

# 24<sup>th</sup> Annual Texas Protein Folders and Function Meeting



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

# 2016 TEXAS PROTEIN FOLDING & FUNCTION MEETING

## — Program —

### 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?**”

# 2016 TEXAS PROTEIN FOLDING & FUNCTION MEETING

- 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**”

## 2016 TEXAS PROTEIN FOLDING & FUNCTION MEETING

- 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

# 2016 TEXAS PROTEIN FOLDING & FUNCTION MEETING

## **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>

## 2016 TEXAS PROTEIN FOLDING & FUNCTION MEETING

***Many thanks to the support of those who have sponsored this meeting:***



**The Department of  
Biochemistry and  
Biophysics**

