

University of Wisconsin - Stevens Point  
College of Letters and Science

Undergraduate Research  
Symposium  
Program



University Center,  
UW-Stevens Point Campus

Saturday  
April 29, 2000

*University of Wisconsin - Stevens Point  
College of Letters and Science*

◆ **Oral Presentations** ◆

See Program for Individual Room Locations  
9:30 – 11:45 A.M.

◆ **Poster Presentations** ◆

Located in the La Follette Lounge  
9:30 – 11:45 A.M.

◆ **Lunch** ◆

served in the Alumni Room at Noon

Introduction by Dean Justus Paul  
Welcome by Vice Chancellor Bill Meyer

Pick up your lunch tickets at the Registration  
Table, located in the La Follette Lounge

**Oral Presentations**

**Anderson Room (103)**  
**Moderator: Dr. Janis Weber**

**Department of Sociology**

**Haiti: Land of Inequality**

*Susan Frommelt and Joseph Malcore*  
*Faculty Mentor: Dr. Janis Weber*

**Birth Control Distribution to Minors**

*Lindsey Schwarz*  
*Faculty Mentor: Dr. Janis Weber*

**Attitudes toward the Legalization of Marijuana**

*Wesley Kapping*  
*Faculty Mentor: Dr. Janis Weber*

**Public Attitudes toward Police Brutality**

*Brandon Hill and Ryan Fox*  
*Faculty Mentor: Dr. Janis Weber*

**A Market for Human Organs:  
Can You Put a Price on a Priceless Item?**

*Jaime McDonald*  
*Faculty Mentor: Dr. Janis Weber*

**Determinants of Alcohol Consumption**

*Susan Frommelt and Quentin Krepline*  
*Faculty Mentor: Dr. Janis Weber*



**Anderson Room (103)**  
**(continued)**

**Maternal Employment and the Effects on Children**

*Dawn Roznowski and Chrissy Snowberry*

*Faculty Mentor: Dr. Janis Weber*

**A Closer Look at Pre-Marital Sex: Factors That Determine  
Who Is More Likely to Approve and Disapprove**

*Michelle Gerber*

*Faculty Mentor: Dr. Janis Weber*

**Attitudes toward Surrogate Motherhood**

*Kayla Tinker*

*Faculty Mentor: Dr. Janis Weber*

**Attitudes toward the Death Penalty**

*Tom Reif and Vassar Hibbitts*

*Faculty Mentor: Dr. Janis Weber*

**Heritage Room (126)**  
**Moderator: Dr. Jianwei Wang**

**Department of Sociology**

**U.S. Attitudes toward School Based Sex Education Programs**

*Heather Digman, Heather Camps and Kristie Pellitteri*

*Faculty Mentor: Dr. Janis Weber*

**To Spank or Not to Spank**

*Francette Albrecht*

*Faculty Mentor: Dr. Janis Weber*

**Determinants of Attitudes toward Capital Punishment**

*Sarah Roberts*

*Faculty Mentor: Dr. Janis Weber*

**Euthanasia: Attitudes and Influential Factors**

*Bonnie Gahan*

*Faculty Mentor: Dr. Janis Weber*

**Parental Influence on the Incidence of  
Adolescent Premarital Sexual Activity**

*Jennifer Oelke*

*Faculty Mentor: Dr. Janis Weber*

**Contraception: Should Teens Require Parental Permission?**

*Nathan Moore*

*Faculty Mentor: Dr. Janis Weber*

**Intact Family or Divorce: Who Agrees Divorce is Better  
for Children in Troubled, Unhappy Situations**

*Christine Yonke*

*Faculty Mentor: Dr. Janis Weber*

**Department of Psychology**

**An Exploratory Study of Boundary Ambiguity and Divorce**

*Melissa Warren and Joanne Houtman*

*Faculty Mentor: Dr. Douglas Henderson*

**Department of Political Science**

**A Comparative View of the American Political-Economic  
Structure in Reference to the Asian and European Systems**

*Andrew Halverson, Pei Ling Jacinta Chew and Tsoun Ming Lai*

*Faculty Mentor: Dr. Jianwei Wang*

**Garland Room (205)**

**Moderator: Dr. Kevin Hefferan**

**Department of Geography/Geology**

**Landsat Thematic Mapper Analysis of the  
Mariscal Mountain Anticline, Big Bend, Texas**

