24th Annual Texas Protein Folders and Function Meeting

April 8-10, 2016
The Retreat at Artesian Lakes
Cleveland, TX
Friday April 8, 2016

4:00 PM  Arrival and Registration
6:00 PM  Dinner
7:00 PM  Introduction
7:10 PM  Speaker 1: Kim Orth (HHMI & UTSW) “Bile salt receptor complex activates a pathogenic type III secretion system”
7:45 PM  Speaker 2: Claus Wilke (UT Austin) “Structural and functional constraints on protein evolution”
8:20 PM  Keynote Speaker 1: Rama Ranganathan (UTSW) “Origins of allostery and evolvability in proteins”
9:20 PM  Discussion and Bonfire

Saturday April 9, 2016

8:00 AM  Breakfast
9:00 AM  Speaker 3: Phil Thomas (UTSW) “A devil with many faces: Cystic fibrosis-causing mutations and molecular pathology”
9:35 AM  Short talks (20 minutes each)

- Short talk 1: Charli Baker (TAMU) “Specific requirements of non-bilayer phospholipids in mitochondrial respiratory chain function and formation”
- Short talk 2: James Campbell (BCM) “Crystallography reveals the need for novel phosphodiesterase resistant PKG activators: Can we solve an old problem in cyclic nucleotide research?”
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- Short talk 3: Aaron Brown (UTMB) “Structural Basis of Chemokine CXCL7 Function in Neutrophil-Platelet Crosstalk: Role of Dimer Formation and Glycosaminoglycan Interactions”

10:35 AM Group photo then Coffee break

11:00 AM Speaker 4: Ben Wylie (Texas Tech) “Lipid regulation of Kir channels and structural characterization of CRES3 functional amyloids determined by solid-state NMR”

11:35 AM Speaker 5: Kevin Gardner (CUNY Advanced Science Research Center) “Converting Nature’s switches into scientists’ tools: How biophysical insights lay the foundation for artificial control of cellular activity”

12:10 PM Lunch

4:30 PM Posters and Social

6:00 PM Dinner

7:10 PM Speaker 6: Jennifer Maynard (UT Austin) “Reverse engineering bacterial adhesins to facilitate oral vaccine delivery”

7:45 PM Keynote Speaker 2: Brian Kuhlman (UNC-CH) “SEWING: Designing new structures from protein pieces”

8:45 PM Discussion and Bonfire

Sunday April 10, 2016

8:00 AM Breakfast

9:20 AM Speaker 7: Ry Young (TAMU) “Protein and membrane gymnastics in phage lysis”

9:55 AM Short talks (20 minutes each)

- Short talk 4: Emily Thomas (Rice) “Post-translational control over metabolic labeling of newly synthesized proteins”
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- Short talk 5: Victor Salinas (UTSW) “A conserved pattern of amino acid interactions underlying function in the PDZ domain”

10:35 AM  Coffee break

10:55 AM  Speaker 8: Joff Silberg (Rice) “Expanding the protein reporter toolbox for applications in complex settings”

11:30 AM  Speaker 9: Sarah Bondos (TAMHSC) “Sources of extensibility and strength in Ubx protein biomaterials – and implications for Ubx monomer function”

12:05 PM  Lunch and Departure
Program Chairs for 2016

Steve Lockless (chair) – Clay Clark (vice-chair)

TPF&F Website and Registration

Jim Hu

Organizing Committee for 2016

Jim Hu – Sarah Bondos – Steve Lockless – Clay Clark

Special Thanks to the Support Help

Tillie Rausch – Jenny Ponzio – Chantel Parenzin

Future Meetings:

TBD

The cover this year depicts the *Drosophila melanogaster* protein Armadillo.

The latest information about past, present, and future meetings can always be found on our web page (unless our computer gets hacked into again):

http://txfolders.tamu.edu
Many thanks to the support of those who have sponsored this meeting:

The Department of Biochemistry and Biophysics