

## 2009 Sigma Xi Symposium Schedule

May 1, 2009

1:30 pm – 4:45 pm

<b>Session 1a—1:45 pm to 3:00 pm</b> Nobel 105 Chair: Brian O'Brien	<b>Session 1b—1:30 pm to 3:00 pm</b> Wallenberg auditorium Chair: Sanjive Qazi
	<b>1:30 pm <i>Strategies for neural and immune responses to provide mechanistic understanding of Holistic Medicine</i></b>  Ashley Baumann, Rebecca Dove, Jeanifer Poon
<b>1:45 pm <i>All-Vanadium Redox Battery</i></b>  Ryan Espy	<b>1:45 pm <i>Between Leaf Scars and Roots in the Fern Genus, Botrychium</i></b>  Colette Brandt and Ashley Grivna
<b>2:00 pm <i>Spectroscopic Investigation of the Pyrazole System</i></b>  Molly Beernink	<b>2:00 pm <i>Cloning and Expression of Myohemerythrin and Metalloprotein II</i></b>  Jessica Moertel
<b>2:15 pm <i>The Preparation of New Hydrocarbon-Cisplatin Anti-tumor Drugs</i></b>  Joel Rindelaub	<b>2:15 pm <i>Solvent Signal Suppression Using WEFT and Decoupler Pulse Sequences</i></b>  Veronica Taylor
<b>2:30 pm <i>Ravine Development and Bank Recession of Ravine Z in Seven Mile Creek Park</i></b>  David Koppel	<b>2:30 pm <i>Gluek Pond Restoration Plan, Minnesota Regional Treatment Center</i></b>  Stephanie Erlandson
<b>2:45 pm <i>Evidence of a Paleochannel Prior to the Present Le Sueur River Channel in Mankato, MN</i></b>  Mikayela Munson	<b>2:45 pm <i>Happiness and Related Components in Chilean and American Culture</i></b>  Emma Espel

3:00 pm-3:30 pm Poster Session and Reception in Nobel Lobby

***Solar Power at Gustavus***

Anna Schuh

***Optimization of Column Choice for Trace Analysis of Triclosan in River Water using Heartcutting Three-Dimensional High Performance Liquid Chromatography***

Scott Simpkins

***All-Vanadium Redox Battery***

Ryan Espy

***Shadow Analysis of Wind Turbines***

Kyle Hulbert

***You Mean I Came All This Way For Nothing? Investigation of Potential Sperm Storage Mutants in Drosophila Melanogaster***

Pauline Jackson

***Hold On! Female Sperm Storage in Drosophila Melanogaster***

Heather Rusk

***lozenge is Required for Normal Sperm Storage Patterns in Drosophila melanogaster Females***

Isaac Weeks

<p><b>Session 2a—3:30 pm to 4:45 pm</b></p> <p><b>Nobel 105</b></p> <p><b>Chair: Laura Triplett</b></p>	<p><b>Session 2b—3:30 pm to 4:45 pm</b></p> <p><b>Nobel 201</b></p> <p><b>Chair: Margaret Bloch Qazi</b></p>
<p><b>3:30 pm <i>Mineralogy and Metamorphism of the Stromatolite Bearing Layers of the Biwabik Iron Formation</i></b></p> <p>Dan Foley</p>	<p><b>3:30 pm <i>Non-Contact Modal Excitation of Micro-Cantilevers using Ultrasonic Radiation Forces</i></b></p> <p>Brad Abell, Dan Mellema</p>
<p><b>3:45 pm <i>Geomorphology of Naran Khondii, Hoh Serh Range, Mongolian Altai, Western Mongolia</i></b></p> <p>Kathryn Ladig</p>	<p><b>3:45 pm <i>Female response to oxidative stress depresses early stage fertility in Drosophila melanogaster</i></b></p> <p>Leah Hogdal</p>
<p><b>4:00pm <i>The Stratigraphy of Seven Mile Creek Park And Implications For Ravine Growth And Other Geologic Processes Within The Park.</i></b></p> <p>Elliot Peterson</p>	<p><b>4:00 pm <i>The effects of group synchrony on cooperation, prosocial behavior, and mood.</i></b></p> <p>Susie Kramer</p>
<p><b>4:15 pm <i>A chemical analysis of sediment sources in the Le Sueur River, southern Minnesota</i></b></p> <p>John Leaf</p>	<p><b>4:15 pm <i>Allosteric behavior of monomeric E.coli gamma-GCL in the presence of non-substrate analogs</i></b></p> <p>Colin Boettcher and Chelsea Koepsell</p>
<p><b>4:30 pm <i>Strain analysis in Archean rocks of the Virginia Horn area of northeastern Minnesota</i></b></p> <p>Ben Christensen</p>	<p><b>4:30 pm <i>Preparation of Fluorinated (P-Aryl)Phthaloylphosphines and New Phosphorus-based Fluorinated Anions</i></b></p> <p>Jason Schultz</p>