*Mike Falkowski, Dean Johnson, Justin Conner and John Zuleger*

*Faculty Mentors: Dr. Kevin Hefferan, Dr. Neil Heywood,*

*Dr. Richard Walker and Dr. Michael Ritter*

**Department of Chemistry**

**Novel Aromatic Diamine Monomers for PMR Polyimides**

*Nate Wallock*

*Faculty Mentors: Dr. John Droske*

**Separation of Caffeine & Aspirin by Capillary Electrophoresis**

*Dan Wolcanski*

*Faculty Mentor: Dr. Laura Cole*

**Department of Biology**

**Characterization by Transmission Electron Microscopy of  
Several Bacteriophage Species Isolated from Sources in  
Central Wisconsin**

*Harold Norton*

*Faculty Mentor: Dr. Richard Crowther*

**Coinfection Rates of Pathogens Causing Babesiosis, Human  
Granulocytic Ehrlichiosis and Lyme Disease in Ixodes  
Scapularis from Areas in Wisconsin**

*James Henkel*

*Faculty Mentor: Dr. Diane Caporale*

**Green Room (113)**

**Moderator: Dr. Richard Crowther**

**Department of Biology**

**Do Conifer Plantations Function as Population Sinks for  
Breeding Cooper's Hawks (*Accipiter cooperii*) in Wisconsin?**

*Sarah Sonsthagen*

*Faculty Mentor: Dr. Robert Rosenfield*

**Effects of Temperature on Nitrogen Waste Production by  
Brook Trout in a Controlled Environment**

*Christopher Huff*

*Faculty Mentor: Dr. Chris Hartleb*

**Home Range Size and Population Assessment of Urban and  
Rural Populations of the North America Wood Turtle  
(*Clemmys insculpta*) in Central Wisconsin**

*Neal T. Halstead and William Zelenski*

*Faculty Mentor: Dr. Erik Wild*

**Species are not Ecological Constants: A Raptor Example**

*Laura Gissibl*

*Faculty Mentor: Dr. Robert Rosenfield*



**Red Room (115)**

**Moderator: Dr. Robert Rosenfield**

**Department of Biology**

**Variation in *Verticillium dahliae* Resistance in Potato Stems**

*Jessica Nelson*

*Faculty Mentor: Dr. Shelley Jansky*

**Metabolism and Ventilation during  
Cold Stress in a Small Bird**

*Derrick Same*

*Faculty Mentor: Dr. Sheldon Cooper*

**Evaluation of Foliage Resistance Expressed by Potatoes  
to Infection of Late Blight**

*Charles Hoff*

*Faculty Mentor: Dr. Terese Barta*

**Grafting Studies in Relation to *Verticillium dahliae*  
Resistance in Potato (*Solanum tuberosum*)**

*Sarah Ferguson*

*Faculty Mentor: Dr. Shelley Jansky*

**Does Heat Produced during Activity Contribute to  
Thermoregulation in the Black Capped Chickadee?**

*Sarah Sonsthagen and Jonathan Schiller*

*Faculty Mentor: Dr. Sheldon Cooper*

**Mitchell Room (207)**

**Moderator: Dr. Alice Keefe**

**Department of English**

**Like, Okay!**

*Darcy Lapp*

*Faculty Mentor: Dr. Mark Balhorn*

**Department of Philosophy**

**The Hebrew Bible:**

**Explorations in Interpretation Panel**

*Faculty Mentor: Dr. Alice Keefe*

**The Sons of God, the Daughters of Men and the Nephilim:  
Complications in Interpretation**

*Ryan O'Leary*

**Judging Characters: Jephthah and his Daughter**

*Craig Buttke*

**Do Not Kill: The Meaning behind the Fifth Commandment**

*Katherine Lawton*

**Cultural Identity and the Old Testament**

*Christopher Parker*

**The Silencing of Miriam**

*Angela Kind*

**Comparing Set and Cain:**

**The Influence of Egyptian Culture on the Ancient Israelites**

*Roger Reichardt*

# Poster Presentations

## La Follette Lounge

### Department of Psychology

#### **Environmental Attitudes: A Functional Approach**

*Pamela Loose, Brad Griesbach, Alicia Bembenek,  
Carrie Lukens and Jamie Hersant  
Faculty Mentor: Dr. Donna Desforjes*

