Summer Research at St. Olaf
Research Results Symposium August 5, 2005

8:00 Breakfast Treats in SC Lobby

8:20 Poster Session A SC Lobby

Presenter(s)	***Advisor***	***Title***
Josie Glassberg, Jillian Godfrey, Willie Richards & Adam Thomas	Bakko	Forest Regeneration by Direct Tree Seeding
Travis C. Mattson	Beussman	Forensic analysis of economic poisons using SPME and mass spectrometry
Paul C. Anderson & Amy L. Wentland	Beussman/Cole	A Proteomic investigation of *Tetrahymena thermophila* using LC-MS and LC-MS/MS
Lisa Schaus	Beussman/Miessler	Using APCI mass spectrometry to characterize molybdenum and tungsten compounds
Erin Manlove	Borovsky	How does molecular structure affect friction?
Chris Rolfes & Erin Mercer	Engbrecht	BiCEP Labs - Biological and Chemical Experiments in Physics Labs
Steve Lund	Engbrecht	Analysis of Ps gas scattering in helium
Marla Nelson	Henry	Stimulated food-foraging behavior patterns of the Blow Fly *Calliphora vicina*
Becky Hochstein	Jackson/Swift	Mussels as indicators of anthropogenic contamination in the Cannon River Watershed
Ian Campbell	Jacobel	Development of high-speed acquisition software for ice-penetrating radar
Kirsten Eilertson, Haley Hedlin & Mark Holland	Legler	Broadening the use of statistical analysis in second language research
Steffanie Halberstadt & Kathleen Kephart	Legler	The Odd Couple: Statistics and Morality
Lisa Schaus	Miessler	Synthesis and identification of tungsten and molybdenum complexes
Patrick Shabino	Muth	Imitation RNA, Creating a secondary structure analog
Christine Gille	Rutherford	Operon confirmation in *Mycobacterium tuberculosis*
Joel Beard and Kristin Henry	Rutherford	Operon prediction in *Mycobacterium tuberculosis*
Benjamin Landsteiner	Rutherford	Current Comparative Table 2: Software for automating protein domain and sequence searches for bench scientists
Anne Malaktaris & Rachael Sexton	Sherman	Month forms
Tyler Drake	Spessard/Hanson/Klingshirn	Green chemistry and the Sonogashira coupling reaction

9:15 Presentations in SC 278

Time	***Presenter(s)***	***Advisor***	***Title***
9:20	Allison Hagen	Jacobel/Petterson	Sub-glacial conditions of the Antarctic ice sheet observed with ground-based radar
9:35	Kieran Cofell-Dwyer & Mike Helgen	Jacobel/Welch	Return from the ice: The Mt. Veniaminof field season
9:55	Allison Christensen	Spessard/Hanson/Klingshirn	Shades of Green: Revising Chemistry 121
10:10	**BREAK SC Lobby**		
10:25	John Nichol	Cederberg/Nitz	An anomaly in the hyperfine spectrum of LiI
10:40	Jimmy Randolph & Sara Fortman	Cederberg/Nitz	Everything you didn't know you wanted to know about quantum mechanics
11:00	Paul Campbell	Spessard/Hanson/Klingshirn	St. Olaf's Green Chemistry Assistant

11:20 Poster Session B SC Lobby

Presenter(s)	***Advisor***	***Title***
Megan Watland	Angell	Surveying prairies for prairie voles: a species of "Special Concern" in Minnesota
Joey Paulsen & Casey Johnson	Engbrecht	Micelle measurements with positron methods
Sarah Anderson & Dane Huber	Hill	Estimation of the spontaneous embryonic lethal mutation rate in Arabidopsis thaliana
Kyla Bauer	Hill	An updated estimate of the energy balance of soybean-derived biodiesel
John Lamppa	Jackson	Detection of contaminants in the Cannon River Watershed through caffeine tracers
David Osterhouse	Jacobel	The flow of ice of the sticky spot in the Kamb Ice Stream
Peter Cathcart	Kandl	Interactions of two translation elongation factors with actin
Kirsten Eilertson & Haley Hedlin	Legler	Broadening the use of statistical analysis in second language research
Bethany Jacobson & Allison Madison	McMillan	Studies in environmental psychology
Kelly Nail	Malvadkar	Optimal harvesting in the presence of random environmental effects
Tom Kiger & Hannah Thiesen	Muir	Apparatus for recording head direction cells
Kristin Dorn	Muth/Schwinefus	RNA Thermodynamics
Larisa Nordstrom & Chris Clark	Schwinefus	Unraveling helix stability: Dependence of cosolute interactions and DNA hydration on base composition
David Harris	Spessard/Hanson/Klingshirn	Oxidation reactions in green chemistry
Tim Barker	Spessard/Hanson/Klingshirn	A Greener method of forming carbon-carbon double bonds
Becca Hunt	Swift	Damselfly larvae predation on cladocerans
Erika Reid & Ellie Kvam	VanWylen	Postconditioning in aged rats
Valerie Klema	Walter/Beussman	Properties of the red beet tonoplast membrane

12:15 LUNCH in SC Lobby