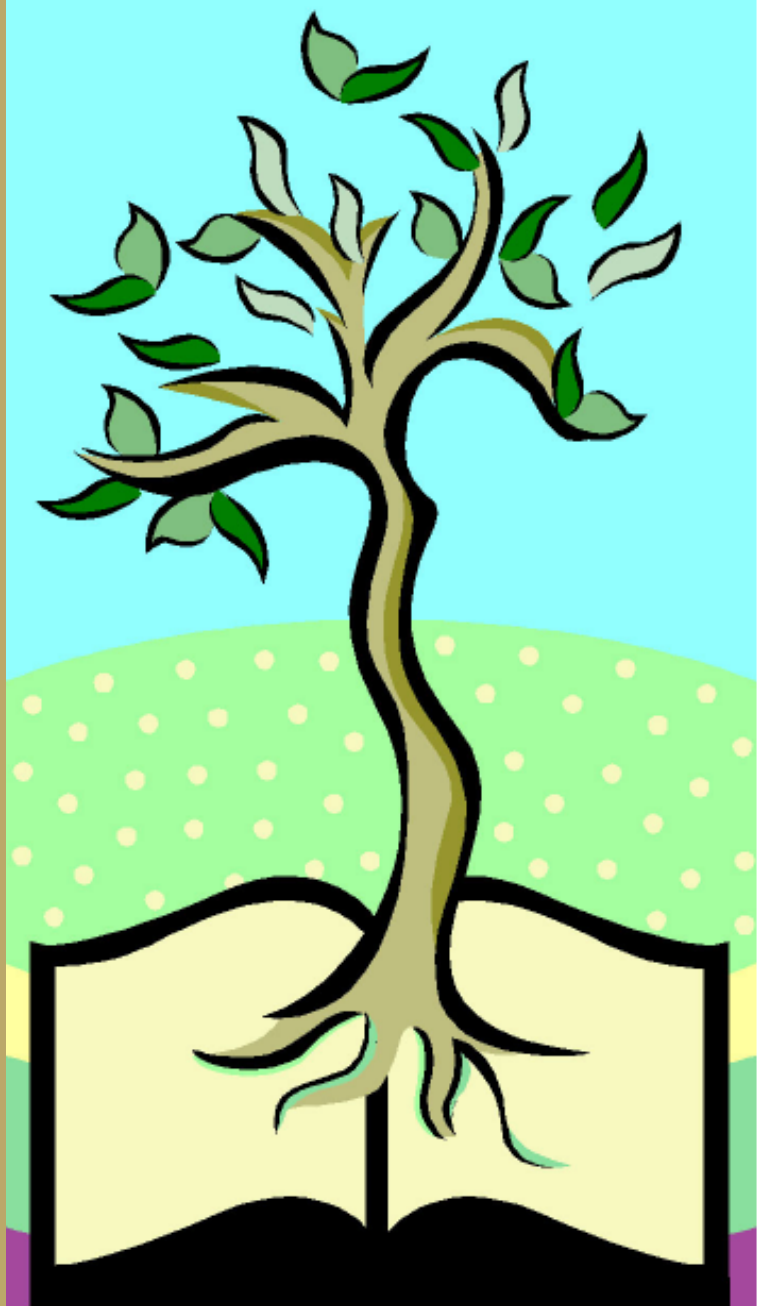


# Michael D. Wilson Symposium

*UMF's  
Celebration  
of  
Undergraduate  
Research  
and  
Creative  
Achievements*

*April 15 and 16,  
2008*



# *Welcome to the Michael D. Wilson Symposium!*

*On this day when we showcase the independent creative research and scholarly works of our students, it is a pleasure once more to acknowledge the naming of Symposium Day in honor of Michael D. Wilson, Class of 1976.*

*Michael was a Special Education major who took great pleasure in helping others to succeed. In tribute to Michael's life-changing friendship, UMF's good friend Michael Angelides and his wife Susan have made possible significant enhancements to our celebration of student achievement.*

*This day is full of the wonderful results of persistence, learning, creativity, hard work, cooperation, and mentoring. Empowering students and helping them realize their potential — that's what UMF is all about. At the Michael D. Wilson Symposium Day you can see the results.*

*Theodora J. Kalikow  
President*



*First held in February 1999, the UMF Symposium has grown into a wonderful tradition. Each spring we take a day off from classes and from our normal routines to share in the exciting work of faculty and students—mainly students. In showcasing their scholarly and creative projects through papers, performances, poster sessions, etc., we are honoring our most deeply felt values as a public liberal arts college—specifically, active and engaged learning, academic rigor, student-faculty collaboration, and service to promote the common good. I find it particularly exciting that Symposium provides an opportunity for everyone—from beginning students to seniors who are completing an exciting capstone project—to share their work in a public venue. I congratulate all the presenters along with their teachers and mentors. In addition, special thanks to the donors and organizers who have made this exciting day possible.*

**Allen H. Berger,**

*Provost and Vice President for Academic Affairs*

*Symposium Day is a wonderful opportunity for students to showcase their scholarly and creative work. During the academic year they pursue their interests through individual projects, group projects, and working in collaboration with faculty mentors. Symposium Day provides them with the stage to share their work with peers, friends, faculty, and staff. We send our congratulations to the students, and we also thank the faculty and staff who have helped the students achieve what they have today.*

**Kathy Yardley,**

*Dean, College of Education, Health, and Rehabilitation*

**Dan Gunn,**

*Interim Dean, College of Arts & Sciences*

**Symposium Day is organized by the University Culture Committee.**

**Linda Beck,** Assistant Professor, Political Science

**Pebble Brooks,** Assistant Professor, Early Childhood & Elementary Education, and Co-Chair

**David Heroux,** Assistant Professor, Natural Sciences

**Melissa Lecroix,** Student Representative

**Theresa Overall,** Assistant Professor, Secondary Education, and Co-Chair

**Doug Reusch,** Associate Professor, Natural Sciences

**Paul Stancioff,** Associate Professor, Natural Sciences

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Please note that if you wish to have lunch in the South Dining Hall, you may purchase a NQAFL (not quite a free lunch) ticket for \$2.00 in the Student Center Lobby  
(Students with meal plans should use their cards)

# Program at a Glance

Tuesday, April 15

## **Arts Night 2008**

5:00 - 9:30pm

Wednesday, April 16

## **Special Session**

Wilson Scholars

Thomas Auditorium 9:00 - 3:00

## **Main Program**

Art Gallery, Education Center,  
Roberts Learning Center, Student Center

9:00 - 10:20	Oral Presentations
10:20 - 10:40	Break
10:40 - 12:00	Oral Presentations
12:00 - 1:00	Lunch
1:00 - 2:20	Oral Presentations
2:20 - 2:40	Break
2:20 - 4:00	Oral Presentations

## **Poster Sessions**

Education Center Lobby  
and Student Center

Refreshments will be available all day in the Student Center,  
Education Center Lobby, Roberts Learning Center, and Thomas Auditorium

# UMF's Michael D. Wilson Symposium

## Arts Night 2008

Tuesday, April 15, 5:00-10:00pm

**Locations:** Merrill, Psychology, and Franklin Parking Lots; Merrill Hall; Nordica Auditorium; Art Gallery; and Alumni Theatre.

### 5:00pm Psychology Parking Lot:

Opening Remarks by President Theodora Kalikow

Welcome by Nathaniel Burns, member of the Ministry of Experimental Arts

### 5:00-6:00pm Merrill, Psychology and Franklin Parking Lots:

*Car Afterlife* by Phil Carlsen

In the tradition and spirit of last year's *Car Life*, the Ministry of Experimental Arts presents *Car Afterlife*, a contrapuntally sublime car-cophony of horns, doors, radios, revving engines, warning bells, and shouted poetic imprecations performed by the cars and drivers of the Afterlife Automobile Orchestra, consisting of fifty to sixty vehicles parked for art in the lots behind Merrill, Psychology, and Franklin Halls. There will be two performances of this heavenly traffic jam session, at approximately 5:10 and 5:40.

Marching Percussion Group

Directed by **Nathaniel Burns**

### 6:00-7:30pm Art Gallery:

Senior Art Show

Works by senior art majors will be exhibited throughout the Art Gallery.

Inkmink

**Ken Masloski**

An exploration of sanity through ambient noises and electronic music.

Adam Reeves, vocals/guitar/songwriting and Tom O'Donnell, guitar

There's an old adage in songwriting: all you need is three chords and the truth. These original rock songs take it a step further, as most of them have four chords. Plus, they have truth AND some made-up stuff. And they sound a bit 90's, but that's neither here nor there.

CE and SF

**Elliot Brackett Lyons**

8bit Game Boy synth, guitar, mostly instrumental, experimental-ish, rock-poppy stuff

Blanket Plan

**Matt Duddy, Graham Duval and Nate Peterson**

Rock meets hiphop with a creative flow of lyricism.

## 6:00-7:30pm Alumni Theatre:

### Sole Expression

**Todd Beaulieu, Chantal Berube, Abner Clark, Luke Ellis, Corey Ford, Tonya Hebert, Amy Kannenberg, Kathleen Kelley, Mollie Lyne, Dan MacGlashing, Sam McAvoy, Kristen McCormack, Esther McLain, Missy Patterson and Ty Thurlow**

Sole Expression is a student-run a cappella group that sings mostly pop and contemporary music.

### *Grief* a monologue by **Angela Hooper**

This work is a four character, one woman show about the stages of grief and the different types of grieving. It expresses the words that are sometimes unheard in difficult times of loss and the hurting that goes along with it.

### *The Salpetriere* a play by **Gavin Pickering**

Cast:

Pierre Janet: **Cary Babcock**

Irene: **Mackenzie Jones**

Nurse Bernadette: **Allisia MacDonald**

Aunt Lucille: **Melissa Patterson**

Francois: **Paul Williamson**

Marie: **Maria Skillings**

*The Salpetriere* is an original one act, based on true accounts, written and directed by Gavin Pickering. Set in 1900, the play is about memory, loss, post-traumatic stress disorder, and the psychological advances that were made in the early 20<sup>th</sup> century. The play recounts the story of a young girl, Irene, who had long taken care of her dying mother at the same time working during the day so she could feed the family. She had not slept for weeks and when her mother died, she was too exhausted to comprehend what happened. Consequently, her aunt committed Irene to the Salpetriere Hospital, an early psychiatric facility in Paris, where Dr. Pierre Janet tries to bring Irene's memory back. The retrieval of those memories reveal a history full of abuse and pain.

