

Symposium

Student Works

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2006

## Symposium 2006

University of Maine at Farmington

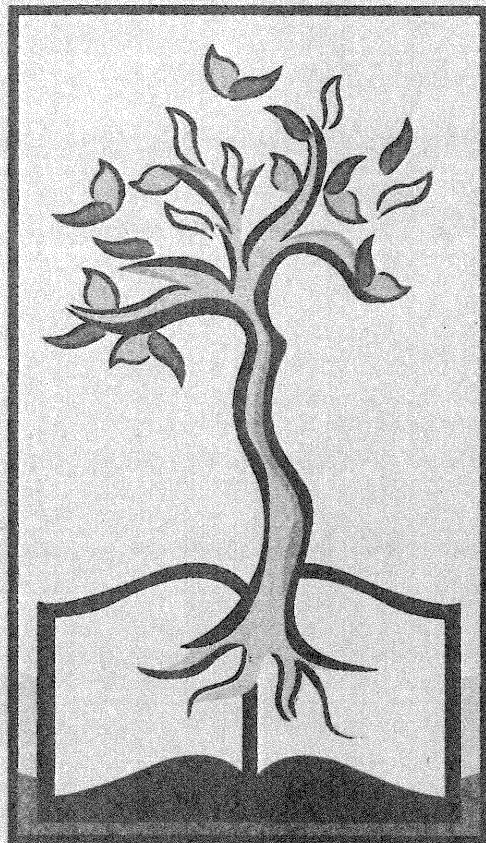
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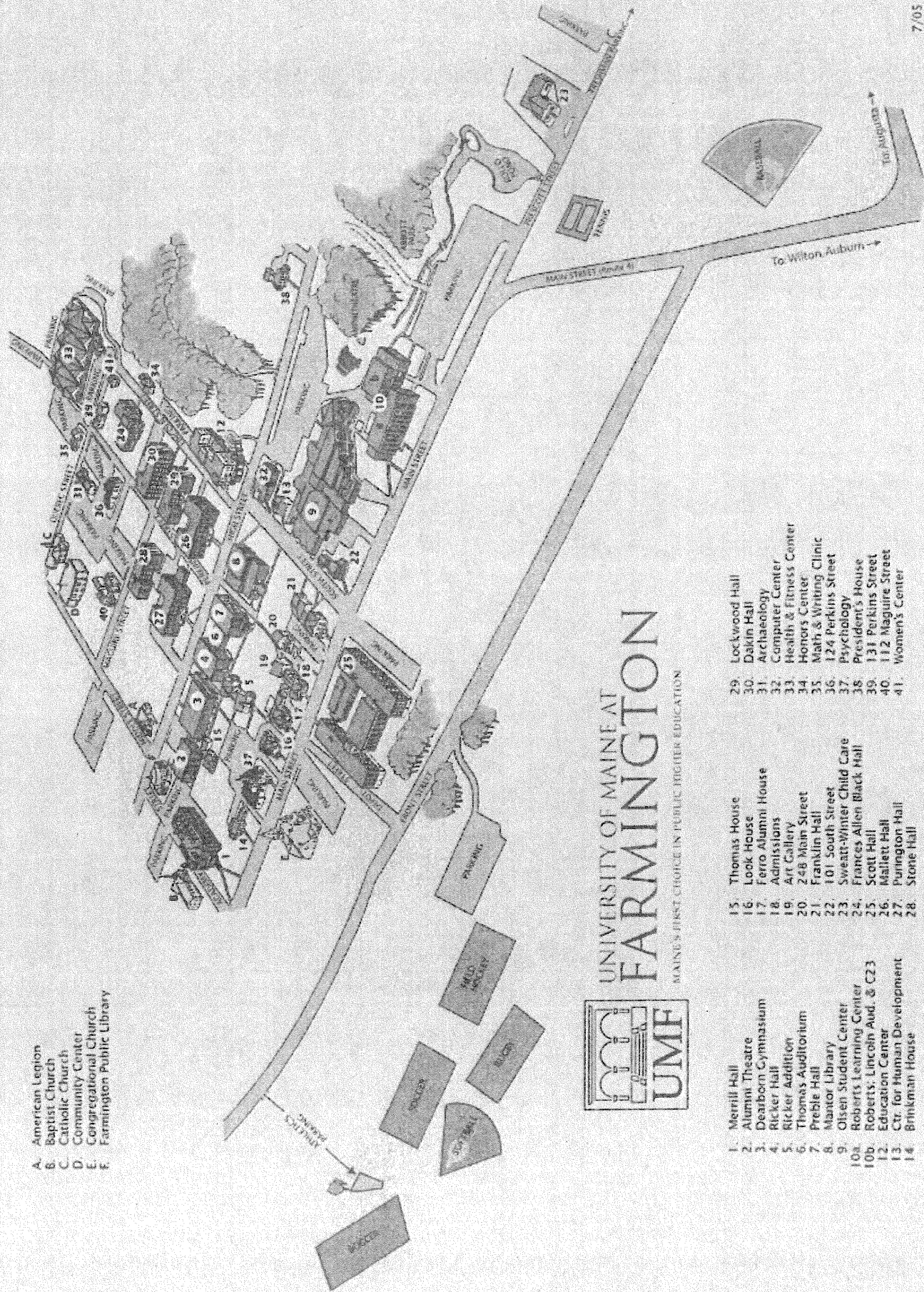
UMF Symposium

