

# Center for Molecular Communication and Signaling

Fall Research Retreat, Friday, October 17th, 2014 | The Barn, WFU

## Posters

1. *5' to 3' exonuclease Dhp1 performs a novel role in epigenetic gene silencing.* James Tucker, Dr. Ke Zhang, Molecular Genetics and Genomics/Biology
2. *Adipose ABCA1 is critical for adipocyte cholesterol balance and function.* Helen Cuffe, John Parks, Internal Medicine-Molecular Medicine
3. *ApoM signal peptide is necessary for formation of large apoM/S1P-enriched HDL particles.* Mingxia Liu, John Parks, Internal Medicine-Molecular Medicine
4. *Atomistic and Coarse-Grained MD simulations of the intrinsically disordered Bacillus subtilis Ribonuclease P protein.* Cecilia Rambarat, Samuel Cho, Chemistry
5. *Bit-Motif: an algorithm to detect motifs around modifiable residues.* Steven Johnson, Dr. William Turkett, Computer Science
6. *CB1 receptor intracellular loop 4 mutation modulates G protein activation and camp production in human neuroblastoma cells.* Khalil Eldeeb, Allyn C. Howlett, Physiology & Pharmacology
7. *Chemical Tools and Methods for Probing the Role of Cysteine Oxidation in the Response to Radiation in Head and Neck Squamous Cell Carcinoma.* Nelmi Devarie Baez, Cristina Furdui, Radiation Oncology
8. *Chronic phenmetrazine treatment results in receptor desensitization and alters DARPP-32 and ERK 1/2 phosphorylation in mesocorticolimbic rat brain regions.* Annie Dreitzler, Allyn Howlett, Biochemistry
9. *Dietary PUFAs enhance macrophage autophagy, attenuate NLRP3 inflammasome activation, and reduce atherosclerosis.* Lulu Shen, , Internal Medicine
10. *Dimerization between the corazonin receptor and leucokinin receptor revealed by FRET microscopy.* Michael Rizzo, Erik Johnson, Biology
11. *Dopamine and ecdysone acutely modulate AKH signaling during physiological stress in Drosophila.* Jason Braco, Erik Johnson, Biology
12. *Elucidating the function of the ethylene receptor family in lateral root development and guard cell signaling.* Justin Watkins, Gloria K Muday, Biology
13. *ER $\alpha$  Variant Expression Induces  $\beta$ -Cell Death in a Ligand Dependent Manner.* Ellen Dover, Peter Antinozzi, Biochemistry
14. *Experimentally Dissecting the Origins of Peroxiredoxin Catalytic Prowess.* Kimberly Nelson, Biochemistry

15. *Fat body is necessary for AKH-mediated metabolic stress response in Drosophila melanogaster.* Rebecca Perry, Erik Johnson, Biology
16. *Functional dissection of Drosophila G-protein coupled receptors.* Michael Rizzo, Erik Johnson, Biology
17. *Hormonal regulation of tomato root architecture during iron deficiency.* Sheena Gayomba, Gloria Muday, Biology
18. *Integrated "Omics" Approach to Discover Therapies for Radiation Resistance Head and Neck Cancer.* Jade Mims, Cristina Furdui, MMTS
19. *Modulation of Energy Allocation and Reproductive Output by Nutrient Sensitive Central Neurons in Drosophila.* Matt Whitmill, Erik Johnson, Biology
20. *Modulation of Erk activity by reversible cysteine modification.* Jeremiah Keyes, Leslie Poole, Biochemistry
21. *Protective role of bacillithiol in superoxide stress and metal homeostasis in Bacillus subtilis.* Zhong Fang, Patricia Dos Santos, Chemistry
22. *RNA polymerase II interactions with bidirectional promoters in Schizosaccharomyces pombe.* Erin Currey, Ke Zhang, Biology
23. *Temporal Analysis of Transcription Factor Networks that Mediate Ethylene Regulation of Root Growth.* Andria Harkey, Gloria Muday, Biology
24. *The Biosynthesis of the Molybdenum Cofactor in Bacillus subtilis.* Hannah Martin, Katherine Black, Dr. Patricia Dos Santos, Chemistry
25. *Tomato mutants and introgression lines provide evidence for a role of flavonoids in lateral root and root hair development.* Kathleen DiNapoli, Gloria Muday, Biology