#### **Group Cohesion and Collective Optimism**

*Kyle Sargent, Pamela Loose and Amy Schroeder  
Faculty Mentor: Dr. Donna Desforjes*

#### **Majority and Minority Perceptions on Intergroup Contact**

*Carrie Lukens, Brad Griesbach, Zach Secrist,  
Jamie Hersant and Alicia Bembenek  
Faculty Mentor: Dr. Donna Desforjes*

#### **Response Components of Task Switching**

*Elizabeth Horswill and Natasha Rueth  
Faculty Mentors: Dr. Padmanabhan Sudevan and Dr. Jack Holmes*

#### **Verbal Interactions between Men in Three Settings**

*Chad Keller  
Faculty Mentor: Dr. Amy Gervasio*

### Department of Geography/Geology

#### **Landsat Thematic Mapper Analysis of the Anti-Atlas Mountains, Morocco: A Linchpin Suture Zone in Neoproterozoic Gondwana Reconstructions**

*Michael J. Falkowski  
Faculty Mentors: Dr. Kevin Hefferan, Richard Walker and Dr. Katie Algeo*

#### **Alternative Constructions of the History of the Chiricahua Apache of Oklahoma**

*Stacey L. Schultz  
Faculty Mentor: Dr. Katie Algeo*

### Department of Biology

#### **A Morphometric Analysis of Populations of *Bufo americanus* (American Toad) from the Door Peninsula and Adjacent Islands**

*Amy Pribbernow, Kristy Kseczka and Bernadette Ball  
Faculty Mentor: Dr. Erik Wild*

#### **A Survey of Parasites from Raptors**

*Andrew Lynch, Hank Reines and Sarah Gomoll  
Faculty Mentor: Dr. Steve Taft*

#### **Acute and Chronic Toxicity of a Phthalate Pesticide leached from a Butyl Rubber Bladder**

*Theresa Sahs and Elizabeth Kurth  
Faculty Mentor: Dr. Robert Bell*

#### **Cellular Morphology, Antibiotic Resistance, and Methods of Purification in Cyanobacteria**

*Brian Schlitt  
Faculty Mentor: Dr. Richard Crowther*



**Comparison of Growth Curves and Colony Morphology of  
*Anabaena spp.* Using Two Media Types**

*Josh Magnuson*

*Faculty Mentor: Dr. Richard Crowther*

**Constructing a Laboratory Experience Dealing with  
Chronobiology and Gravitropism**

*Amanda Noworatzky and Carmela Rjos*

*Faculty Mentor: Dr. Jane Johnson*

**Daily Metabolic Nitrogenous Waste Production from Brook  
Trout fed two Different Diets**

*Joshua J. Eastman*

*Faculty Mentor: Dr. Chris Hartleb*

**Designing a Student Lab Investigation of  
Motor Neurons Innervating the  
Superficial Flexor Muscle of the Common Crayfish**

*Nicholas J. Doperalski*

*Faculty Mentor: Dr. Sol Sepsenwol*

**Determination of the Environmental Conditions and Culture  
Medium Necessary for the Optimal Growth of the  
Cyanobacteria *Anabaena spp.* and *Microcystis aeruginosa***

*Harold Norton*

*Faculty Mentor: Dr. Richard Crowther*

**Determining the Measurement of Age and Growth of Fish  
using a Computer-Digitized Technique**

*Sarah E. Kaatz*

*Faculty Mentor: Dr. Chris Hartleb*

**Identification of a Fungal Dermatophyte  
Isolated from a Chronic Infection**

*Amy Brownrigg*

*Faculty Mentor: Dr. Terese Barta*

**Identification of Unknown Bacteria Isolated from Salad, and  
Enumeration Techniques for Cyanobacteria**

*Paul Berland*

*Faculty Mentor: Dr. Richard Crowther*

**Infection Rate of Lyme Disease Pathogen  
*Borrelia burgorferi*, Among *Ixodes Scapularis* Ticks in  
Northwestern and Central Wisconsin**

