

2014 Sigma Xi Symposium Schedule

Gustavus Adolphus College

May 2, 2014

Session 1: Oral Papers, Nobel Hall 201	
2:30 pm	Developing a New Method for Synthesizing Primary Arylphosphines Carl Schiltz Advisor: Brian O'Brien
2:45 pm	The Prevalence and Plasmid Profile Analysis of Antibiotic Resistant <i>Escherichia coli</i> among College-Aged Adults Mikie Phan Advisor: John M Lammert
3:00 pm	Mercury Dynamics In Sub-Arctic Lake Sediments Across A Methane Ebullition Gradient Lance Erickson
3:15 pm	Characterization of Gamma-Glutamylcysteine Ligase Beth Wiese and Katie Diederichs Advisor: Dr. Brenda Kelly
3:30 pm	Taphonomy of Bison Bones from the Des Moines River Dominic Delmont Advisor: Hilary Christensen
3:45 pm	Sediment Mobilization in Ravines Draining Minnesota Cropland Andrew Wallace Choquette Advisor: Laura Triplett
4:00 pm	Bison Remains: Migration, Diet and Climate Kara Helgeson Advisor: Hilary Christensen
4:15 pm	Rare earth element trace of bison fossils in the Des Moines River with unknown origins Serenity Mahoney Advisor: Hilary Christensen
Sigma Xi New member reception 4:30 Nobel Hall Atrium	

**Session 2: Poster Papers sponsored by Sigma Xi
Presented at the Celebration of Creative Inquiry
Jackson Campus Center, 5:00 pm to 7:00 pm**

Characterization of Monomeric and Dimeric Gamma-Glutamylcysteine Ligase

Katie Diederichs, Emily Hamberg, Stefano Rosati, Beth Wiese

Advisor: Brenda Kelly

The Gustavus AMO Lab: Time of Flight Mass Spectrometer and Coulomb Crystals

Will Doebler, Joshua Wolanyk

Advisor: Jessie Petricka

Cryptochrome Interactions With Other Circadian Clock Proteins

Hana M. Fischer, Monica E. Johnson, Stefano W. Rosati, Claire E. O'Neill

Advisor: Karla E. Marz

**Towards Synthesis of a Novel Switchable Aromatic 8,10,21,23-tetrahydrohemiporphyrzine
Ligand**

Daria Grishina

Advisor: Thomas Gardner

Investigating The Relationship between Salicylate-Induced Tinnitus And Circadian Rhythmicity

Travis Sigafos

Advisor: Janine Wotton