# UMF SYMPOSIUM 2006 APRIL 12

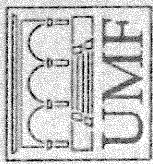
Program With Abstracts



Any changes to the Symposium program will be posted by the Student Center mailroom on April 12<sup>th</sup>.



- A. American Legion
- B. Baptist Church
- C. Catholic Church
- D. Community Center
- E. Congregational Church
- F. Farmington Public Library



UNIVERSITY OF MAINE AT  
**FARMINGTON**

MAINE'S FIRST OFFICE IN PUBLIC HIGHER EDUCATION

- 1. Merrill Hall
- 2. Alumni Theatre
- 3. Dearborn Gymnasium
- 4. Ricker Hall
- 5. Ricker Addition
- 6. Thomas Auditorium
- 7. Preble Hall
- 8. Manoir Library
- 9. Olsen Student Center
- 10a. Roberts Learning Center
- 10b. Roberts, Lincoln Aud. & C23
- 12. Education Center
- 13. Ctr. for Human Development
- 14. Brinkman House
- 15. Thomas House
- 16. Look House
- 17. Ferro Alumni House
- 18. Admissions
- 19. Art Gallery
- 20. 248 Main Street
- 21. Franklin Hall
- 22. 101 South Street
- 23. Sweat-Winter Child Care
- 24. Frances Allen Black Hall
- 25. Scott Hall
- 26. Mallett Hall
- 27. Purington Hall
- 28. Stone Hall
- 29. Lockwood Hall
- 30. Dakin Hall
- 31. Archaeology
- 32. Computer Center
- 33. Health & Fitness Center
- 34. Honors Center
- 35. Math & Writing Clinic
- 36. 124 Perkins Street
- 37. Psychology
- 38. President's House
- 39. 131 Perkins Street
- 40. 112 Maguire Street
- 41. Women's Center

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### Preface

Seven years ago, the University of Maine at Farmington held its first Symposium Day dedicated to the sharing of scholarship and creative work that is the great aim of an educational system. Now students and faculty continue to be engaged in diverse activities as they seek meaning in the chaos of life. This day-long event showcases the fruits of their efforts through oral and poster presentations of original research, readings, performances, art displays, and more. Come celebrate and let the spirit of Symposium Day revive us!

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 cards should use their cards.)

Symposium Day is sponsored by the UMF Culture Committee.

## Venue 1: UMF Art Gallery                      Art

9:00 - 10:30                      Perception: Art Seniors Present Their Exhibitions

*Bradley Dubois, Audrey Schoenthaler, Melissa Sprague, Thomas Stevens, Joshua Therriault*

Graduating seniors in art, Bradley Dubois, Audrey Schoenthaler, Melissa Sprague, Thomas Stevens, and Joshua Therriault, present their work in painting, drawing, photography, sculpture and installation. Discussion to follow.

