Oral Presentation Session 2

Nobel 201

3:30 **Katie Aney**
KPC cells engineered with GFP to study the T cell response to pancreatic cancer

3:45 **Haley Moran**
The Iron Binding Chemistry of Metalloprotein II and Myohemerythrin

4:00 **Elise Le Boulicaut**
Performance Studies of the Transition Radiation Tracker at the Large Hadron Collider ATLAS Experiment.

Nobel 222

3:30 **Ester Archer & Thomas Lauer**
HPLC Flow Rate Modulation

3:45 **Xiaoqi Yu**
Decomposed Cosmic Velocity Field in f(R) Gravity

4:00 **Halie Ostberg**
Identifying genes involved in *Drosophila* ovulation through genetic screens

Full abstracts and additional authors are available at:
https://gustavus.edu/chemistry/research/SummerResearchSymp.php

Fall Research Symposium

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Oral Presentations Session 1

Nobel 201

1:30 **Erica Power**
GOT DRUGS? A summer spent in the Mayo Toxicology lab

1:45 **Kelly Neubauer**
Inverse magneto-caloric effect at the spin reorientation of Fe_2B alloys doped with Co

2:00 **Brittany Courteau**
Determination of the Kinetic Expression of the Photodegradation of the Herbicide Dicamba in Aqueous Solutions

2:15 **Connor Balfany**
Domesticated Atriplex hortensis, Protein Isolation and Quality Assessment

Nobel 222

1:30 **Carly Miller & Ben Madigan**
Analyzing Monoclonal Antibodies and Host Cell Proteins Using Two-Dimensional Liquid Chromatography

1:45 **McKenzie Perry & JakeWestfield**
Identifying agricultural land management successes and water quality improvements at the sub-watershed scale: A case study in south-central Minnesota

2:00 **Eli Larson**
Simulating Elution Profiles in Two-Dimensional Liquid Chromatography: Developing an Analytical Toolbox

2:15 **Kathryn Hagen**
Behavioral Changes in Early Visual Areas due to Perceptual Learning

Full abstracts and additional authors are available at:
https://gustavus.edu/chemistry/research/SummerResearchSymp.php

Poster Session: Nobel Hall Atrium 2:30 – 3:30 PM

Sarah Anderson & Kylee Brimsek
Ecological Assessment of a Chronosequence of Prairie Restorations

Chandra Bouma
Correlates of Basal Ganglia Perivascular Spaces in a Population Based Sample: Mayo Clinic Study of Aging

Tyler Brau
Using computer simulations to investigate the effects of Active Solvent Modulation on resolution and sensitivity in the second dimension of 2D-LC

Linh Chu
Steps Toward a Framework for the Determination of Solute Parameters using the Hydrophobic Subtraction Model of Selectivity in Liquid Chromatography

Sara Graves
Predictive signatures during acute *Campylobacter* enteritis for post-infection irritable bowel syndrome.

Brian Hastings
Evidence of Less Flexible Cognitive Resource Reallocation In Individuals With Multiple Sclerosis

Hayley Lhotka
Improving the Aqueous Solubility of Thiomuracin GZ

Matthew Mehrkens
Ultrasonic Imaging using Refracto-Vibrometry

Abby Michels
Syntectonic Deposition of Plio-Quaternary Sediments in the Santa Rosalia Basin of Baja California Sur, Mexico

Meagan Nowariak
Creation of Reusable, High-Fidelity Heart Model to Simulate Neonatal Extracorporeal Membrane Oxygenation

Emma Santa & Abby Trouth
Using Fragment-Based Ligand Design to Inhibit PfGCN5-mediated Gene Expression

Ryan Sullivan
Weekly Cycle in NEXRAD Rain Rates

Riley Thoen
Analysis of the effects of fat content on the islet isolation procedure of total pancreatectomy with islet autotransplantation (TP-IAT)