

**Fall Research Symposium Schedule  
Friday, September 17, 2010**

<b>Time</b>	<b>Talk A – Nobel 105</b>	<b>Talk B – Nobel 222</b>	<b>Talk C – Nobel 201</b>
<b>1:30</b>	Kristin Jahr <i>New approach to discovering drug to protein interactions for pharmaceuticals</i>	Laura Secor <i>Towards the development of a three-dimensional HPLC method for the quantitation of estrogen hormones and derivatives</i>	
<b>1:45</b>	Steve Groskreutz <i>Development of Hybrid Multi-Dimensional High Performance Liquid Chromatography for Fast, Targeted Trace Analysis in Complex Matrices</i>	Hilary Bauer <i>Mechanisms of Adipogenesis via PI3-Kinase/Akt pathway in Graves' Ophthalmopathy</i>	
<b>2:00</b>	Margaret Bloch-Qazi <i>Is she wound up? The role of a non-canonical histone on sperm fate in female fruit flies</i>	Linnea Schmidt <i>Expression patterns of METACASPASE 9 in Wild and Domesticated Cotton</i>	
<b>2:15</b>			
<b>2:30</b>	<b>Nobel Preview Wallenberg Auditorium</b>		
<b>3:30</b>	Courtney Kerestes <i>Intramolecular Diels-Alder Reactions of Silyloxyfurans</i>	Xiu Xiao <i>Post Transcriptional Regulation of Metalloprotein II</i>	Michael Davidson, Christian DeMarais, Samuel Grace, Henry MacCarthy <i>Thrill Me</i>
<b>3:45</b>	Spencer Bonnerup <i>Development of Rapid LC/MS/MS-based Methods for Confirmatory Analysis of Opiates and Benzodiazepines</i>	Josh Hammer & Carl Stenoién <i>Rupert Anderson Award in Systematics: Enhancement of Gustavus Adolphus Vertebrate Museum's Freshwater and Marine Fish Collection</i>	Ben Johnson-Tesch <i>Insights into Irreversible Binding of Buthionine Sulfoximine and its Derivatives to <math>\gamma</math>-Glutamylcysteinylase</i>
<b>4:00</b>	Laura Leland <i>Investigation of mRNA Degradation by the Exosome in <i>S. cerevisiae</i></i>	Audrey Messelt <i>Synthesis of Biologically Active Molecules via 1,5-electrocyclization</i>	Quentin Ebner <i>A Numerical Approach to Heisenberg's Anisotropic Spin Chain</i>
<b>4:15</b>			
<b>4:30</b>		Carl Stenoién <i>Larval Odonate Predation on Free Swimming Cercariae: Effects of Predator Density, Predator Diversity, and Prey Type</i>	Mandy Halfen <i>Cloning of Myohemerythrin and Metalloprotein II from <i>Nereis diversicolor</i> and Metal Binding in <i>Phascolopsis gouldii</i></i>
<b>4:45</b>		Zainab Jaji <i>Unfolding studies of Myohemerythrin (Myohr) from <i>Phascolopsis gouldii</i></i>	Michelle Kirkvold <i>Intramolecular Diels-Alder Reaction in Silyloxyfurans</i>
<b>5:00</b>		Jamison Utzig <i>Mercury in Itasca County Lakes</i>	Dawn Comstock <i>An investigation of one-component regulators in <i>Myxococcus xanthus</i></i>
<b>5:15</b>		Jiawen Li <i>Identification and Monitoring of <math>\gamma</math>-Glutamylcysteinylase Inhibition in Cells</i>	Daniel McDougall <i>Designing and Building an Ion Trap</i>
<b>5:30</b>			Bryce Bjork <i>Photothermal Measurements of Optical Coatings for Advanced Interferometric Gravitational Wave Detectors</i>

**Gustavus Adolphus College**  
**Fall Research Symposium Poster Sessions**  
**Friday, September 17, 2010**

**Poster Session A - 2:00 – 2:30 pm**  
**Nobel 2<sup>nd</sup> Floor Atrium**

**Noel Amborn**

Importance of CRY/PP5 Binding in the Circadian Cycle

**Eric Cronin**

The Irish in Olmsted County: A Preliminary Study

**Rima Kharbush**

Development of the Microbiota in Newborn Mammalian Species

**Matthew Klun and Garrett Stoddard**

Spectroscopic and Computational Characterization of Transition Metal-Pyrazole Complexes

**Steve Lundberg and Keisha Bates**

Tying the Knot: Providing Connections Between General Biology and Chemistry

**Cyndi Smith**

A Nurse Based BRIDGE Transitional Care Model Reduces Readmissions and ED Visits

**Poster Session B - 4:00 – 4:30 pm**  
**Nobel 2<sup>nd</sup> Floor Atrium**

**Justin Anderson**

Mapping the Rso Tassel Sterility Gene in Maize

**Alex Chubick**

The Differences Between CRY1 and CRY2 and Their Role in Circadian Rhythms

**Ian Gibbs-Hall**

Carbon Based Stationary Phase Characterizations: For Applications in Extreme Separations

**Amber Kirk**

Mapping the dimer-dimer interface of the measles virus hemagglutinin tetramer

**Daniel Mellema**

Modal Analysis of Shearwave Propagation in Arteries and Tube-like Structures

**Noah Setterholm**

Factors affecting the rate of Diels-Alder reactions involving 2-trialkylsilyloxyfurans.

**Kimberley Sukhum**

The effects of stress conditions on floral and vegetative growth in endemic glade species

**Brian Welch**

Examination of denitrification and biofilm development by *Pseudomonas aeruginosa* (ATCC? 27853) incubated in agitated and static conditions