

**Winthrop University**  
**Summer Undergraduate Research Experience (SURE) Symposium**  
**July 27, 2012, Sims 215**

9:00 INTRODUCTION AND REFRESHMENTS

9:15 **Lauren Rhodes** and Dr. Grosseohme. DNA Binding Properties of NUR, a Metalloregulatory Protein from *S. coelicolor*.

9:30 **Angelica Huang** and Dr. Sumter. Assessing the DNA Binding Interactions of Benzo[4,5]isoxazolo[2,3- $\alpha$ ]pyridinium and Benzo[4,5]isoxazolo[2,3- $\alpha$ ]quinolinium Tetrafluoroborates.

9:45 **Mariam Salib** and Dr. Hurlbert. Crystallization of the GH30 Endoxylanase CaQ97 from *Clostridium acetobutylicum*.

10:00 **Sarah Wicks, Craig Stevens**, Dr. Hanna and Dr. Lammi. Synthesis and Evaluation of Potential Amyloid- $\beta$  Aggregation Inhibitors.

10:15 **Wayne Anderson, Matt Neal** and Dr. Rusinko. A Colorectal Carcinogenesis Model Incorporating Insulin and Insulin-like Growth Factor 1.

10:30 BREAK

10:40 **Kelsey Aadland** and Dr. Hurlbert. Preliminary Studies of the GH10 Endoxylanase from *Xanthomonas axonopodis* pv. *citri*.

10:55 **Michelle Rice** and Dr. Sumter. Evaluating the Relationship Between  $\beta$ -catenin Function and HMGA1 Activation in Colon Cancer.

11:10 **Chelsea Brennan** and Dr. Hanna. Toward a Synthesis of Cryptolepine Alkaloids: Preparation of Carbolines via Cyclization of 3-(2-Aminoaryl)pyridine *N*-oxides.

11:25 **Justin Waller, Sarah White, and Kenisha Barber** and Dr. Harris. Photocatalytic Splitting of Water Molecules Using Semiconductor Thin Films.

11:45 **Lucas Boncorddo** and Dr. Grosseohme. Preparation and Characterization of Phosphoserine Mimicking Mutants of *C. intestinalis* FoxO.

12:00 LUNCH

1:00 GROUP PHOTO (Meet in Sims Lobby)

1:15 **Jimmy Vinton** and Dr. Birgbauer. Investigating the Effects of Ibuprofen on Retinal Growth Cones.

1:30 **Jamie Murakami** and Dr. Hanna. Synthesis of Benzisoxazolo[2,3-*a*]pyrazinium Tetrafluoroborates.

1:45 **Laura Wilt** and Dr. Hurlbert. Expression and Purification of the Dual-specificity Protein Tyrosine Phosphatase from *Xanthomonas euvesicatoria*.

2:00 **Taisha Jones, Briana Murray**, and Dr. Calloway. Method Development for Gradient Flow Analysis.

2:15 **Michelle Humphrey, Kristen McLaurin** and Dr. Lammi. Structures and Dynamics in Amyloid- $\beta$  Dimers: Zinc Binding and Chelation.

2:30 BREAK

- 2:40 **Janet Xiao** and Dr. Birgbauer. The Effect of KI16425 on the Action of Lysophosphatidic Acid in the Visual System of the Chick Embryo.
- 2:55 **Arthur Korous** and Dr. Hartel. The Reduction of 2-Acylaziridines to Mannich Bases Using Silyllithium Reagents.
- 3:10 **Kourtland Haile** and Dr. Hanna. Construction of Isoxazolopyridines via Cyclization of 3-Acylpyridine *N*-oxide Oximes.
- 3:25 **Justin Talbert** and Dr. Calloway. Chromium Analysis using Tungsten Coil Atomic Emission Spectrophotometry.