## 8:00-10:00pm Nordica Auditorium:

### *Clapping Music* by Steve Reich

**Seth Fogg** and Steven Pane, hands

### *Trio for Clarinet, Violin and Cello* by **Joshua Case**

**Kristen Finkbeiner**, clarinet

**Trond Saeverud**, violin

**Marisa Solomon**, cello

A brief talk by the composer will precede the performance.

### Trond Saeverud/Anita Jerosch duo

UMF Community Orchestra conductor and violinist Saeverud teams up with UMF Concert Band conductor and trombonist Jerosch for a rare collaboration. Selections to be announced.

### *Sonality* by **Seth Fogg**

**Violinist**, TBA

**Phil Carlsen**, cello

**Y. Lily Funahashi**, piano

Two Bits: Solo jazz piano interpretations of early 1980's arcade game music.

**Tom O'Donnell**, piano

Using themes from the classic arcade games "Donkey Kong" and "Dig Dug," these two pieces explore the possibilities of kitsch as the basis for jazz improvisation. The idea is to focus on a particular aspect of popular culture and recast it in a more artistic context, akin to Andy Warhol's paintings of soup cans.

Out of this Moment: Electronic improvisation on guitar.

**Brandon Lagana**, guitar

The uniqueness of each moment, place and time can influence notes and emotion played in-the-moment. Simple notes, shaped by electronic processing, will intertwine to create landscapes of changing melodies and rhythms (like watching clouds shifting and changing).

## INTERMISSION

Some of Us are Misbegotten: Alt-folk acoustic music.

**Meg Reid**, vocals/guitar/songwriting

**Chris Neal**, bass/keyboards

**Matthew Lewis**, guitar/mandolin

This selection of alt-folk music explores relationships, identity and a search for meaning in a cold, northern landscape. These themes are explored through traditional folk instrumentation with a modern touch.

Guitar Trio (1977) by Rhys Chatham

**Meghan Dzyak, Seth Fogg, Elliot Lyons**, guitars

**Philip Carlsen**, bass

**Nathaniel Burns**, drums

In 1977 Rhys Chatham, founder of The Kitchen's contemporary music program, composed Guitar Trio, a landmark work written in one of the most heterogeneous periods of American music history. Composed as "art music" written in "rock style," Guitar Trio features three guitars, a bass and drums, highlighting the complex overtone series created by the combination of amplification and the guitar's timbre. A brief talk will precede the performance and an expanded presentation on Chatham's works will be featured at a Michael D. Wilson Symposium session the following day. This performance will be the Maine premiere of Guitar Trio.

## Art Exhibitions in Merrill Hall

Art students from Painting, Drawing, Sculpture, Combined Media and New Media Classes are exhibiting throughout Merrill Hall. Larger exhibits are installed in the basement, and smaller exhibits are on the second floor.

(Faculty sponsors: Brian Burnett, Tom Higgins, Dawn Nye and Katrazyna Randall)

The Art Renegades, a student club on campus, will have a table in Nordica Auditorium with free apparel, designs made by the members and free copies of their first Zine. Feel free to stop by, talk with them and see what they are about.



# Michael D. Wilson Symposium Arts Week Calendar:

**Thursday, April 10/Friday, April 11, 7:30pm both evenings Alumni Theatre:**

“Dancing in the Midst of Chaos” A dance concert by the UMF Dancers, director Margaret Wescott

**Saturday, April 12, 7:00pm South Dining Hall, UMF Olsen Student Center:**

Battle of the Bands 2008

The 5th annual WUMF Battle of the Bands, featuring eight bands battling it out for prizes and more. Sponsored by WUMF and the Ministry of Experimental Arts.

**Monday, April 14, 6:30-8:30pm Lincoln Auditorium:**

The First Annual UMF Video and Animation Fest: Pixel Hunter  
(Faculty Sponsors: Dawn Nye and Katrazyna Randall)

Join us for an evening of video and animation shorts made by the UMF community. Subjects range from religion to the environment to relationships. This event is free, but donations will be accepted at the door.

**Tuesday, April 15, 11:45am-1:30pm Nordica Auditorium:**

IMPROVISE!

Members of the Improvising Music Course and the Lawn Chair Pirates

Improvising Music: **Daniel Allen, Chantal Berube, Nathaniel Burns, Sean Chase, Colleen Doiron, Sheridan Ellis, Grayson Languet, Matthew Leonetti, Caleb Owen, Phineas Peake, Benjamin Prentiss, Adam Reeves and Adam White.** (Faculty Sponsor, Steven Pane)

Lawn Chair Pirates (improv comedy group): **Kyle Baker, Eric Buckhalter, Angela Hooper, Laura Jennings, Rebecca Larose, Mark Lemos, Elliot Lyons, Tyler Perry, Gavin Pickering, Maria Skillings, and Benny Wells**

**Wednesday, April 16/Thursday, April 17, 7:30pm both evenings Alumni Theatre:**

*Brutality of Fact* by Keith Reddin presented by The UMF Theatre Department, director Andrea Southard

**Michael D. Wilson Symposium Arts Week events are presented and sponsored by the UMF Visual and Performing Arts Department and the Ministry of Experimental Arts.**

# Special Session

## Wilson Research Scholars

**Thomas Auditorium, Preble Hall 9:00 - 12:00**

**Moderator: Allen Berger**

9:00 - 9:20

### **Cross Cultural Comparison of Western Versus Sino Math History**

***Samuel Valentine***

Joseph Needham offered the idea that the Pythagorean Theorem, long associated with the mathematician Pythagoras, may have actually originated in China rather than Greece. Using research conducted in the United States and interviews conducted in Beijing, China this presentation offers a theoretical time line for this highly controversial theory. As knowing something's origins can offer insight into something's future, this presentation will discuss this historical possibility with reference to both the Chinese Remainder Theorem and the Pythagorean Theorem. *(Faculty Sponsor: Nicholas A Koban)*

9:20 - 9:40

### **Music and Memoir: Writing a Life in Song**

***Meg Reid***

In this presentation, I will be reading from a memoir piece about my work as a songwriter and how I found myself entrenched in a life of music. It will focus on how this passion relates to my studies in Creative Writing at UMF and how the program has helped me grow in my nontraditional area of interest. This should show how students can apply what they learn in university to many different areas of interest. The piece will focus on the creative process, inspiration and the pressures of a field where there is no defined path of study. *(Faculty Sponsor: Patricia E O'Donnell)*

9:40 - 10:00

### **A Graphic Approach to Dynamical Systems**

***Adam Case and Hunter Basselet***

Join the presenters as they demonstrate the computer program they designed and coded to aid the study of the mathematical field of dynamical systems. We will explore various function systems resulting in visible strange attractors and see how initial conditions can effect these systems in real time. Also, we will view more complex aspects of the program such as the generation of famous probabilistic systems like Sierpinski's Triangle and the Fractal Fern. *(Faculty Sponsor: Daniel Jackson)*

10:00 - 10:20

## **Predicting UMF Persistence**

**Brian London**

The BCSSE is a survey given to incoming UMF first-years regarding pre-college academic and co-curricular experiences, as well as their interest in and expectations for participating in educationally purposeful activities during college. This presentation will provide an analysis of the resulting data, by showing a correlation between survey responses, G.P.A. and persistence. This Wilson Scholarship project is a continuation of earlier research regarding this data, and has expanded to become a cross-sectional research design encompassing several years of data. Final thoughts will examine potential changes to the survey to better collect pertinent data. *(Faculty Sponsor: Marilyn Ann Shea)*

10:20 - 10:40

## **Break – refreshments available**

10:40 - 11:00

## **The Impact of Sulfide Weathering on Local Water**

**Holly Castle**

Weathering of sulfide minerals produces sulfuric acid, which can mobilize toxic ions. In the Farmington region, the 400-million-year-old Temple Stream Formation, formed in a Black Sea setting, contains sulfides and arsenic up to 392 ppm. A powdered sample quickly lowered the pH of de-ionized water to 3. Stream water samples have high sulfate relative to chloride and bicarbonate, consistent with dissolution of feldspar, calcite, biotite, and pyrite (iron sulfide) and minor input from precipitation. Local homeowners that use well water may want to consider testing for arsenic and related metals. *(Faculty Sponsor: Douglas N Reusch)*

11:00 - 11:20

## **The Blood Family?: Social Identity, Stigmatization and Community among Adult Hemophiliacs in Maine**

**Matthew Lariviere**

What does it mean to have a chronic condition? Are there any consequences associated with it? The goal of my research is to describe what it means to be an adult hemophiliac in Maine. I will explore this unique socio-cultural identity by examining the social events that characterize the lives of hemophiliacs with a focus on three distinct topics: the self identity of the hemophiliac, stigmatization based on the condition, and the presence of a hemophiliac community and how it does or does not affect the individual. *(Faculty Sponsor: Kristina B Wolff)*

11:20 - 11:40

## **Faint Notes of the Ideal: The Unitarian Church in the Great Depression**

**D. Jamez Terry**

While the Unitarian church has always prided itself on its humanitarian work and its emphatic support of social justice, it has frequently failed to provide aid that would be in keeping with its own stated ideals. Such was the case during the Great Depression. This presentation will examine the Unitarian church's response to the Great Depression, the complex and self-contradictory set of values that shaped that response, and the ways that the Unitarians' ethical failures of the 1930s prompted a reawakening of the values that define the church today. (*Faculty Sponsor: Christopher S O'Brien*)

11:40 - 12:00

## **The World's Best Surprise Bag**

**Nathaniel Burns**

This presentation will be a progress report regarding my musical composition *The World's Best Surprise Bag*. It is arranged for a traditional piano trio (piano, cello, and violin), and two voices. During this presentation I will demonstrate the use of modern music notation software. The evolution of this project will also be discussed, starting in 2006 when I purchased a Surprise Bag at a gas station. Come to learn about the background of this piece, which will premiere in the fall of 2008. (*Faculty Sponsor: Philip C Carlsen*)