*Jason Malone and Brianna Luedtke*

*Faculty Mentor: Dr. Diane Caporale*

**Methods for Cell Lysis of *Anabaena flos-aquae* and  
Subsequent Protein Analysis by  
SDS Polyacrylamide Gel Electrophoresis**

*Stephen D. George*

*Faculty Mentor: Dr. Richard Crowther*

**Microscopic Survey of Fossilized Pollen-Containing  
Structures of the North Dakota Paleocene,  
Sentinel Butte Formation**

*Tim Chambers, Michael Nowack*

*Faculty Mentor: Dr. John Curtis*

**Mineral Nutrition of Potato**

*Shana Dahl and Angelique Peltier*

*Faculty Mentor: Dr. Jane Johnson*

**Molecular Phylogenetic Study of Chironomids  
(Insecta: Diptera) Using Mitochondrial 16S Ribosomal DNA**

*Kelly Stern*

*Faculty Mentor: Dr. Diane Caporale*

**Oxygen Consumption of Brook Trout:  
The Effects of Water Temperature and Fish Size**

*Matthew L. Rogge*

*Faculty Mentor: Dr. Chris Hartleb*

**Survey of Fossilized Marine Invertebrates in the Cretaceous Layer of the Bear Paw Formation in North Eastern Montana**

*Julie Larsen and Alicia Fitzpatrick*

*Faculty Mentor: Dr. John Curtis*

**The Effects of General Anesthesia on Temperature Control in Lab Rats**

*Michael K. Petri and Jonathan A. Schiller*

*Faculty Mentor: Dr. John Curtis*

**Anatomy of secretory cavities of *Panax quinquefolia* (Ginseng)**

*Seth Dahlke, Jason Hendricks and David Murray*

*Faculty Mentor: Dr. John Curtis*

**Anatomy of the Leaf Trichomes of *Rosmarinus* (Rosemary)**

*Yoko Okubo and Heather Oxley*

*Faculty Mentor: Dr. John Curtis*

**Department of Chemistry**

**The Synthesis and Characterization of Novel Polyamides from Diaminotriphenylmethanes Containing 4-Trifluoromethyl and 4-Bromo Substituents**

*Josh Van Gompel and Clare Wysocki*

*Faculty Mentor: Dr. John Droske*

**The Study of an Iridium (III) Complex Reacting with 1,3-Dioxolane**

*Jason Jadin and Robin Tanke*

**Progress Toward the Development of a General Route for the Synthesis of Ring A Substituted Canthinone Indole Alkaloid Natural Products**

*Melissa Oberbeck, Craig Zifcsak, Melissa Fondell, Gretchen Gorte, John Stevens, Christopher Randlett and Kevin Czerwinski*

**HPLC Analysis of Alfalfa Plant Phenolics in Relation to Insect Resistance**

*Bethany Buck and Jennifer Wolter*

*Faculty Mentor: Dr. Thomas Zamis*

**Aromatic Diamine Monomers for High Molecular Weight Linear Polyimides**

*Bridget Schmitz and Aaron Clausen*

*Faculty Mentor: Dr. John Droske*

**Separation of  $\gamma$ -crystallins**

*Amber Ganski*

*Faculty Mentor: Dr. Laura Cole*

**Department of Physics/Astronomy**

**Parallel-Plate Ionization Chamber Spatial Resolution and Characteristic Response**

*Kyle York and Dr. Syed Ackber*

*Faculty Mentor: Dr. Jagdish Chander*

**Diode-Pumped Solid State Green Laser**

*Jason Bree*

*Faculty Mentor: Kameshwar Razdan*

**Nitrogen Laser Design and Construction**

*Corey Jaskolski and Christopher Randlett*

*Faculty Mentor: Dr. Gregory Taft*

**Solid State Ionic Conductivity of Silver Cadmium Iodide**

*John Faludi and Wendy Schreier*

*Faculty Mentor: Dr. Robert Beeken*

**Superconducting Tunnel Junctions**

*Josh Peterson*

*Faculty Mentor: Brad Hinaus*