

17th Annual Gibbs Conference on Biothermodynamics

	Saturday, September 27
4:00 - 7:00 pm	Check-in in Indian Room
7:00 - 10:00 pm	Reception in Indian Room
	Sunday, September 28
7:30-8:30	Breakfast
8:30-8:35	Introduction Wayne Bolen
8:35-9:35	Keynote James C. Lee "Communication Pathways within the Modular Protein cAMP Receptor Protein from E.coli"
9:35-10:00	Refreshment break
	Session I: Protein Folding and Stability (Moderator: James Hamburger)
10:00-10:35	Richard Dahlquist "The Source of Thermal Stability in the CheY from a Hyperthermophile"
10:40-10:55	Alexey V. Gribenko "Mechanism of Thermostabilization in a Designed Cold Shock Protein with Optimized Surface Electrostatic Interactions"
11:00-11:15	Yun-Ru Chen " <u>C</u> aspase <u>R</u> ecruitment <u>D</u> omains (CARD) of RICK and Procaspace-1"
11:20-11:55	Kim Sharp "How fish survive in polar waters and how macromolecules survive in polar solvent"
12:00-1:00	Lunch
1:00-3:00	Free time
	Session II: Solvation and the Denatured State (Moderator: Katie Tripp)
3:00-3:35	Robert Baldwin "Role of backbone solvation and electrostatics in generating preferred backbone conformations of peptides"
3:40-4:00	Hugh Nymeyer "Membrane Insertion without Folding: Replica Exchange Simulations of an Alpha Helical Peptide in an Explicit Bilayer"
4:00-4:30	Refreshment break
4:30-4:45	Jorg Rosgen "Activity Coefficients of Aggregating Systems"
4:50-5:25	Trevor Creamer "The left-handed polyproline II helix"
6:00-7:00	Dinner
8:00-10:00	POSTER SESSION I (A-J)

	Monday, September 29
7:30-8:30	Breakfast
	Session III: Nucleic Acid-Protein Ligand Interaction (Moderator: Scott Larson)
8:30-9:05	David Wilson "Surface Plasmon Resonance-Biosensor and Calorimetric Investigation of DNA-Organic Cation Interactions"
9:10-9:45	Liskin Swint-Kruse "Asymmetric Allosteric Transition Pathway in the LacI Core Domain Homodimer"
9:50-10:05	Eda Koculi "The effect of polyamines on the energy and structure of rate limiting transition state and final folded state of Tetrahymena ribozyme."
10:10-10:30	Refreshment break
10:30-11:05	Lihua Jin "Thermodynamics of Ligand Binding to <i>E. coli</i> Arginine Repressor"
11:10-10:25	Ronald Shikiya "Thermodynamic Contributions for the Incorporation of a Single Mismatch into the d(A ₇ C ₅ T ₇ C ₅ T ₇) Intramolecular Triplex"
11:30-12:05	Dorothy Beckett "The Biotin Repressor: linkage of ligand binding, protein assembly and site-specific DNA binding"
12:10-1:10	Lunch
1:10-3:30	Free time
	Session IV: Folding and Binding (Moderator: Daniel Isom)
3:00-3:35	Lila Gierasch "Monitoring Protein Stability and Aggregation In Vivo by Real-time Fluorescent Labeling"
3:40-4:15	Terry Oas "D ₂ O, Thiourea and Fast Folding Proteins: Tales of an Accidental Thermodynamicist"
4:20-4:50	Refreshment Break
4:50-5:05	Connie Yarian "Kinetic Study of Partially-Liganded Human Hemoglobin Intermediates Confirms a Dominant Pathway for Cooperative Ligand Binding"
5:10-5:45	Ed Lewis "Non-linear Least Squares Analysis of ITC Data: Simple to Complex Models and Monte Carlo Evaluation of the Uncertainties in K, ΔH, and n Parameter Estimates"
6:00-7:00	Dinner
8:00-10:00	POSTER SESSION II (K-Z)

	Tuesday, September 30
7:30-8:30	Breakfast
	Session V: Electrostatics and Protein Surfaces (Moderator: Matt Auton)
8:30-9:05	Bertrand Garcia-Moreno "Experimental and computational studies of molecular determinants of pKa values "
9:10-9:25	Gary Heil "Molecular Determinants of Side-Chain Conformations in Ubiquitin "
9:30-10:00	Refreshment break
10:00-10:15	Travis Waldron "Enthalpic and Entropic Contributions to a Protein-Ligand Interaction arising from Specific and Aspecific Salt Effects"
10:20-10:55	Andrew Robertson "Protein Phrenology: Determining Aptitudes and Tendencies of Proteins from Their Surface Properties"
11:00-12:30	Lunch