1:00 - 1:20

## **The Poetics of Birds in the Poetry of John Clare**

**Randall Rothert**

My proposal is to write an essay that addresses the significance of birds in Clare's poetry. By considering such things as social and natural history, poetics, and peasant life, I will argue that Clare uses birds in his poetry to function as metaphor and as a cataloging preservation of the species. It is my intention to study John Clare's bird poetry as an *ars poetica*, or the art of writing poetry, as a form of self reflection and as a reflection on society. (*Faculty Sponsor: Misty A Beck*)

1:20 - 1:40

## **Authenticity and The Need for Proximity in Interpersonal Relationships**

**Matthew Nichols**

Through this paper, my goal is to successfully explain why the importance of authentic, face-to-face communication goes beyond social speaking skills. There are lessons in regards to Being (as understood by Martin Heidegger) that are most natural to our existence and can only be understood when an individual submerses him/herself with others. Only through opening these bonds of communication can one fully understand and appreciate the unique differences each Field of perception has. These differences need to be understood as essential lessons to our cultural learning. Merleau-Ponty says that as we're most natural among others, we must be opened to multiple views otherwise we become a 'pure conscienceness'; fixated on narrow ideas that lead to unhealthy ego-centricity. One cannot hope to reach clear-headedness regarding others without authentic communication achieved through face-to-face contact. (*Faculty Sponsor: George H Miller*)

1:40 - 2:00

## **Esther: A Modern-Day Retelling of the Biblical Book**

**Mary Ellms**

The Biblical Book of Esther tells of a beautiful Jewish maiden, Esther, who is loved by the Persian king, Xerxes, and is chosen as his queen. When Xerxes's second-in-command, Haman, seeks to annihilate all of the Jews in the kingdom, Esther risks her life to save them. I am working on a modern-day retelling of this story. My version takes place in Berlin in the years leading up to and during World War II. My Esther is wooed by an up-and-coming German officer, and must risk her own life to convince him to save her and her loved ones. (*Faculty Sponsor: Patricia E O'Donnell*)

2:00 - 2:20

## **Can Economic Theories Explain the Current Health Situation in America and at UMF?**

**Vincent M. Rubino**

Through an in-depth literary review and local independent research, I will attempt to explain why student health at UMF has been ranked as the 19th fattest college by Men's Fitness Magazine. I will also introduce possible policy recommendations that the University can take to improve the overall health on campus. (*Faculty Sponsor: Wendy L Harper*)

2:40 - 3:00

## **Those Downtown Sounds: A Bakhtinian Analysis of Rhys Chatham**

**Meghan Dzyak**

Rhys Chatham infused ideologies from multiple sound discourses into his compositions during his music directorship at The Kitchen. Western art music, rock and the sounds of Manhattan in the 1970s and 1980s inform his guitar works. Mikhail Bakhtin's concept of heteroglossia, and Björn Heile's Typology of Musical Representations guide this paper. I propose a Bakhtinian analysis in three parts: Chatham's represented and authorial discourses, musical analysis of Guitar Trio (1977) and Drastic Classicism (1981), and identification of Chatham's utterances in later music. (*Faculty Sponsor: Steven Pane*)

3:00 - 3:20

## **Love, Faith, and Treating Drug Abuse**

**Janna Gilbert**

The purpose of this study is to research one particular faith-based residential program and its considerable success as it employs faith and love as treatment methods. Some believe that drug abuse is caused by lack of meaning and that faith-based organizations may have the greatest success in filling these voids in American society by affecting individual's behavior through spiritual regeneration. As a result of constructing the social problem of drug abuse in this way, faith and Christian love, employed by the program, could be considered viable treatment methods. It is the goal of this research to investigate how faith and love is implemented in drug treatment. (*Faculty Sponsor: Kristina B Wolff*)

3:20 - 3:40

### **Tattoo: Self Expression on the Surface**

**Nicole L. Schoppee**

Tattoos have a history with every culture spanning the globe, but as every culture has reasons, meanings, and uses for tattoos; every individual has reasons and meanings for getting tattoos. The popularity of tattoos has increased in American culture, yet stigma still surrounds them. This study explores the process people go through when deciding whether or not to get a tattoo and people's attitudes about tattoos. The main goal of my research is to increase the understanding of the complexities surrounding why people get tattoos. *(Faculty Sponsor: Kristina B Wolff)*

3:40 - 4:00

### **Clique, Clique, Boom**

**Melissa Lyons**

This is a presentation on the results of a study about friendships, cliques, and bullying that occurs within social groupings in middle schools. The research question is, How does social hierarchy, commonly known as cliques, affect the students, particularly in forms of bullying? The methods of research were three focus groups of 6th, 7th, and 8th grade students that were followed by a brief questionnaire that was conducted at a surrounding area middle school. *(Faculty Sponsor: Kristina B Wolff)*

*Please note that additional Wilson Scholar Presentations may be found throughout the program*

# Main Program

Any changes to the program will be posted by the Student Center Mailroom  
and in the Education Center lobby on April 11th

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## Venue 1 Art Gallery

1:00 - 2:40

### **Eye Candy \ Ear Wax** *Senior Art Majors*

Graduate art majors **Casey Brackett, Isaac Glidden, Julia Richards, Becky Stevenson and Vincent Leonetti** discuss their exhibitions of sculpture, installation, sound art and painting. (*Faculty Sponsor: Sarah Maline*)

## Venue 2 Science **Lincoln Auditorium, Roberts Learning Center**

9:00 - 9:20

### **Introduction to the “Science Day” session** *Dr. Drew Barton, Professor of Biology*

9:20 - 9:40

### **Pitch Pine Ridgetops in the Basin Preserve, Phippsburg, Maine: Origin and Dynamics of a Rare Community Type** *Laura Lalemand\*, Drew Barton*

A major goal of the Nature Conservancy Basin Preserve in Phippsburg, Maine is the conservation of the pitch pine ridge-top ecosystem, which is rare in northern New England. Because little is known about this habitat type, we are investigating the history of pitch pine in the preserve, the relationship of these stands to past fire patterns, and the environmental factors critical to the success of these ecosystems. We will report results from sampling of vegetation and environment in 20 plots and paleoecological data from fossil pollen, charcoal, and plant parts from two forest bog hollows near these plots. (*Faculty Sponsor: Andrew M Barton*)

*\*M.D. Wilson Research Scholar*

9:40 - 10:00

**Living the Pages of a Coral Reef Fish Book, and Other Unexpected Bonuses**  
*Nancy Prentiss and Tropical Island Ecology Class*

Presenters from the May 2007 Tropical Island Ecology course will give a slide show that features studies conducted in St. John, U.S. Virgin Islands. Students learned over 70 fish species while assessing the relationship between habitat complexity and coral reef fish diversity. Other highlights include student perspectives on experiential outdoor learning in the various habitats of the island. (*Faculty Sponsor: Nancy Kotchian Prentiss*)

10:00 - 10:15

**DNA Sequencing for Larval Identification in Odonates**  
*Christopher Stevens, Adeline Harris*

The purpose of this project is to test the reliability of DNA sequencing in identifying some members of the suborder Zygoptera (Odonata). Odonates are an important part of terrestrial and aquatic food webs and represent a conservation concern. Larval identification, which is integral in determining population distribution, is very difficult and time consuming. Obtaining DNA sequence information that identifies individuals to the species level will be of great benefit to further ecological research regarding their abundance, distribution, and conservation. This study will focus on the most commonly utilized marker to determine the accuracy and efficiency of larval Odonate identification. (*Faculty Sponsor: Jean A Doty*)

10:20 - 10:40

**Break – refreshments available**

10:40 - 11:00

**Nutrient Speciation in Farmington Municipal Wastewater**  
*Terry Morocco*

Clean water is a major national concern. Municipal wastewater treatment plants face increasing regulations regarding plant effluents. This work was undertaken to measure the nitrogen and phosphorus species in both the influent and effluent of the Farmington Water Pollution Control District's treatment plant to monitor the effectiveness of the advanced treatment process. Results from spring and fall of 2007 will be presented.

11:00 - 11:20

**Distinguishing Hybrid Milfoil in Maine Lakes**  
*Katelyn Michaud\*\**

Variable-leaf Water Milfoil, *Myriophyllum heterophyllum*, is a non-native invasive aquatic plant that poses significant threats to Maine water bodies. It can reproduce sexually, within the same species, asexually through vegetative reproduction, or hybridize between a native species and invasive species and produce a hybrid species (Moody and Less 2002). Once established, milfoil spreads rapidly and is nearly impossible to eradicate. Currently in Maine, 25 lakes are infested with Variable-leaf Water Milfoil. Two lakes contain a



hybrid species. The goal of the study is to determine if hybrid species exist in other Maine lakes. Over 250 milfoil plant samples were collected from five different lakes across Maine. The samples were analyzed using genetic analysis techniques to determine if they are purebred or hybrid species. We predict there is a possibility of other hybrid species in the Maine lakes. (*Faculty Sponsor: Jean A Doty*)

**\*\* M.D. Wilson Research Fellow**

11:20 - 11:40

### **Evolution of the Composite Shirley-Blanchard Pluton, Central Maine: Field, Petrographic, and Geochemical Evidence**

**Monica Hall\*\***

The Shirley-Blanchard pluton, a group of igneous rocks, is located south of Greenville in north-central Maine. The pluton was mapped as a composite intrusion by Espenshade and Boudette (1964), with the Shirley phase exposed in the northeast of the pluton and the Blanchard phase in the southwest. The relative age of these phases is unclear, although zircon ages (Bradley et al., 2000) suggest the Shirley phase ( $404 \pm 4.4\text{Ma}$ ) is younger than the Blanchard phase ( $407 \pm 1.5\text{Ma}$ ). This study details the field relations and petrography of the Shirley-Blanchard pluton and, with new whole-rock geochemistry, examines its evolution and assembly. (*Faculty Sponsor: David Gibson*)

**\*\* M.D. Wilson Research Fellow**

11:40 - 11:50

### **Harvey Aft Award for Excellence in Chemistry**

**Chemistry Faculty: David Heroux, Terry Morocco, and Mariella Passarelli**

Each year the chemistry faculty recognizes a student who has excelled in upper-level chemistry courses, has outstanding general scholarship, has demonstrated interest in chemistry, and projects a good attitude toward the field. Please join us when we announce the winner and present the award.