## Venue 2: Lincoln Auditorium                      Science / Senior Speakers/ Culture

9:00 - 9:30                      Introduction to the science session

*Drew Barton*

9:30 - 9:50                      Habitat Associations of a Globally Rare Damselfly in Maine

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

Maine hosts a diverse assemblage of dragonflies and damselflies (Order Odonata), which includes 35% of all North American species. One of these is the globally rare Scarlet Bluet (*Enallagma pictum*), which reaches the northern-most extent of its geographic range in central Maine. To extend our knowledge of the habitat requirements of this rare damselfly, we surveyed 48 ponds and lakes in central and southern Maine in July and August of 2005. We conducted damselfly surveys at known Scarlet Bluet breeding sites and nearby 'null' sites where this species did not occur. We also collected data related to pond and lake characteristics, aquatic and shoreline vegetation, and the extent of human alteration of these essential plant communities. Our surveys established five new breeding locations for this species in Maine. While data analysis is still underway, preliminary results suggest that the Scarlet Bluet is found in unique damselfly assemblages that have significant associations with specific types of aquatic vegetation. The implications of these findings will be explored in relation to the conservation of damselflies and other aquatic invertebrates.

9:50 - 10:10                      Petrography and Geochemistry of the Zoned Onawa Pluton, Central Maine

*Jesse Powers*

The Onawa pluton is an elliptically shaped intrusion ~60 km<sup>2</sup> in size, located in southern Piscataquis county, central Maine. Earlier maps of central Maine show the Onawa as concentrically zoned, with an outer margin of gabbro surrounding a central granodiorite. Recent field and petrographic investigations have revealed a more complex and variable field relation within the pluton that identifies three distinct rock phases. The purpose of this project was to observe the field relations in greater detail and perform whole-rock geochemistry to help determine the origin of the petrographic zoning observed in the Onawa pluton.

10:10 - 10:20                      The Harvey Aft Award For Excellence in Chemistry

*Chemistry Faculty*

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.

10:20 - 10:40                      Sex Drugs and Your Brain

*Katie Gassman and Tobin Carson*

Our project looks at the affect of sex hormones, specifically estrogen and testosterone, on how our brain functions. Learning takes place through changes in brain structure and chemistry. How do hormones

impact this process? Does hormone therapy, the replacement of estrogen during menopause, help or hurt learning? These are the questions we hope our talk will address

10:40 - 11:00                    Who's your Daddy? The display of paternal resemblance in infants  
*Elizabeth Hebert, Jessika Hyde, Dale Menard*

This experiment tested the parental resemblance in human offspring during the infant and toddler stages of development. Paternal resemblance has shown to be a determining factor in the efforts of the father in child rearing because of supporting proof of the paternity of the child. Children and their parents were rated on a scale determining how much they resembled each other for such features as eyes, mouth, nose and general appearance from two panels of twelve different individuals, six bias (science majors) and six non bias (non science majors).

11:00 - 11:20                    Decoding the Genome: Detection of  $\alpha$ -Amylase, Chitinase, Hemocyanin, Alkaline Phosphatase and Cytochrome Oxidase in *Carcinus Maenas* (Green crab)  
*Kristin Beale and Abby West*

During a week at MDIBL, an experiment was conducted to detect the DNA coding sequence for the protein Cytochrome Oxidase using proven DNA markers. Another experiment was also conducted to isolate unknown protein sequences from RNA for the proteins  $\alpha$ -Amylase, Chitinase, Hemocyanin, and Alkaline Phosphatase. This was accomplished through the use of degenerate and specific primers. Various tissue samples were collected from *C. maenas* and tested for the above protein sequences. The specific primers all gave useable sequences but the degenerate primers yielded no results.

11:20 - 11:40                    Antibiotic Resistance in the bacteria *Staphylococcus aureus*  
*Aline Potvin & Laura Laleman*

In the past two decades, Methicillin Resistant *Staphylococcus aureus* (MRSA) has become a growing concern to the human population. MRSA is increasingly resistance to common antibiotics, leading scientists to believe that eventually there will be no antibiotic that can combat these infections. A non-pathogenic *Staphylococcus aureus* was used in this experiment as a model to test how quickly bacteria can become resistant and how easily resistance can be transferred via transformation to a healthy population or strain. By doing these experiments we were able to better understand the underlying mechanisms allowing MRSA to thrive and make modern antibiotics obsolete.

