**Center for Molecular Communication and Signaling  
Fall Research Retreat**

**Friday, October 19th, 2012 | 9:00am – 5:00pm | Bridger Field House**

**Posters**

*The effects of hemolysis on platelet activation and aggregation*

Christine Carlisle, Dany Kim-Shapiro, Physics

2*Small Molecule Probes of DNA Methylation*

Lindsay Comstock, Chemistry

*Redox control of cell growth*

Larry Daniel, Biochemistry

*Probing the structural basis for RNA-protein interactions during VSV infection*

Adam Davidson, Rebecca Alexander, Chemistry

*CB1 receptor agonists and G protein subtype selectivity in N18TG2 neuroblastoma cells*

Khalil Eldeeb

*Function of the Chondrocyte PI-3 Kinase-Akt Signaling Pathway is Stimulus Dependent*

Meredith Greene, Richard Loeser, Int Med - Molecular Medicine

*Analysis of Highly Charged Methylated Peptides*

Sarah Hymbaugh, Lindsay Comstock, Chemistry

*The Dietary Flavonoid, Quercetin, Alters Insulin Signaling by inhibition of PI3-Kinase and Antioxidant Activity*

Monica Jenks, Gloria Muday, Biology

*Detection of cysteine oxidation in proteins involved in signal transduction*

Jeremiah Keyes, Leslie Poole, Biochemistry

*Identifying Similarities and Differences in Protein Clustering of the VOC Superfamily using Active Site Environment, Full Protein Structure, and Full Protein Sequence*

Janelle Leuthaeuser, Dr. Jacquelyn Fetrow PI, Molecular Genetics and Genomics

*Kinetic Analysis of Auxin-Induced Transcription Factor Networks Controlling Lateral Root Development in Arabidopsis thaliana*

Stacey Lundy, Gloria Muday, Biology

*A genetic approach to understanding the pathway for synthesis of flavonoids, plant-derived antioxidants, and their physiological functions*

Gregory Maloney, Gloria Muday, Biology

*Complete Artificial Saliva Alters Expression of Proinflammatory Cytokines in Human Dermal Fibroblasts*

Gloria Malpass, Allyn C. Howlett, Physiology and Pharmacology

*Detection of Protein-Lipid Interactions by Confocal Microscopy*

Anita McCauley, Biology

*Improved Large Scale Synthesis of DCP-Bio1: A specific protein sulfenic acid labeling reagent*

Rajeswari Mukherjee, Bruce King, Department of Chemistry

*Specific residues in peroxiredoxins increase peroxide reactivity through effects on cysteine pKa, transition state stabilization and oligomerization*

Kimberly Nelson, Biochemistry

*Localization of the proton-sensing receptor GPR4 in the kidney glomerulus*

Snezana Petrovic, Physiology and Pharmacology

*Performance Analyses of a Parallel Verlet Neighbor List Algorithm for GPU-Optimized MD Simulations*

Andrew Proctor, Samuel Cho, Computer Science

*Measuring intracellular viscoelastic properties of normal and transformed human mammary epithelial cells by vesicle tracking*

Amanda Smelser, Jed Macosko, Biochemistry

*HPOX, A Promising Target for Treating Primary Hyperoxaluria*

Candice Summitt

*Sequence motif analysis of Arabidopsis thaliana transcription factor genes*

William Turkett, Computer Science

*Modulation of reactive oxygen species signaling by antioxidants in guard cells*

Justin Watkins, Gloria Muday, Biology