

**Monday, July 13**

|                |                    |   |
|----------------|--------------------|---|
| 7:30 - 9:00 AM | Breakfast          | <i>Elementary School</i>  |
| 7:30 - 9:00 AM | Badge Pick up      | <i>Elementary School</i>  |
| 9:00 AM        | Horia Petache      | <i>Interactions of amino acids with lipid membranes</i>   |
| 9:30 AM        | Gerald Feigenson   | <i>Line Tension and Bending Energy of 4-Component Lipid Mixtures Containing Transmembrane Peptides</i>                        |
| 10:00 AM       | Greg Voth          | <i>New Insights on Membrane Remodeling by Proteins Revealed by Multiscale Simulation</i>                                      |
| 10:30 AM       | Coffee Break       |   |
| 11:00 AM       | Frank Brown        | <i>Lipid tilt, splay and twist and extracting bending moduli from detailed membrane simulations</i>                           |
| 11:30 AM       | John Nagle         | <i>Moduli; Bending and Tilt</i>   |
| 2:00 PM        | Rich Pastor        | <i>Mechanical Properties of Lipid Bilayers</i>  |
| 2:30 PM        | Ed Lyman           | <i>Nanoscale structure and subdiffusive dynamics of liquid ordered phases</i>   |
| 3:00 PM        | Siwert-Jan Marrink | <i>Lipid Organization of the Plasma Membrane</i>  |
| 3:30 PM        | Steve Wassal       | <i>PUFA and cholesterol</i>   |
| 4:00 PM        | Ka Yee Lee         | <i>Binding of the TIM Family Proteins to Lipid Membranes</i>  |
| 4:30 PM        | David Ackerman     | <i>The Effect of WALP Length and Concentration on Phase Behavior in Quaternary Lipid Mixtures: A Molecular Dynamics Study</i> |

**Tuesday, July 14**

|         |                 |  |
|---------|-----------------|--|
| 1:00 PM | Kalina Hristova | <i>FGF receptors: dimerization, structure, and function</i>  |
| 1:30 PM | Klaus Gawrisch  | <i>Conformation and dynamics of endogenous cannabinoid ligand 2-AG in a lipid matrix and its interaction with cannabinoid type II receptor</i> |
| 2:00 PM | Blake Mertz     | <i>Hydration dynamics are controlled by the initial photoisomerization event in proteorhodopsin activation</i>                                 |
| 2:30 PM | Scott Feller    | <i>Retinal-opsin interactions as a function of the Rhodopsin photocycle</i>  |
| 3:00 PM | Coffee Break    |  |
| 3:30 PM | Michael Brown   | <i>Role of Soft Matter in Activating G-Protein-Coupled Receptors</i>   |
| 4:00 PM | Alan Grossfield | <i>Modeling GPCRs at multiple resolutions</i>  |
| 6:00 PM | TSRC Town Talk  | <i>Telluride Conference Center in Mountrain Village</i>  |

### Wednesday, July 15

|                |                          |  |
|----------------|--------------------------|--|
| 7:30 - 8:30 AM | Breakfast                | <i>Elementary School</i>   |
| 8:30 AM        | Jeff Knight              | <i>Comparing and contrasting membrane binding by synaptotagmins 1 and 7</i>  |
| 9:00 AM        | Jeff Klauda              | <i>Binding of a Curvature-sensing Peptide to Model Organelle Membranes of Yeast</i>  |
| 9:30 AM        | Joe Falke                | <i>Single molecule studies of master kinase signaling mechanisms on membrane surfaces</i>  |
| 10:00 AM       | Emad Tajkhorshid         | <i>Enhanced and Efficient Sampling of Specific Lipid-Protein Interactions at an Atomistic Level Using HMMM Membranes</i>                 |
| 10:30 AM       | Coffee Break             |  |
| 11:00 AM       | Taras Pogorelev          | <i>Capturing interactions of FGFR domains with mobile membranes</i>  |
| 11:15 AM       | Scott Perrin             | <i>Membrane Disruption by the Antimicrobial Peptide Piscidin</i>   |
| 11:30 AM       | Denise Greathouse        | <i>Membrane interactions of antimicrobial lactoferricin peptides by solid-state NMR and fluorescence spectroscopy and MD simulations</i> |
| 12:00 noon     | Stephanie Tristram-Nagle | <i>Structure determination of HIV-1 Tat/fluid phase membranes</i>  |
| 6:00 PM        | TSRC Picnic              | <i>Under Tent at Elementary School</i>   |

### Thursday, July 16

|         |                  |   |
|---------|------------------|---|
| 1:00 PM | Toby Allen       | <i>Membrane charge permeation and the role of polarizability</i>                              |
| 1:30 PM | Roger Koeppel    | <i>Molecular Determinants of Transmembrane Orientation for Neutral and Ionizable Peptides</i> |
| 2:00 PM | Peter Kasson     | <i>Interfacial dynamics and influenza membrane fusion</i>                                     |
| 2:30 PM | Zhe Wu           | <i>Functional Role of SNARE Complex and Synaptotagmin in Membrane Fusion</i>                  |
| 3:00 PM | Coffee Break     |   |
| 3:30 PM | Helgi Ingolfsson | <i>Computational lipidomics and the lipid organization of cell envelopes</i>                  |
| 3:45 PM | Clement Arnarez  | <i>Fast hydrodynamics for solvent free lipid models</i>                                       |
| 4:00 PM | Fangqiang Zhu    | <i>Conformational changes in the inter-helical loops of the Mhp1 membrane transporter</i>     |
| 4:30 PM | Marjorie Longo   | <i>Structure and dynamics of nanolipoprotein particles entrapped in nanoporous sol-gel</i>    |
| 5:00 PM | Michael Lerner   | <i>faster, more accurate calculation of diffusion constants</i>                               |