1:00 - 1:40                        Class Speaker Auditions for Commencement 2006  
*To Be Announced*

Seniors will be presenting their prepared speeches for auditions. One will be selected to speak at Commencement, May 13, 2006; another 2-3 will be chosen to present at the Senior Banquet to be held on Friday, May 12, 2006. Class Marshals will also be selected.

1:50 - 2:50                        Three Italian cities, thirty-seven students, four faculty members.  
*Members of the Mayterm trip to Italy*

Last year's May Term trip to Venice, Florence and Rome introduced students to the art, music, politics, and literature of Italy. Students not only learned about Italian culture, but experienced it as well. They dined on pasta in Tuscan cafes, strolled along Venetian canals, marveled at Roman architecture and had fun even getting lost in the tangle of medieval city streets. In this presentation, students will share their memories of Italy through photos, film and readings from their academic work.

### Venue 3: Roberts C23

### Math / Literature

9:00 - 10:50

#### Calculus and the Environment

*Students in Calculus 2*

Calculus II students will present mathematical models concerning various environmental issues and use these models to make future predictions. Examples include rain forest depletion, global warming, repopulation of endangered species, U.S. water usage vs. supply, oil production vs. consumption, reforestation after a clear-cut, a population comparison between India and China, sulfur emissions, ozone depletion, and the decay of radioactive residues at both Nagasaki and Chernobyl.

10:50 - 11:00

#### Population Growth of India

*Jessica Jones, Emily Neely*

For our project, we will be studying the population growth of India. We will compare it to other countries to see how quickly India's population will surpass the population of other countries. Mainly, we are interested in finding when the population of India will surpass the greatest populated country, China. We will also find the expected population of India through a series of dates ranging from now until 3006. We will calculate the expected population with exponential and logistic models. To do this we will conduct research on the past population statistics of India. We will conduct this same research on China and other various countries. By using models we can input old statistics to find the rate of increase of the population. With this number and an accurate estimate of the current population, we can project an estimated population for any given year.

11:00 - 11:50

#### Cellular Automata: C++ versus Mathematica

*Dustin Gage*

Last summer I had the privilege of doing mathematical research at Central Michigan University focusing on Cellular Automata and its role in encryption. In the six months that followed, our research team developed a system of computer algorithms written in C++ that were used to extend the published data on a specific class of Cellular Automata and were just as fast as Mathematica's built-in Cellular Automata functions. My hope with this presentation is to describe Cellular Automata, discuss our research, and show how the COS142 data structures of queues, stacks, and binary trees can be specialized and used in conjunction to produce noteworthy results. Knowledge of any object-oriented computer language is helpful but not necessary for this presentation.

1:00 - 2:00

#### Parody and Metadrama in A Midsummer Night's Dream

*Edie Davis, Cassandra Edwards, and Nicholas Hart*

There will be a brief video presentation of the "Pyramus and Thisbe" scene from A Midsummer Night's Dream, followed by three papers commenting on the parodic and self-referential aspects of the scene.

2:00 - 3:30

#### Reading Joyce's Ulysses

*Jennie Ferris, Sean Thomas, Nate Rawson, and Evan Gleason*

A panel on James Joyce's Ulysses, including papers on sexuality, resistance to music, Shakespeare, and the Italian language.

## Venue 4: North Dining Hall B      Civic Engagement

1:00 -2:00                      How to Tie a Civic Engagement/Service Learning Component Into Your Fourth Credit

*Mary Schwanke, Steven Quackenbush, Julianna Acheson, Margaret Gould Wescott, Pat O'Donnell Drew Barton*

Come and hear what faculty in English, Psychology, Dance, Science, and Anthropology have experienced by adding a Service-Learning component to their courses: their trials and errors, successes and challenges---moderated by a professor of science. Bring your questions, concerns, ideas, about:-How to use this pedagogy without drastically altering your teaching style. -How to tie Civic-Engagement/Service-Learning into your 4th credit. Courses:\*Patricia O'Donnell - The trials and errors of adding a Service-Learning component to Seminar in Writing \*Steven Quackenbush - "Service Learning: The Confessions of a Reluctant Convert," Gerontology\*Julianna Acheson - "Possibilities for Research and Publishing," Anthropology \*Margaret Gould Wescott - What is to be learned by providing a service in various communities - how it embellishes the subject of Dance.\*\*Drew Barton-reflections on tying community service into a FYS science course addressing sustainability issues. Mary Schwanke, moderator - As a professor of science, Mary embraces the concept of Service-Learning.