11:50 - 12:00

### **“Science Day” Discussion**

**Dr. Mary Schwanke**

1:00 - 1:20

### **Pasteurization resistance in E. coli**

**John Zwetsloot, Chris Durkin**

*Escherichia coli* is a known agent of food poisoning. Ultra violet irradiation is being used to eliminate *E. coli* from meats as a means of enhancing food safety. This experiment will test the ability of *Deinococcus radiodurans*, a common UV-resistant bacterium, to pass ultraviolet light resistance to *E. coli* via the process of transformation. This experiment will assess the response of *E. coli* to ultraviolet light post-transformation, making clear the potential for gene-sharing between these two bacterial types. Data collected will have far-reaching implications concerning food sterilization and bacterial resistance (*Faculty Sponsor: Jean A Doty*)

1:20 - 1:40

### **Ability of Non-resistant to Antibiotics Bacteria to Acquire Resistant DNA through Transformation**

**Kendall Ricker, Jason Millett**

We will identify bacteria around the UMF campus, identify which bacteria exhibit resistance to antibiotics, and examine the non-resistant bacteria's ability to obtain the bacterial DNA that codes for resistance through transformation. We'll collect and grow various bacteria found on campus and test resistance to antibiotics. We'll then test their ability to uptake naked DNA from bacteria and their ability to share the resistant genes. We'll do this by growing bacteria then killing it, introducing a second bacteria to see what DNA is transferred to the second bacteria and if the resistant bacteria has the ability to share its resistant genes. (*Faculty Sponsor: Jean A Doty*)

1:40 - 2:00

### **The Effects of Mutagens in Four Different Brands of Cigarettes on the Common Fruit Fly, *Drosophila melanogaster***

**Molly Vespa, John Duplinsky**

We all know that smoking is unhealthy, but those who still choose to smoke usually have a brand of choice. Cigarette companies have used advertising campaigns that may imply that their cigarettes are the healthier choice following a growing amount of evidence that proved the negative health effects of smoking, for example, Winston's "No Bull" ad campaign. In this project we will be examining whether or not certain brands may be more or less harmful than others by examining the effects of mutagens in four different brands of cigarettes on the common fruit fly, *Drosophila melanogaster*. (*Faculty Sponsor: Jean A Doty*)

2:00 - 2:20

### **Developing Antibiotic Resistance in Staphylococcal Species**

**David Kell, Kristi Allen, and Jessica Whittaker**

Methicillin Resistant *Staphylococcus aureus* (MRSA) infections hospitalize approximately 292,000 people a year, and killed 19,000 people in 2005 alone. Nationwide costs for MRSA infection treatment range from \$3.2 to \$4.2 billion dollars annually. This project is designed to determine how quickly populations of Staphylococcal species develop resistance to penicillin, methicillin, and vancomycin antibiotics and combinations of those antibiotics. (*Faculty Sponsor: Jean A Doty*)

2:40 - 3:00

### **Isolation and Sequencing of Parathyroid Related Protein in Maine Brook Trout**

**Christopher Pillsbury**

This experiment will endeavor to isolate the Parathyroid related protein (PTHrP) in Maine Brook Trout. PTHrP is responsible for mobilization of calcium from internal bone structures and scales, and also calcium uptake from the environment. Calcium deficiency in Maine Brook Trout is the leading cause of osteodystrophy and osteomalacia, more commonly called Screamer Disease due to a deformity of the

lower mandible. Fish under the effects of Screamer Disease usually die after their first spawning due to starvation because the deformed jaws do not allow the mouth to function properly. This research is part of a larger experiment currently being conducted by Inland Fisheries and Wildlife. *(Faculty Sponsor: Jean A Doty)*

3:00 - 3:20

### **Comparing Oxidation Potentials: Effects of Antioxidants on Repairing UV Radiation Induced DNA Damage of *Drosophila melanogaster***

***Lora Cyr, Brandon Brown***

This experiment examines the ability of different antioxidants to suppress mutations caused by the effects of ultra-violet radiation. UV radiation is a known cause of oxidative stress, producing free radicals which can damage an organism's DNA. We will correlate the oxidative potential of antioxidants with the ability of *Drosophila melanogaster* (fruit fly) to prevent DNA damage, by investigating the occurrence of mutations among generations of fruit flies exposed to UV radiation. *(Faculty Sponsor: Jean A Doty)*

3:20 - 3:40

### **Comparing the Susceptibility of *E. coli* to Multiple Phages and the Role Co-evolution Plays**

***Victoria Pearson, Joelle Perkins***

The increase of bacterial resistance to antibiotics over the past 70 years has led to research for alternative methods for microbial treatment. Methicillin-resistant *Staphylococcus aureus* (MRSA) is one bacterium that has become resistant; in 2005 there were over 94,000 cases within the U.S. One alternative method currently being researched is host-specific bacteriophages for treatment of bacterial infections. Our study examines the occurrence of co-evolution between *E. coli* and its phages; co-evolution allows a phage to continue infecting its host. Co-evolution will be determined by comparing frequency and size of plaque formation; results will verify bacterial resistance in each case. *(Faculty Sponsor: Jean A Doty)*

## **Venue 3**

### **Miscellaneous**

### **Education Center 114**

9:00 - 9:40

#### **Learning Centers across Early Childhood Settings: Beginning Explorations**

**Ashley Doherty, Megan Hamann, Kate Longstreet, Alison Michaud, Melissa Russell, and Maria Sleeper**

Students enrolled in their first practicum experience share their explorations and observations of learning centers across a variety of early childhood education settings, from urban programs to small rural sites. They discuss their findings including center designs, materials for active learning, children's skills, and learning across domains. Three student teams share their information in presentation slideshows. This session concludes with a chance for participants to try out a student-designed learning center. *(Faculty Sponsor: Loraine Spenciner)*

9:40 - 10:00

#### **Shades of Green: My Semester in Ireland**

**Katharine Rose Gergosian**

As a George J. Mitchell Peace Scholar, Katharine Rose Gergosian spent the Fall of 2007 studying abroad in Ireland. During her time there she took classes at the University College Cork and immersed herself in the Irish culture. In this presentation she will share photography from her semester abroad and discuss her experiences. *(Faculty Sponsor: Theresa L Overall)*

10:00 - 10:20

#### **Student Leadership and Civic Engagement Award Nominees Share Their Passions**

**Oreva Olakpe and Jacques Rancourt**

Come listen to Oreva Olakpe and Jacques Rancourt share stories about their student engagement, commitment, and leadership which led to State and National award nominations. They have been nominated by their advisors and professors because of their outstanding civic engagement and student leadership for the following awards: The National Frank Newman Leadership Award, The Maine Campus Compact state-wide Heart and Soul Award, The National Howard Swearer Student Award, and The UMF Above and Beyond Expectations Award.

*(Faculty Sponsor: Mary L Schwanke)*

10:20 - 10:40

**Break – refreshments available**

10:40 - 11:00

## **Gender in the Environmental Discussion**

***Siobhann Patrie***

The living environment has recently become a huge topic for discussion. How does gender impact actual and perceived relationships with the environment? Environmental organizations must consider this question when they are creating contacts with a community, giving information and education, or allocating funds for projects. The manifestations of environmental problems differ, but they tend to have something in common: the unequal distribution of costs causing the poor and disempowered to experience the harshest environmental consequences. Women's disproportionate representation among the poor, for instance, means that attempts to alleviate these problems require an understanding of gender dynamics in distinct socio-economic settings. *(Faculty Sponsor: Alice E Adams)*

11:00 - 11:20

## **Mere Exposure Effect**

***Marissa Wilbur, Dan Stefanilo, and Josh Tanguay***

The mere exposure effect concerns how people form attitudes in their lives. The effect is the tendency for repeated stimuli to become liked because of the former exposure. This implies that the more someone encounters a seemingly insignificant object, the more the person will like it simply because of repeated encounters. Mere exposure encompasses attitudes from those towards seemingly insignificant objects all the way to attitudes in interpersonal relations. We will critically analyze the use and the implications of this diverse effect in our culture today. *(Faculty Sponsor: Matthew Freytag)*

11:20 - 11:40

## **Mill's Methods**

***Kelly Cenga, Nathaniel Collins***

John Stuart Mill (1806-1873) developed a powerful method, a set of tests, for determining when two events are causally related: The method of agreement; The method of difference; The joint method of agreement and difference; The method of residues; The method of concomitant variations. We will describe the five tests, illustrate their operation, and suggest some of their limitations. *(Faculty Sponsor: Matthew Freytag)*

11:40 - 12:00

## **Journalists' Access**

***Brianna Ebbling, Adam Tosch, and Donna Townsend***

Without ever resorting to censorship, people with power can control our understanding of events just by controlling the sort of access journalists have to information sources. They can limit the access of reporters who ask hard questions, and they can grant special access and prized exclusive interviews to reporters who don't. We will explain how this works, give some examples, and suggest ways the citizen who wants to be well-informed can respond. *(Faculty Sponsor: Matthew Freytag)*

1:00 - 1:20

### **Interview: Meghan Dzyak in New York: The Tale of a UMF Student on Internship in New York City, Spring 2008.**

***Meghan Dzyak***

Ever wondered what it would be like to do an internship in New York City? Join us for an interview with Meghan Dzyak, a music and writing major, about her semester in New York as an intern at The Kitchen Center For Video, Music, Art, Performance, and Literature, and Nonesuch Records. The presentation will cover how this experience culminated her studies at UMF and has opened doors for graduate school and work in the music field after graduation. She will share many of her tales of apartment hunts and subway commutes to toasting with music celebrities and dining in The City. *(Faculty Sponsor: Steven Pane)*

1:20 - 1:40

### **Superdelegates. What do the Facts Say?**

***Erica Rickards***

Superdelegates are a touchy subject in today's 2008 election cycle. Once seen as a way to get party leaders behind a candidate and prevent a president from being ineffectual, today they are controversial and appear outdated. Do we still need super delegates? Are they discriminatory? What difference does it make? Why should I care about this? *(Faculty Sponsor: James P Melcher)*

1:40 - 2:00

### **Decisions are Made by Those Who Show Up: Getting Young People to Vote.**

***Savannah Larsen***

During their first year of college, many students become eligible to vote. Navigating through eligibility laws, registering to vote, and casting an informed vote can be both confusing and difficult. With research showing that young people are far less likely to participate in the voting process, there is much to be done, both at UMF and state wide to inform those who wish to vote. This presentation provides an overview of the voting process, as well as suggestions as to how both UMF and the state of Maine can make voting easier and less confusing. *(Faculty Sponsor: James P Melcher)*

