

— Program —

Friday April 13, 2012

4:00 PM Arrival and Registration

6:00 PM Dinner

7:00 PM Introduction

7:10 PM **Maga Rowicka-Kludicka** (UT Medical Branch, Galveston) “**Informativity-guided Analysis of Genomic Data**”

7:45 PM AM **Sarah Bondos** (Texas A&M) “**Intrinsically disordered regions select interacting proteins based on partner topology**”

8:20 PM **Keynote Speaker - Wah Chiu** (Baylor College of Medicine) “**Cryo-Electron Microscopy of Chaperonins at Different Biochemical States.**”

9:10 PM Social and Discussion

Saturday April 14, 2012

8:00 AM Breakfast

9:00 AM Introduction

9:10 AM **Marc Morais** (UT Medical Branch, Galveston) “**Structural insights into the assembly and mechano-chemistry of the bacteriophage phi29 dsDNA packaging motor.**”

9:45 AM **Tim Palzkill** (Baylor College of Medicine) “**Use of Deep Sequencing to Reveal Enzyme Sequence Requirements at High Resolution.**”

10:20 Coffee Break AM

10:30 AM **Choel Kim** (Baylor College of Medicine) “**Crystal Structures of the Carboxyl cGMP binding domain of Human PKG I Reveal the cGMP Selectivity Mechanism**”

11:05 AM (**Short talks**)

- **Daniel Shoup** (Texas A&M) **Development of a single particle assay for studying protein disaggregation by molecular chaperones**
- **Qian Cong** (UT Southwestern) **Structure Prediction along the Path between Folds**
- **David Marciano** (Baylor College of Medicine) **Genetic feedback provide robustness to mutation**
- **Kelvin Rembert** (Texas A&M) **The Molecular Mechanisms of Ion-Specific Effects on Proteins**

12:05 PM Lunch

3:00 PM Posters and Social

6:00 PM Dinner

7:00 PM **Introduction**

7:10 PM - **Keynote Speaker - Jose Onuchic** (Rice University) **“The energy landscape for protein folding and function.”**

7:45 PM - **Keynote Speaker - Elizabeth Goldsmith - Keynote Speaker** (UT Southwestern) **“A new approach to molecular simulation yields some surprises in protein folding”**

8:30 PM Social and Discussion

Sunday April 15, 2012

8:00 AM Breakfast

9:00 AM **Introduction**

9:10 AM **Xuewu Zhang** (UT Southwestern) **“Regulation and signaling of plexin: a tale of two dimers and two small GTPases”**

9:45 AM **Greg Reinhart** (Texas A&M) **“Taking Advantage of a Different View of Allosteric Behavior”**

10:20 AM Coffee Break

10:30 AM **Martin Lisewski** (Baylor College of Medicine) **“Information decoding in noisy biological networks: from protein structures to supergenomic webs”**

11:05 AM **Bob Fox** (University of Houston) **“Tying the knot”**

11:30 AM **Andrey Karamyshev** (UT Southwestern): **“Cotranslational protein quality control.”**

12:00 noon Lunch and Departure