

Gustavus 2007 Fall Research Symposium Schedule

Friday, September 7

Session 1A—Nobel 222

1:30 pm *Conservation genetics investigation of the margined sculpin (*Cottus marginatus*)*

Rochelle Molitor, Joel Carlin

1:45 pm *Relating Gene Regions to Phenotype in *Drosophila melanogaster* Female Fertility*

Isaac Weeks, Margaret Bloch Qazi

2:00 pm *A Computational Model of the Vertebrate Peripheral Auditory System*

Katie Halvorson, Mike Ferragamo, Jan Wotton

2:15 pm *Desulfation of Cell Surface Glycosaminoglycans by Heparin Degrading Endosulfase, Sulf*

Vwaire Orhurhu, Lewis Roberts, Jin Ping Lai, Rashid Shire, Vivek Tharayil, Catherine Moser, Kenard Jackson (Mayo Clinic)

2:30 pm *Melanoides tuberculata and invertebrate diversity of Kelly Warm Springs*

Elias Anoszko, Erin Hotchkiss (University of Wyoming)

2:45 pm *Distribution and Abundance of *Botrychium* spp. in Joseph, OR and Bemidji, MN*

Amy Waldner, Whitney Hohman, Stephanie Erlandson, Cindy Johnson-Groh

Session 1B—Nobel 105

1:30 pm *Are carboxyl groups the most acidic sites in amino acids? From gas phase to solution, considering the thermodynamic properties of variable deprotonation sites*

Maari Hanson, Joe Scanlon, Steve Kass, Chris Cramer, (University of Minnesota)

1:45 pm *Synthesis and Reactivity of Bio-inspired Copper(I) Complexes*

Dave Pearson, Bill Tolman (University of Minnesota)

2:00 pm *In Pursuit of Pincer Ligand-Supported Hafnium Alkylidenes*

Emily Pelton, Oleg Ozerov (Brandeis University)

2:15 pm *Organic Synthesis of Pyrrolizidine Alkaloids*

David Guptill, Nina Serratore, Scott Bur

2:30 pm *Nitrate and Other Anions in the St Peter Drinking Water Sources Protection Area*

Nick Hefty, Jeff Jeremiason

2:45 pm *Spectroscopic Characterization of the Active Site of γ -Glutamylcysteine Synthetase*

Colin Boettcher, Kelly Rozenboom, Brenda Kelly

Poster Session—Nobel Atrium

3:00 pm-3:30 pm

The Attenuation of Pro-inflammatory Proteins and Activated Microglia and Astrocytes in Mice with the use of VIVIT Peptide

Steve Howard, Colin Combs (University of North Dakota)

Multi-Domain Peptide Hydrogels: Synthesis, Purification, and Analysis of Nanofiber Self-Assembly

Molly Beernink, Jeffrey Hartgerink (Rice University)

PNP-Supported Hafnium Complexes

Emily Pelton, Oleg Ozerov (Brandeis University)

Characterization of Non-Zeolite Pores in SAPO-34 Membranes

Jeremy Bedard, John L. Falconer (University of Colorado—Boulder)

The Photolysis of Sulfonyl Group Herbicides: Nicosulfuron and Flumetsulam.

Mallory Richards, Amanda Nienow

Channel Morphology of No Thoroughfare Canyon, CO

Kathryn Ladig, Richard Gigi (Mesa State College)

Session 2A—Nobel 222

3:30 pm *The Circadian Clock, cAMP Levels, and Light Influence the Distribution of Myosin III and Actin in Limulus Photoreceptors*

Rachel Dorr, Barbara-Anne Battelle (University of Florida)

3:45 pm *Neurotrophin Regulation of Synaptic Vesicles and Transmission*

Brandon Baartman, Carlos Mantilla, Gary Sieck (Mayo Clinic)

4:00 pm *Type Specific Diagnosis of Herpes Simplex Virus (HSV) Infections Using Chemiluminescence Immunoassays*

Sarah Duncan, Beth Frenzel (DiaSorin--Stillwater, MN)

4:15 pm *Metal Binding Specificity in Myohemerythrin*

Veronica Taylor, Brandy Russell

4:30 pm *The Attenuation of Pro-inflammatory Proteins and Activated Microglia and Astrocytes in Mice with the use of VIVIT Peptide*

Steve Howard, Colin Combs (University of North Dakota)

Session 2B—Nobel 105

3:30 pm *Controlled Release Polymer/Drug Conjugates with Anti-Cancer Applications*

Morgan Wells, Thomas Hoye and Chris Macosko (University of Minnesota)

3:45 pm *Synthesis and Characterization of Ruthenium Complexes for Use as Semiconductors*

Chris Leonard, Kent R. Mann (University of Minnesota)

4:00 pm *The Effect of Sulfate Addition on Methylmercury Concentrations in a Marcell Experimental Forest Wetland*

Eliza Swedenborg, Jeff Jeremiason

4:15 pm *The Changing Faces and Spaces of Lutheranism in the Minneapolis Synod*

Brad Utecht, Mark Bjelland

4:30 pm *Preparation and Reactivity of [1.1.1] Propellane*

Joel Rindelaub, Alex Burum, Brian O'Brien