2:00 - 2:20

### **Presidents and their Promises**

***Tyler Backus***

Do the promises made by presidential candidates influence how you vote? With the next presidential election coming in November, I will investigate both specific and rhetorical, and those in between, promises that presidents from Kennedy to Clinton made to get elected. Also looked at is how successful they were at keeping those promises and reasons why other promises were not kept. *(Faculty Sponsor: James P Melcher)*

## **Venue 4**

### **Business Economics / Health Education Center I 13**

9:00 - 9:20

#### **Mortgages: Repercussions of a Modern Financial Instrument**

**Nick Juliano**

This presentation will delve into the current situation concerning the sub-prime mortgage fiasco. It will be done for an independent study in economics. We will be taking a trip from where the crisis really began to where it currently lies. The relationships between the players of this industry (including Alan Greenspan, Ben Bernanke and the Fed) will be dissected with respect to who did what to bring the market to its current status. Possible policies for the future of the mortgage industry will be offered and discussed. *(Faculty Sponsor: Wendy L Harper)*

9:20 - 9:40

#### **Silver Sunrise**

**John Carey, Josh Nason, and Chris Fortney**

Silver Sunrise is an entrepreneurial internet start-up enterprise. This presentation provides an overview for a new business. It is an introduction of a new business, and will cover a business plan, marketing plan and website logistics. In addition to written components, logistics of running an internet business, entering a new market and raising start-up capital will be discussed. *(Faculty Sponsor: Thomas A Maroney)*

9:40 - 10:00

#### **Subliminal Perception**

**Amanda Parlin**

The topic for this presentation is subliminal perception, based on the points of the book "The Hidden Persuaders" by Vance Packard. This book was written in the 1940's, and I am going to show how the marketing techniques that were used back then are relevant today. I'm also going to consider if these techniques are legal, and if they are, should they be? *(Faculty Sponsor: Thomas A Maroney)*

10:00 - 10:20

#### **Teen Apparel Industry Analysis: Abercrombie and Fitch**

**John Carey, Jeff Lemery, Chris Fortney, and Andy Knapp**

This presentation is part of BUS 491 Strategic Management, the capstone course in Business. It is part of an industry analysis on teen apparel retailers. It will provide an analysis of Abercrombie and Fitch Co. It will analyze the history, marketing, financials, and competitors using SWOT, a balanced scorecard, and benchmarking approach. *(Faculty Sponsor: Thomas A Maroney)*

10:20 - 10:40

**Break – refreshments available**

10:40 - 11:00

**Teen Apparel Industry Analysis: Aeropostale**

***Nicolas Weider, Peter Doolittle, and Caitlin Sullivan***

As a component piece of the BUS 491 teen apparel industry analysis project we will be presenting a profile and analysis of the Aeropostale brand. This will include the history of the company, including demographics for the target market, as well as a marketing, strategic, and financial analysis. We will be comparing Aeropostales' performance indicators with other competing teen apparel companies. Performance measures include the company's international dimensions, SWOT analysis/benchmarking, and the balanced scorecard approach. *(Faculty Sponsor: Thomas A Maroney)*

11:00 - 11:20

**Teen Apparel Industry Overview**

***Brian London, Tyler Zamore, Travis Rowell, and Nick Juliano***

This presentation is an overview of the teen apparel industry. It is the introductory presentation of the BUS 491: Strategic Management class' industry analysis. The complexities of the history, strategy, marketing, and financials of this strong and influential industry will be unraveled. The sensitivity of the teen apparel industry to economic circumstances will be explored as well. The strategy will be analyzed by a balanced score card approach. *(Faculty Sponsor: Thomas A Maroney)*

11:20 - 11:40

**American Eagle Company Analysis**

***Katrina Brown, Megan Heath, William Martin, and Andrew Mayo***

This PowerPoint is a component part of the teen apparel industry analysis for BUS 491 Strategic Management. We will analyze the history, how they market to the target market, and their financials (NYSE, valuation ratios, and income statement.) They are the second-best performer in their industry, following Abercrombie and Fitch. We will also analyze their strategy from a balanced scorecard approach, which is an overall view of the company that includes non-financial measures. *(Faculty Sponsor: Thomas A Maroney)*

11:40 - 12:00

**Teen Apparel Industry Analysis: Pac Sun**

***Emily Kritzman, Chris Bateman, Charlie Creagh, and Tyler Littlefield***

This presentation is given as a component part of an industry analysis for Strategic Management, BUS 491, a senior capstone business course. It will focus on Pacific Sunwear of California, or Pac Sun, within the teen clothing industry. The presentation offers history, financial data, marketing, and strategy of the active wear company using a balanced scorecard approach. Also, we will take a brief look at the strengths and



weaknesses of the company and other companies in the industry, looking into how the economy is affecting the industry, and how the industry is affected by teen trends and recreational sports. (*Faculty Sponsor: Thomas A Maroney*)

1:00 - 1:20

### **A Ban Against Smoking in Cars with Children**

**Kate Callahan**

Secondhand smoke is both deadly and controversial. It affects both smokers and non-smokers alike. No amount of secondhand smoke exposure is safe. The EPA has classified secondhand smoke to be a known human carcinogen. Children are the most susceptible to disease and chronic illness from exposure to secondhand smoke. Hundreds of thousands of children are sent to physicians and emergency rooms yearly due to the repercussions of their contact with secondhand smoke. Policies are slowly being introduced worldwide to ban smoking in cars with children. This is a controversial and proactive movement. This presentation will illustrate some of the current and potential policies, the feedback from smokers and non-smokers, how local children feel, and what Maine has been doing. (*Faculty Sponsor: J Dennis Kamholtz*)

1:20 - 1:40

### **Targeting/ Changing Health Problems within the Younger Population**

**Andy Knox, Hannah Austin, Craig Cameron, and Cameron Gray**

This is a presentation from HEA 411, on the implementation of a program that our group created. We will have gone through the Precede-Proceed model in class and will show our steps in the presentation. Our target population is a younger population with healthy behaviors. We will be observing eating habits, amount of physical activity, and other health-related issues that we may see through our observation. We will then provide information for these issues through health promotion and health education. (*Faculty Sponsor: Graciela L Bryant*)

1:40 - 2:00

### **Does Campus Safety Stress You Out?**

**Melissa Ingalls, Allie Hopkins, Aidan Dunfy and Krystal Pierce**

For our project we had to design a program that would focus on a chosen health topic and target population. Our group decided to concentrate on campus safety and its relation to stress among UMF students. Campus safety has been a recent concern. Using the Precede-Proceed Model we performed assessments of our population, evaluated the information, and planned a program addressing the needs of UMF students. We worked with RA's, students, and Public Safety to gain insight and understand how stress correlates with individual safety. We also assessed the lighting on campus and the location of emergency call boxes as a few more components for our program. (*Faculty Sponsor: Graciela L Bryant*)

2:00 - 2:20

## **The Importance of Nutrition and Exercise for Adolescents**

***Nicole Cournoyer, Emily Falco, Andrea Gove, and Tharjiath Ruot***

The importance of healthy eating combined with effective amounts of physical activity is essential to everyone's health, especially young people. Today's generation of adolescents is expected, for the first time ever to not out-live their parents. This presentation will expose you to important facts about nutrition and exercise, and show what we learned from implementing our knowledge of health education in a local school classroom. Our lessons for the classroom are based around educating the students about nutrition and exercise while keeping it fun by relating it to the upcoming Summer Olympics. *(Faculty Sponsor: Graciela L Bryant)*

2:40 - 3:20

## **Late Entries**

## **Venue 5**

### **Miscellaneous**

### **Education Center 112**

9:00 - 10:00

#### **Survivor: MAT100 Style**

***Students in MAT100-001 and -002***

The year is 2010. It is the dead of winter. One week ago a coordinated series of terrorist attacks has effectively cut off the flow of oil from the Middle East. There have been no local deliveries of gasoline or food since the attack. A blackout of the entire region began three days ago and the Federal government has declared a state of emergency for the entire country. You are holed up with twenty-four other students in your professor's house in Farmington. How will you survive? Come see which MAT100 students did and did not survive the ensuing carnage. (*Faculty Sponsor: Peter G Hardy*)

10:00 - 10:20

#### **Making Mathematics Accessible for the Blind**

***Kyle Steinle***

Translating written mathematics into an accessible format for the blind is very time-consuming and expensive. The Infty Project and ViewPlus are developing software to make this process easier. The Infty Project's programs allow anybody to read and write mathematics, and ViewPlus has technology that enables the blind to create and look at graphics. Using these tools, I made one of my own mathematics textbooks accessible for the blind. Since all the software is still being developed and improved, I found many bugs, which I reported. Once these programs are finished, it will be much more affordable to make mathematics accessible for the blind. (*Faculty Sponsor: Lori J Koban*)

10:20 - 10:40

**Break – refreshments available**

10:40 - 11:00

#### **Family Planning Research Project in Comalapa, Guatemala**

***Sarah Hardy***

In 2007 UMF students participated in a service learning research opportunity focused on Comalapa, Guatemala. This study assesses the unmet need for information about and access to contraception in the context of education, ethnicity, and poverty. Research was undertaken in partnership with a Guatemalan non-governmental organization: Women's International Network for Guatemalan Solutions (WINGS). Students worked on the design and implementation of the survey and other students worked on the

analysis portion. Results from this research are expected to enhance appropriate dissemination of family planning information to the Comalapa community, and to improve provision of family planning services there.

