

International Symposium on Protein Folding and Dynamics

October 15 – 17, 2012

Program

Monday, October 15, 2012

Time	Speaker		
8.00 – 8.45 am	Registration		
8.45 - 9.00 am	Welcome		
	Session 1		
	Chair: Madan Rao, NCBS, Bangalore		
9.00 - 9.45 am	From Self-Organization Of Alkane Chains To Protein Folding And Enzyme Kinetics: A Theoretical Perspective		
	Biman Bagchi, IISc, Bangalore		
9.45 - 10.30 am	Connecting Sequence To Conformational Properties Of Intrinsically Disordered Proteins: A Charged Relationship		
	Rohit V. Pappu, Washington University, USA		
10.30 – 11.00 am	Conformational Excursions Of Intrinsically Disordered Proteins: Chain Collapse And Binding-Induced Folding		
	Samrat Mukhopadhyay, IISER, Mohali, India		
11.00 - 11.30 am	Coffee/Tea		
	Session 2		
Chair: Mrinalini Puranik, IISER, Pune			
11.30 - 12.15 pm	Probing The Polymeric Properties Of Unfolded And Disordered Proteins With Single-Molecule Spectroscopy		
	Ben Schuler, University of Zurich, Switzerland		

12.15 – 1.00 pm	Microsecond-Resolved Tracking Of The Unfolded State Of Bdpa By A Line Confocal Detection Of Single Molecule Fluorescence		
	Satoshi Takahashi, Tohoku University, Japan		
1.00 – 2.00 pm	Lunch		
2.00 – 4.00 pm	Posters		
4.00 - 4.30 pm	Coffee/Tea		
	Session 3		
	Chair: Srikanth Sastry, TIFR, Hyderabad		
4.30 - 5.15 pm	Simulations Of The Folding Unfolding Of Proteins Under Different Solvent And Confinement Condition		
	Angel E. Garcia, Rensselaer Polytechnic, USA		
5.15 – 6.00 pm	Hidden Complexity In The Isomerization Dynamics Of Holliday Junctions		
	Changbong Hyeon, Korea Institute for Advanced Study, Seoul		
6.30 – 8.00 pm	Mixer and Dinner		
	Session 4		
	Chair: K.VijayRaghavan, NCBS, Bangalore		
8.00 – 9.00 pm	G N Ramachandran: Looking Back At The Phi-Psi Plot After Half A Century		
	P. Balaram, Indian Institute of Sciences, India		

Tuesday, October 16, 2012

Session 5	
Chair: R. Sowdhamini, NCBS, Bangalore	
9.00 - 9.45 am	Mapping Protein Folding On Organismal Fitness Eugene Shakhnovich, Harvard University, USA
9.45 - 10.30 am	Understanding The Folding-Function Tradeoff In The β-Trefoil Proteins Shachi Gosavi, National Centre for Biological Sciences, India

12.15 – 1.00 pm Global Dynamics From The Strain Of A Single Hydrogen Bond. Mikael Oliveberg, Stockholm University, Sweden 1.00 – 2.00 pm Lunch 2.00 – 4.00 pm Posters Session 7 Chair: Deepak.T.Nair, NCBS, Bangalore 4.30 - 5.15 pm Studies Of The Folding And Misfolding Of Multidomain Proteins With Tandem Homologous Repeats Jane Clarke, University of Cambridge, UK 5.15 – 6.00 pm Beyond Two-State Model Of Protein Folding And Unfolding G. Krishnamoorthy, Tata Institute of Fundamental Research, India 6.00 - 6.30 pm The Role Of The Conformation And Dynamics Of The Unfolded State On Protein Self-Association Studied At Single Molecule Resolution Krishnananda Chattopadhyay, Indian Institute of Chemical Biology, India	10.30 – 11.00 am	The Unique Cysteine Knot Regulates The Pleotropic Hormone Leptin		
Session 6 Chair: Ramakrishna Vadrevu, Birla Institute of Technology & Science-Pilani, Hyderabad 11.30 - 12.15 pm Functional Consequences Of Intrinsic Disorder In The NF xB/IxBa Interaction Elizabeth A. Komives, University of California at San Diego, USA 12.15 - 1.00 pm Global Dynamics From The Strain Of A Single Hydrogen Bond. Mikael Oliveberg, Stockholm University, Sweden 1.00 - 2.00 pm Lunch 2.00 - 4.00 pm Posters 4.00 - 4.30 pm Coffee/Tea Session 7 Chair: Deepak.T.Nair, NCBS, Bangalore 4.30 - 5.15 pm Studies Of The Folding And Misfolding Of Multidomain Proteins With Tandem Homologous Repeats Jane Clarke, University of Cambridge, UK 5.15 - 6.00 pm Beyond Two-State Model Of Protein Folding And Unfolding G. Krishnamoorthy, Tata Institute of Fundamental Research, India 6.00 - 6.30 pm The Role Of The Conformation And Dynamics Of The Unfolded State On Protein Self-Association Studied At Single Molecule Resolution Krishnananda Chattopadhyay, Indian Institute of Chemical Biology, India		Ellinor Haglund, The University of California at San Diego, USA		
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Biology, India	6.00 - 6.30 pm	State On Protein Self-Association Studied At Single Molecule		
6.30 – 8.00 pm Mixer and Dinner				
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Wednesday, October 17, 2012

Session 8	
Chair: M.K. Mathew, NCBS, Bangalore	
9.00 - 9.45 am	Manipulating The Protein Energy Landscape
	Susan Marqusee, University of California, USA
9.45 - 10.30 am	Single Molecule Mechanics Of Protein Folding And Interaction
	Matthias Rief, Universität München, Germany
10.30 – 11.00 am	Single-Molecule Studies On The Mechanical Unfolding Pathways Of Large Two-Domain Proteins
	Sri Rama Koti Ainavarapu, Tata Institute of Fundamental Research, India
11.00 - 11.30 am	Coffee/Tea
	Session 9
	Chair: Sandeep Krishna, NCBS, Bangalore
11.30 - 12.15 pm	Protein Model Discrimination And Structural Analysis Using Mutational Sensitivity Derived From Deep Sequencing
	Raghavan Varadarajan, Indian Institute of Science, India
12.15 – 1.00 pm	Using Translationally Symmetric Proteins To Dissect Energetics, Cooperativity, And Pathway Selection In Protein Folding
	Doug Barrick, Johns Hopkins University, USA
1.00 – 2.00 pm	Lunch
	Session 10
	Chair: Athi N.Naganathan, IIT, Madras
2.30 - 3.15 pm	Function Of GroEL Follows The Iterative Annealing Mechanism
	Devarajan Thirumalai, University of Maryland, USA
3.15 – 4.00 pm	Thermodynamics Barriers And Conformational Stabilities Of Proteins: Perspectives And Predictions From A Simple Statistical Model
	Athi N. Naganathan, Indian Institute of Technology Madras, India

4.00 - 4.30 pm	Coffee/Tea
_	Session 11
	Chair: Mukund Thattai, NCBS, Bangalore
4.30 - 5.15 pm	Understanding Protein Folding And Energy Landscape By NMR
	Ramakrishna V. Hosur, Tata Institute of Fundamental Research, India
5.15 – 6.00 pm	The Folding And Unfolding Of A SH3 Domain
	Jayant Udgaonkar, National Centre for Biological Sciences, India
6.30 - 8.15 pm	Mixer and Dinner
8.30 pm	Music Concert: Hindustani Vocal by Venkatesh Kumar