Biopolymers in vivo Subgroup 2017 Symposium Saturday, February 11, 2017 New Orleans, Louisiana 10:00 AM- 6:15 PM Room 218

Gary Pielak, University of North Carolina at Chapel Hill, Subgroup Chair

Interactions and Phase Transitions

10:00 Business Meeting

11:30 Break

1:00 keynote lecture

Organization of nucleic acids and proteins by lipid membrane Sarah Keller, University of Washington, Seattle

1:45 Junior Faculty Award winner

Folding in the cell - ions, crowders, osmolytes Simon Ebbinghaus, University of Bochum, Germany

2:15

The role of RNA in tuning the physical properties of polyQ-protein phase transitions Amy Gladfelter, UNC Chapel Hill

2:45 **Graduate Student Talk**

Attenuating the Toxicity of Amyloid-Beta Aggregation with Specific Species Ryan Limbocker, University of Cambridge

3:00

Visualizing structural details of disordered domain phase separation associated with ALS and cancers

Nicolas Fawzi, Brown University

3:30 Break

4:00

Proteins – forever aging?

Jeremy Smith, University of Tennessee and ORNL

4:30 Graduate Student Talk

Glycine Betaine Reverses Osmotic Shock Induced Protein Destabilization in Living Cells Samantha Stadmiller, University of North Carolina

4:45

How evolution tunes stress-triggered protein phase separation to promote cell fitness during stress

Allan Drummond, University of Chicago

5:15 **Keynote Lecture**

Phase Behavior and Self-Assembly of a New Family of Stimulus Responsive Peptide Polymers Ashutosh Chilkoti, Duke University

6:00 PM Closing Remarks