11:00 - 11:40

### **Split This Rock**

***Emily Cramer, Jacques Rancourt, Danielle LeBlanc, Matthew Luzitano, Randy Ranthall, and Kyle Baker.***

Members of the Writers Guild Club will reflect on their experience at Split This Rock Festival, a peaceful War Protest by poets from across the country which took place from 20 March-23 March 2008. The primary goal of this presentation will be to gain awareness of how poetry can be used as a form of activism, to share the poetry that was presented at the Festival, and to have students present their own anti-war poetry. *(Faculty Sponsor: Gretchen T Legler)*

1:00 - 1:20

### **Reproductive Health Services: Individuals and Their Reactions to Their Access to Reproductive Options**

***Rebecca J. McPhedran***

The focus of my senior research project is to look at the range of options and access to reproductive health options that men and women have in Maine. I was interested in looking at the different vantage points that men and women both have concerning access to reproductive options. My project involved surveying and interviewing UMF students and community members on their access to reproductive health options. I asked whether high school students should have access to contraception, and about the availability of sexual education in high schools. I also asked questions about their feelings about the affordability of healthcare, as well as questions concerning their feelings about their access to reproductive options. *(Faculty Sponsor: Kristina B Wolff)*

1:20 - 1:40

### **The Simpsons: Parody and Psychology**

***Logan Frey***

This presentation is an analysis of The Simpsons television show's use of parody. The presentation hopes to uncover why the audience enjoys parody (in this case, a Season 15 parody of the battle of Helm's Deep from the Lord of the Rings), utilizing many concepts from Social Psychology. *(Faculty Sponsor: Alison J Terry)*

1:40 - 2:00

### **An Analysis of The Simpsons' Treatment of Celebrity**

***Jaclyn Buck***

This presentation is an analysis of how the TV show The Simpsons portrays our treatment of celebrities, with a focus on their status in our society and our fascination with them. Topics include their VIP status, paparazzi, celebrity gossip magazines, and our idol-type worship of celebrities. *(Faculty Sponsor: Alison J Terry)*

2:00 - 3:00

### **Social Accountability: The Critical Political Role of Non-Profits in Maine**

***Savannah Larsen, Oreva Olakpe, Aline Potvin, and Samantha Starrett***

Social accountability is a critical component of any democracy including our own. Beyond electoral politics, social accountability involves citizens and other non-state actors, such as non-governmental organizations, unions, and the media, holding politicians and civil servants accountable for their formulation and implementation of public policy as well as their behavior in public office. The students on this panel will present their service-learning projects conducted in fall 2007 to assist non-profit organizations from around the state in holding public officials socially accountable. *(Faculty Sponsor: Linda J Beck)*

## Venue 6

### **Psychology / Readings of Student Work**

### **C23 Roberts Learning Center**

9:00 - 10:30

#### **Attitudes and Platitudes**

**Students of PSY 400**

Using analogue, observational, and experimental studies, student's from PSY 400 (Research Methods in Psychology) have explored various psychological variables and will present their findings. The questions they explored and the student presenters include Who Holds the Door Open Guys or Gals? by **Jamie Andrews and Brittany Keithan**; Simon Says: Does Sounds Enhance Memory? by **Gus Booth and Frank Glover**; Who's Better at Facial Recognition Men or Women? by **Emily Price and Samantha Leeman**; Are Men and Women Biased Regarding Autism? by **Lindsey Michel and Jessica Jones**; Do Pets Affect Human Stress Levels? by **Jennessa Tudisco**; Do Gamers Encode Information Better than Non-Gamers? by **Gerard Escarfullery**; What Do College Students Think about Binge Drinking? by **Stephanie Harmon**; Are Previously Incarcerated Individuals Considered Employable? by **Leslie Jones**; Are Online or Classroom-Based Classes Better? by **Karissa Ostheimer and Davin Currie**; Does Magazine Readership Affect Person Perception? by **Genesis Burke and Amy Gabrielski**. (Faculty Sponsor: Susan A Anzivino)

10:20 - 10:40

#### **Break – refreshments available**

**Might be better to have the following in the landing.**

10:40 - 11:40

#### **Readings of Essays from VOICES, the First-year Student Publication**

**Lauren Cross, Ted Gill, and Tim Sturtevant**

First-year students at UMF produce many essays and other projects in their composition seminars and first-year seminars. Only a few of these works are chosen for the annual student first-year publication, VOICES. Three of the six students published in the 2008 edition of VOICES will read from their winning essays and answer questions about their writing experiences and processes. Audience members will each receive an autographed copy of VOICES, hot off the presses for Symposium Day. (Faculty Sponsor: Christiane K Donahue)

1:00 - 2:00

#### **Sandy River Review Reading**

**Matthew Luzitano, Danielle LeBlanc, and Andrea Bechen**

A reading from the current issue of the Sandy River Review, the on-campus literary journal. The readings will range from selections of poetry, nonfiction, and fiction. (Faculty Sponsor: Patricia E O'Donnell)

2:00 - 3:00

### **The Exquisite Corps Presents**

***Michael McPherson, Evan Whitehead, Rebecca Seidel, Laura Jennings, Ross Saunders, Seamus Conneely, and Ariel Cohen.***

Members of student writing group The Exquisite Corps will read selections from their work as a part of their mission to illustrate that nontraditional genres of writing can still possess literary merit. Despite the 'pulp' roots of science fiction, fantasy, and alternative genres, the Corps believes that the art of a story is in the writing, not the subject. An introduction will precede the readings, and there will be a short Q&A before the next session begins. *(Faculty Sponsor: Michael K Johnson)*

3:00 - 4:00

### **Auditions for Senior Class Speaker**

***TBA***

Members of the senior class will be auditioning for the honor of speaking at their commencement in May. *(Faculty Sponsor: Patricia A Carpenter)*

## Venue 8

### Poster Session I

Location: Student Center

poster #1

#### **Temperature Variation in the Western Mountains of Maine**

*Ian E Putnam*

Documenting local temperature variability has become important for identifying patterns of climatic change. Baseline temperature data for air and water temperatures were collected at three locations from July through September: Webb Lake (207 m) and Tumbledown pond (875 m) in Weld, and Cranberry pond (866 m) in the Bigelow range north of Kingfield. This pilot study seeks to address what is responsible for a significant rise or fall in water and air temperature, as well as what influence elevation has on water temperature variability. We hope to demonstrate there is a close correlation between insolation, cloud cover, and temperature variation. (*Faculty Sponsor: Julia F Daly*)

poster #2

#### **Sustainable Campus Coalition: Projects Looking In and Reaching Out**

*Students, Faculty, and Staff involved in the Sustainable Campus Coalition*

The Sustainable Campus Coalition is a group of students, faculty, and staff who carry out projects to promote environmental sustainability at UMF and in the surrounding community. Multiple posters will present the wide variety of SCC projects, many of them collaborations with community and statewide organizations. These will include greenhouse gas audits of campus and the Farmington municipality, a survey of barriers to alternative energy use by local businesses, a Farmington climate action plan, a SAD 9 pilot hydroelectric project, an environmental graduation pledge, local foods on and off campus, UMF's commitment to carbon neutrality, Bike Day, and more. (*Faculty Sponsor: Andrew M Barton*)

poster #3

#### **Climate Change and ME**

*BIO 110: Ecology & The Environment class*

Climate change will alter the lives of our students. Students in this course will present posters on a variety of aspects of climate change relevant to their lives, their careers, the UMF campus, and the state of Maine. Although students had not selected their projects at press time, I expect projects such as the following: how Maine's climate has already changed, greenhouse gas releases for alternative heating systems in Maine, how local trees and forests sequester carbon, the state's approach to combating climate change, and ways to teach kids about climate change. (*Faculty Sponsor: Andrew M Barton*)



poster #4

### **Application of Green Chemistry: The Construction of a Simple, Low Cost Chloride Sensor for Use in Environmental Analysis.**

***Kyle Shea and Josh McMahon***

The chloride ion is routinely assayed in water since elevated levels are anthropogenic in nature. Students frequently do not have access to the sophisticated instrumentation required to measure environmentally relevant levels of chloride in fresh water. In this work, a student-constructed potentiometric chloride sensor was constructed and evaluated for use in environmental analysis. The sensor was evaluated based upon construction materials and the volume of hazardous waste produced by the procedure. This work will show that the sensor is easily constructed, has adequate sensitivity, and generates a minimal amount of hazardous waste. (*Faculty Sponsor: Martin T Morocco*)

poster #5

### **Application of Green Chemistry: A Miniaturized Procedure for the Manual Analysis of Nitrate Nitrogen (NO<sub>3</sub>-N) in Water.**

***Holly Castle, Nina Griffin, Ally Martin, and Michelle Michaud***

The objective of this study was to determine if EPA Standard Method 4500 could be miniaturized to reduce the amount of hazardous waste generated in accordance with the principles of the Pollution Prevention Act of 1990. Farmington tap and commercially available spring water were analyzed to determine if the analysis could be scaled down without decreasing accuracy, precision, or sensitivity. Results will show a successful miniaturization, with hazardous waste generation reduced by a factor of 25. (*Faculty Sponsor: Martin T Morocco*)

poster #6

### **A Study of Matrix Effects in Complex Samples: The Spectrophotometric Analysis of Ascorbic Acid.**

***Kevin Stewart***

A study of the spectrophotometric analysis of Ascorbic Acid (AA) in pharmaceutical preparations and beverages was conducted to investigate the possibility of matrix effects. Two analysis methods were used. The first method oxidizes AA using Iron(III), while the second uses Copper(II). Since Copper(II) is a milder oxidant than the Iron(III), this method could potentially prove superior for real samples such as fruit juices containing weak reductants such as citrate, oxalate and tartarate that otherwise produce positive errors. Results indicate both reagents suffer from matrix effects in the fruit juices, but not in the pharmaceutical preparations. (*Faculty Sponsor: Martin T Morocco*)

poster #7

### **Comparative Anatomy Poster Session**

**Adam Beede, Elizabeth Clements, Nina Griffin, Adeline Harris, Jessika Hyde, Kerry Kowalczyk, Kenneth Masloski, Zachary Lopez, Joshua McMahon, Trevor Rivard, Christopher Stevens, and Molly Vespa**

