15:00	Poster Session
Tuesday	July 7
08:30-09:30	William Degrado (<i>UPenn</i>) De Novo design of Catalytic Proteins
09:30-10:05	Chao Tang (<i>UCSF/PKU</i>) Flexibility of secondary structures from database analysis
10:05-10:25	Tea Break
10:25-11:00	Yaoqi Zhou (<i>SUNY Buffalo</i>) Molecular mechanism of binding cooperativity in a dimeric hemoglobin
11:00-11:35	Ray Luo (<i>UC Irvine</i>) Unfolding and refolding of p53 cancer and suppressor mutations
11:35-11:50	Jingyuan Li (<i>Zhejiang University</i>) Hydration and Dewetting near Graphite-CH ₃ and Graphite-COOH Plates
12:00-13:30	Lunch
13:30-14:05	Jeff Saven (<i>UPenn</i>) Methods for engineering protein structure and function with computational protein design
14:05-14:40	Chen Zeng (<i>George Washington U</i>) Application of Generic Sidechains and Softmodes in Protein Design
14:40-15:15	Hong Qian (<i>U. of Washington</i>) Dynamics on Energy Landscapes: From Protein Folding Pathways to Open-systems Thermodynamics of Kinetic Proofreading
15:15-15:35	Tea Break
15:35-15:50	Fan Jiang (<i>Institute of Physics, CAS</i>) Scaling laws in folding of native protein structures
15:50-16:05	Ying-Chieh Sun (<i>National Taiwan Normal University, Taiwan</i>) Examination of Several Factors Affecting Folding of Short Helical Peptides Using Molecular Dynamics Simulation
16:05-16:40	Luhua Lai (<i>PKU</i>) Functional Protein Design Targeting Protein-Protein Interface