Comparative vertebrate morphology is the study of anatomy in the context of understanding function, uniformity and diversity of structure among groups, and the adaptive significance of evolutionary modifications. Students in Comparative Anatomy are working in pairs to research topics of particular interest to them. These will culminate in oral presentations at semester's end to class members and invited Gold LEAF Institute members. The poster presentations represent work in progress on these topics: evolution of echo-location, reproductive anatomy of marsupials vs. placental mammals, adaptations of armadillos, evolution of teeth, reinvasion of water by mammals, and evolution of the cetacean brain. (*Faculty Sponsor: Mary L Schwanke*)

poster #8

### **The Association of Color with a Food Source in Black Capped Chickadees**

**Robert Priest**

Birds are known to have the ability to discriminate and recognize objects due to color (Varela et al. 1993). I tested the hypothesis that Black Capped Chickadees (*Poecile atricapillus*) can learn to associate a red bird feeder with food by hanging three different colored bird feeders (Red, Yellow, and Blue) at equal distances from cover or buildings. The blue and yellow bird feeders were filled with empty sunflower seed shells; the red bird feeder was filled with intact sunflower seeds. I rotated the feeders daily so the chickadees didn't associate the bird feeder that supplies food with a specific spot. After training them to only try to eat at the red bird feeder, I replaced the empty shells with bird seeds so all three bird feeders were filled with intact bird feeders. The amount of chickadees which feed from each bird feeder will be recorded. Results will be discussed. (*Faculty Sponsor: Sarah A Sloane*)

poster #9

### **Associative Learning by the House Cricket, *Acheta domesticus***

**Molly Vespa**

I investigated whether the house cricket, *Acheta domesticus*, is able to learn to associate a certain pattern with a nutritious food source. Two cages containing ten crickets that were given a nutritious food associated with either a vertical-striped pattern or a horizontal-striped pattern and the low nutrient food source in the same cage that was given the opposite pattern. A third cage held the control group in which twenty crickets were given the same nutritious and non-nutritious foods but the pattern associated with the food was changed periodically during a 24 hour period. Following this training period of 1-3 weeks the crickets were then individually presented with the choice of an empty dish with either a vertical pattern or horizontal pattern. The dish that the cricket chose first was recorded. I expected that the crickets that were trained to associate the nutritious food with a vertical-striped pattern would go to that dish first. The same is expected for crickets that were trained to associate nutritious food with a horizontal-striped pattern. Data is currently being collected and results will be presented at symposium. (*Faculty Sponsor: Sarah A Sloane*)

poster #10

### **Extinction and Recovery Rates of Rats under Various Stimuli**

## **Kendall Ricker**

Learned behaviors are common in all species and are beneficial because they help animals to survive. Animals often learn to associate doing a task to a reward; if the reward is no longer present the task will stop being preformed, I tested the hypothesis that extinction and recovery rates would vary depending on the method of extinction that were used, using Sniffy (virtual rat program used to run experiments) I tested negatively enforced extinction vs. just taking the reward away, along with the recovery time for Sniffy to regain a trait once it had been extinguished. (*Faculty Sponsor: Sarah A Sloane*)

poster #11

### **Do Rock Doves Make Trade-offs Between Food, Exposure to Weather, and Safety from Predators?**

**Alexandra Martin**

Trade-offs between food, exposure to elements, and possible predation is seen in many species. To test this idea, Rock Doves (*Columba livia*) found in and around downtown Farmington, Maine. Five times a week flocks of pigeons were located and their behavior were observed. I recorded flock size, weather (temperature, wind speed and cloud cover), possible predators, and time of day along with such behaviors as foraging, vigilance, resting, walking/flying, mating, aggressive, and other. I expect to find that birds will prefer to be in sheltered areas when the weather is cold or windy. In addition expect to find more birds foraging during morning hours than during afternoon hours. (*Faculty Sponsor: Sarah A Sloane*)

poster #12

### **Distribution, Status, and Habitat Associations of a Globally Rare Damselfly**

**Ron Butler, Aline Potvin\*, Mary Tomlinson, Hannah Robbins, and Kimberly Trimpop**

The globally rare Scarlet Bluet (*Enallagma pictum*) reaches the northern extent of it's geographic range in central Maine. To extend our knowledge of the distribution and habitat requirements of this rare damselfly, we studied 47 Maine lakes in 2005. We discovered five new breeding locations for this rare species and re-confirmed it at 10 sites where it had been observed previously. Our final analysis now suggests that Scarlet Bluet habitat associations differ as a function of spatial scale, but that large beds of near-shore floating plants and undisturbed terrestrial vegetation on nearby shorelines are critically important. These findings have clear implications with regard to shoreline development and the conservation of aquatic communities. (*Faculty Sponsor: Ronald G Butler*) \*M.D. Wilson Research Scholar

poster #13

### **Sampling Regimes for Damselfly Diversity: Implications for Long-term-Monitoring and Conservation**

**Ron Butler, Chris Stevens\*, Chris Pillsbury\*, Allison Giguere\*, and Aline Potvin**

Damselflies and dragonflies (Odonata) play critical roles in freshwater food webs both as predators and prey, and monitoring programs of these important insects are widespread. Previously, surveys based only on samples of either aquatic larvae or aerial adults have been criticized as being inaccurate or biased pictures of damselfly assemblage composition. To address this issue, we assessed damselfly assemblage composition by conducting repeated, systematic surveys of both larvae and adults at 25 Maine lakes in 2007. Preliminary results concerning the distribution, abundance, and diversity of larvae and adults will be

presented, and the implications of this research will be related to long-term monitoring programs. (*Faculty Sponsor: Ronald G Butler*)

\* M.D.Wilson Research Scholar

## **Venue 9**

### **Poster Session II**

### **Location Education Center**

poster #14

#### **Incorporating State Early Learning Guidelines into Toddler Curriculum and Parent Child Playgroups**

***Maegan Cunliffe, Penny Galloway and Alexandria Wiencek***

Maegan Cunliffe, Penny Galloway and Alexandria Wiencek will be providing examples of a planning approach for supporting parent-child interactions in natural environments such as a playgroup. We will give examples on how our Parents Interacting With Infants (PIWI) model is evidence based by connecting our planning to the Supporting Maine Infants and Toddler Guidelines. We will provide hard copies of our planning method and Supporting Maine Infant and Toddler Guidelines. (*Faculty Sponsor: Dolores J Appl*)

poster #15

#### **Supporting Adoptive Children and the Families Who Adopt them**

***Michelle Spiller***

The following areas of research will be covered: 1. Investigation of the experience of foreign-born children and the families who adopt them. 2. Understanding of the influence of the prior-experience of the adopted child (quality of adult-child interactions, the environment, and other factors) on the child's course of development once adopted. 3. Investigation of successful strategies developed by teachers and staff in child-care that support the healthy development of foreign-born adopted children and their families. 4. Gathering of resources for teachers who work with non-traditional families with a particular focus on adopted children and their families. (*Faculty Sponsor: Priscilla B Brooks*)

poster #16

#### **Will Eating a Banana a Day Keep Muscle Cramps at Bay?**

***Kerry Kowalczyk***

This poster will summarize a research project that was conducted to examine the effects that potassium has on cramping in skeletal muscles. This project was carried out based on the idea that eating a banana can reduce muscle cramping, because of the potassium that bananas are known to contain. The literature research found that, though potassium might have a minimal effect preventing cramps, it is not a major influence compared to other electrolytes. (*Faculty Sponsor: Denise K Higgins*)

poster #17

### **School Health Education**

**Nicholas Mowatt, Ryan Pelletier, Sarah Mueller, Kristin Simoneau, Jayme Martin, Eileen Bellefleur, Katie Schwarz, and Amber Murphy**

School health policies and programs will be represented by the spring 2008 class of students who are currently working towards the completion of a school health professional certification. The future prospect of working in Maine schools employed as a school health coordinator and/or health teacher is the driving force of the research that has gone into the creation of the posters that will be displayed. *(Faculty Sponsor: Stephanie A Swan)*

poster #18

### **Fractions and Fractals!**

**Derek Beaudet and Neil Plummer**

We will examine 2 families of fractal images. These images have interesting relationships with fractions. Our poster will illustrate some of these relationships. *(Faculty Sponsor: Daniel Jackson)*

poster #19

### **Planetary Astronomy**

**Students of Descriptive Astronomy**

Space missions are currently exploring the solar system from Mercury out to Neptune and beyond. Groups of students have carried out term projects on various celestial bodies and will present them in poster form. Topics include Pluto, Saturn, Jupiter, Jupiter's moons, comets, and life on Mars. *(Faculty Sponsor: Christopher Magri)*

poster #20

### **Albert Einstein's Physics**

**Students of Elementary Physics: "Einstein's Physics"**

Albert Einstein's towering accomplishments were his special and general theories of relativity and his crucial contributions to quantum physics. Groups of students have carried out term projects on various aspects of these theories and will present them in poster form. Topics include lasers, particle accelerators, superconductors, superfluids, quantum teleportation, gravitational wave observatories, binary pulsars, and the philosophy of the block universe. *(Faculty Sponsor: Christopher Magri)*

poster #21

## **Mahoosuc Region Interpretive Touring Map**

**Kelly Rines**

Over the course of this semester, I have been assisting in the production of an updated Mahoosuc Region Interpretive Touring Map. As a volunteer intern for the Appalachian Mountain Club (AMC), I have been working with the partners in the Mahoosuc Initiative and area Chambers of Commerce to develop a map that identifies outdoor recreation businesses and opportunities as well as natural/cultural heritage attractions in the Mahoosuc Region. The map will provide visitors with a navigation aid as well as promote economic stability and growth. (*Faculty Sponsor: Cathleen M McAnneny*)

## **POSTER SESSION III**

### **Conference Room 123 Student Union**

## **Global Climate Change**

**Andrea Nurse ENV 110 students**

The effects of greenhouse gases on the global climate and the implications of global warming are highly charged scientific and political issues. Scientists study ice cores and marine and terrestrial sediments to learn about past climate fluctuations. We know that the climate changes in cycles of 100,000, 40,000, 21,000, and 1500 years with the greatest swings occurring between periods of continental glaciations to the warm temperatures we enjoy today. Atmospheric carbon dioxide levels oscillate in synchrony with these climate shifts. Bolstered by carbon emissions from industrial processes, levels of atmospheric carbon dioxide are higher today than at any time during the past 400,000 years. We do not know how, or if, this carbon overload will affect the global climate system. Thirty eight students of ENV 110 use poster presentations to explore the impact of climate change on the global environment. Twenty posters discuss the cyclical nature of climate change, species response to rapid climate changes, and human impacts on the natural cycles. Topics range from paleomagnetism, mass extinctions, arctic warming, El Nino events, and volcanism to greenhouse gases, health implications, and the politics of climate change.

# Michael D. Wilson Research Fellows and Scholars

The Michael D. Wilson Scholars represent some of UMF's best students from across all disciplines. The program recognizes UMF students' tremendous creativity, and expands UMF's commitment to undergraduate research and faculty mentoring. Each scholar was awarded funding to help underwrite an original undergraduate research or creative project. The scholar awards are funded by a generous gift of Michael and Susan Angelides, in honor of their good friend, and UMF alumnus, Michael D. Wilson, class of 1976. The students were nominated by a UMF faculty mentor and, after a competitive selection process, were chosen by the UMF Institutionalizing Undergraduate Research Development Team. The awards are given each semester.

## 2007-2008 Research Fellows

**Katelyn Michaud**, *Distinguishing Hybrid Milfoil in Maine Lakes*

Faculty sponsor: Dr. Daniel Buckley, Dr. Jean Doty

**Monica Hall**, *"Magmatism and Crustal Evolution of the Northern Appalachians – Evidence from the Shirley-Blanchard Pluton, Central Maine."*

Faculty sponsor: Dr. David Gibson

## Fall 2007 Research Scholars

**Josh Case**, *Composition for Small Ensemble*

Faculty sponsor: Dr. Philip Carlsen

**Meg Reid**, *I Just Write the Songs: Choosing a Future, Finding Myself*

Faculty sponsor: Dr. Pat O'Donnell

**Brian London**, *Predicting UMF Persistence*

Faculty sponsor: Dr. Marilyn Shea,

**Christopher Pillsbury**, *Relationships Between Larval and Adult Damselfly Distribution, Abundance, and Diversity: Implications for Odonate Conservation Biology*

Faculty sponsor: Dr. Ron Butler

**Laura Lalemand**, *Pitch Pine Ridgetops in the Basin Preserve, Phippsburg, Maine: Origin and Dynamics of a Rare Community Type*

Faculty sponsor: Dr. Drew Barton

**Tara Gagnon**, *Drowned Towns of Maine*

Faculty sponsor: Dr. Pat O'Donnell

**Adam Case, Hunter Basselet** (shared award), *Searching for Examples of Maximal Chaos*

Faculty sponsor: Dr. Daniel Jackson

**Holly Castle**, *Temple Stream Acidification Analysis*

Faculty sponsor: Dr. Doug Reusch,

**Samuel Valentine**, *Cross Cultural Examination of Western Civilization Compared to Sino Culture with Respect to Historical Mathematical Origins and Applications*

Faculty sponsor: Dr. Nicolas A Koban

**Aline Potvin**, *Distribution, Status, and Habitat Associations of a Globally Rare Damselfly at the Northern Extreme of its Range in Maine*

### **Spring /Summer 2008 Research Scholars**

**Nathaniel Burns**, *The World's Best Surprise Bag*

Faculty sponsor: Dr. Phil Carlsen

**Jessica Dorr**, *Who is Reaping the Benefits of Fair Trade?*

Faculty sponsor: Dr. John Messier

**Meghan Dzyak**, *The New York Downtown Music Scene*

Faculty sponsor: Dr. Steven Pane

**Mary Ellms**, *Esther a Novella*

Faculty sponsor: Dr. Patricia O'Donnell

**Allison Giguere**, *Relationships Between Larval and Adult Damselfly Distribution, Abundance, and Diversity: Implications for Odonate Conservation*

Faculty sponsor: Dr. Ron Butler

**Janna Gilbert**, *Love, Faith, and Treating Drug Abuse: A Teen Challenge Case Study*

Faculty sponsor: Dr. Kristina B. Wolff

**Matthew Humer**, *Answering Why Canada Did Not Join in the Berlin Airlift*

Faculty sponsor: Dr. Allison L. Hepler

**Matthew Lariviere**, *The Blood Family?: Social Identity, Stigmatization and Community Among Adult Hemophiliacs in Maine*

Faculty sponsor: Dr. Kristina Wolff

**Melissa Lyons**, *Clique, Clique, Boom*

Faculty sponsor: Dr. Kristina Wolff

**Matthew Nichols**, *The Importance of Authentic Communication in Establishing Pure Understanding*

Faculty sponsor: Dr. George Miller

**Abby Pettitt**, *Drinking Water Safety in Kaoma, Zambia*

Faculty sponsor: Dr. David S. Heroux



**Jacques Rancourt**, *Men and Mountains*

Faculty sponsor: Dr. Jeffrey Thomson

**Randall Rothert**, *The Poetics of Birds in the Poetry John Clare*

Faculty sponsor: Dr. Misty Beck

**Vincent M. Rubino**, *Economic Factors of Student Health at UMF*

Faculty sponsor: Dr. Wendy Harper

**Nicole Schoppee**, *Tattoo: Self Expression on the Surface*

Faculty sponsor: Dr. Kristina B. Wolff

**Trevor Spangle**, *North to South: A Survey of Oregon's Coastline*

Faculty sponsor: Dr. Gretchen Legler

**Christopher Stevens**, *Relationships Between Larval and Adult Damselfly Distribution, Abundance, and Diversity: Implications for Odonate Conservation Biology Student*

Faculty sponsor: Dr. Ron Butler

**D. Jamez Terry**, *Faint Notes of the Ideal: The Unitarian Church in the Great Depression*

Faculty sponsor: Dr. Christopher S. O'Brien

*The Wilson Research program is facilitated by the Undergraduate Research Council whose mission is to further develop and implement the goal of institutionalizing undergraduate research at UMF.*

The URC Members are:

Misty Beck, Assistant Professor of English

Dan Buckley, Professor of Biology

Tom Donaghue, Creative Specialist

David Heroux, Assistant Professor of Chemistry

Nic Koban, Assistant Professor of Mathematics

Rob Lively, Dean of Arts and Sciences

Frank Roberts, Director of Mantor Library

Walter Sargent, Assistant Professor of History

Marilyn Shea, Professor of Psychology

Sarah Sloane, Associate Professor of Biology

Clarissa Thompson, Assistant Professor of Secondary and Middle Education

# List of Student Presenters

Kristi Allen	Ted Gill	Amber Murphy
Hannah Austin	Isaac Glidden	Josh Nason
Tyler Backus	Andrea Gove	Matthew Nichols
Kyle Baker	Cameron Gray	Oreva Olakpe
Hunter Basselet	Nina Griffin	Amanda Parlin
Chris Bateman	Monica Hall	Siobhann Patrie
Derek Beaudet	Megan Hamann	Victoria Pearson
Andrea Bechen	Adeline Harris	Ryan Pelletier
Adam Beede	Megan Heath	Joelle Perkins
Eileen Bellefleur	Allie Hopkins	Krystal Pierce
Casey Brackett	Jessika Hyde	Christopher Pillsbury
Katrina Brown	Melissa Ingalls	Neil Plummer
Brandon Brown	Laura Jennings	Aline Potvin
Jaclyn Buck	Nick Juliano	Robert Priest
Nathaniel Burns	David Kell	Ian E Putnam
Kate Callahan	Andy Knapp	Jacques Rancourt
Craig Cameron	Andy Knox	Randy Ranthall
John Carey	Kerry Kowalczyk	Meg Reid
Adam Case	Emily Kritzman	Julia Richards
Holly Castle	Laura Lalemand	Erica Rickards
Kelly Cenga	Matthew Lariviere	Kendall Ricker
Elizabeth Clements	Savannah Larsen	Kelly Rines
Ariel Cohen	Danielle LeBlanc	Trevor Rivard
Nathaniel Collins	Jeff Lemery	Hannah Robbins
Seamus Conneely	Vincent Leonetti	Randall Rothert
Nicole Cournoyer	Tyler Littlefield	Travis Rowell
Emily Cramer	Brian London	Vincent M. Rubino
Charlie Creagh	Kate Longstreet	Tharjiath Ruot
Lauren Cross	Zachary Lopez	Melissa Russell
Maegan Cunliffe	Matthew Luzitano	Ross Saunders
Lora Cyr	Melissa Lyons	Nicole L. Schoppee
Ashley Doherty	Alexandra Martin	Katie Schwarz
Peter Doolittle	William Martin	Rebecca Seidel
Aidan Dunfy	Jayne Martin	Kyle Shea
John Duplinsky	Kenneth Masloski	Kristin Simoneau
Chris Durkin	Andrew Mayo	Maria Sleeper
Meghan Dzyak	Joshua McMahon	Michelle Spiller
Brianna Ebbeling	Josh McMahon	Samantha Starrett
Mary Ellms	Rebecca J. McPhedran	Dan Stefanilo
Emily Falco	Michael McPherson	Kyle Steinle
Chris Fortney	Alison Michaud	Christopher Stevens
Logan Frey	Michelle Michaud	Chris Stevens
Penny Galloway	Katelyn Michaud	Becky Stevenson
Katharine Rose Gergosian	Jason Millett	Kevin Stewart
Allison Giguere	Nicholas Mowatt	Tim Sturtevant
Janna Gilbert	Sarah Mueller	Caitlin Sullivan

# List of Student Presenters

Josh Tanguay	Students involved in the Sustainable Campus Coalition
D. Jamez Terry	Students of PHY 101: Descriptive Astronomy
Mary Tomlinson	Students of PHY 110: Elementary Physics: "Einstein's Physics"
Adam Tosch	Students of PSY 400: Research Methods in Psychology
Donna Townsend	Students of BIO 321/INT 221: Tropical Island Ecology
Kimberly Trimpop	
Samuel Valentine	
Molly Vespa	
Nicolas Weider	
Evan Whitehead	
Jessica Whittaker	
Alexandria Wiencek	
Marissa Wilbur	
Tyler Zamore	
John Zwetsloot	
Students of BIO 110: Ecology & The Environment class	
Students in ENV 110: Introductory Environmental Science	
Students in MAT100: Introduction to Mathematics	

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## List of Faculty Sponsors

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Alice E Adams	Peter G Hardy	Christopher S O'Brien
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Jean A Doty	James P Melcher	Alison J Terry
Matthew Freytag	George H Miller	Kristina B Wolff
David Gibson	Martin T Morocco	

# NOTES:

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# *A Tribute to Michael D. Wilson*

*Michael D. Wilson graduated from UMF in 1976. He loved teaching, helping children grow and develop. He reached out to help people whenever he could. He also had a deep love for the beauty and serenity of the wilderness where he felt a deep sense of connection.*

*Michael chose to live his life in a manner that was true to his beliefs. Many people remember him as a special person and a good friend. He died in a tragic accident in 1977, just as he was preparing to begin a new teaching position in a small town in Aroostook County.*

*Michael D. Wilson Symposium Day is made possible by a gift from Michael and Susan Angelides, who remember Michael with gratitude.*







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