2:00 - 2:20                      Diesel Emissions in Farmington

*James Flanders and Dr. Kathleen Welch*

We will investigate the harmful effects of breathing diesel fumes in the downtown Farmington area. Truck traffic through the UMF downtown area will be counted and amount of emissions measured. The precautionary approach will be explained and the need to focus attention on the problem instead of the harmful health effects from breathing diesel fumes. The increased truck traffic through the downtown area as a result of the new operation in Poland Springs will also be estimated.

2:20 - 2:40                      Biomass: fuel of the future, or poisoning Athens, Maine?

*Gwen Tuttle and Greta Atchinson*

What if someone proposed a plant that was capable of spewing potentially dangerous emissions 40 miles from Farmington, Would you want to know about it? Come hear about the proposed biomass incinerator in Athens, Maine: the pros, the cons, the good, the bad and the dirty. Environmental Science students Gwen Tuttle and Greta Atchinson will be presenting on biomass as one of the new alternative forms of energy and the proposed GenPower Plant in Athens, Maine.

2:40 - 3:30                      Gulf Coast Relief Alternative Break: The Truth about the Tragedy

*Chelsea Goulart*

I will present my experiences as a participant from the relief trip taken this February. Photographs, oral discussion, and video will supplement the Symposium.



## Venue 5: North Dining Hall C

## Writers Read

1:00 - 2:00 Fiction Reading from Advanced Fiction  
*Students from English 310*

Several students from English 310, Advanced Fiction, and Pat O'Donnell will read from their short fiction. Expect variety and voice.

2:00 - 2:30 The Art of The Essai  
*Writers from the Beginning Nonfiction Workshop*

ESSAI is a verb--not a noun. To ESSAI is to try, to attempt, to experiment, to journey into the unknown, to follow the mind's natural meanderings--in style and substance. Come hear some of UMF's finest creative writers as they read from their nonfiction work--work that explores what it is to live in this world, work that challenges received notions of everything you thought a boring old "essay" should be.

## Venue 6 Student Center 123

## Miscellaneous Topics

All day Geometric Designs  
*Students in MAT 104, Geometry for Elementary Teachers*

A display of artwork demonstrating the visual effects that can be achieved with geometric patterns. Patterns incorporate a variety of types of symmetry, line designs, circle designs, knot designs, and tessellations.

9:00 - 9:25 Digital Flash Cards - Computer Science & Learning, an HCI Approach  
*Victor Cavendish Góes*

Technology should be harnessed to maximize human potential. To help learning efficacy, a Flashcard program was developed in Macromedia Flash, integrating PHP, XML, and ORACLE to provide the user with a friendly interface. The learner may study Chinese, English, and Pinyin; in addition, the learner may listen to the Chinese or English pronunciation Mp3s, downloaded from an online server. The card selection, from the user's online account, is done through a local XML file.

9:30 - 10:45 From China to Maine: Cultural Realism in the Classroom  
*Susan Sandler, Daniel Lemieux, Marilyn Shea*

During a month in China, participants in a graduate course offered by Marilyn Shea and Ming Ming Pu, visited factories, schools, ancient ruins and modern buildings in Beijing, Xi'an, Wuhan, and Shanghai. They talked with people in parks, on the streets and at universities. The presentations will sample from the wealth of material brought back to be incorporated into the classroom experiences of students in Jay and Dixfield Middle and High Schools. Susan Sandler, Social Science teacher from Jay Middle School will speak about the general social culture and education in China.

Daniel Lemieux, Technology Education teacher from Jay High School will speak about the modern and ancient architecture and the industrial changes in China. Marilyn Shea, Professor of Psychology, UMF will describe methods developed by a range of teachers to add a touch of Chinese culture to their curriculum.

10:45 - 11:05 What do rehab grads do? A student's perspective on the national scope of practice study  
*Sean Siebert*

The Undergraduate Council of the National Council on Rehabilitation Education has specified key outcomes needed for accreditation and credentialing of undergraduate programs. A national scope of practice study has been started to inform this process. Educators from University of Maine At Farmington, University of North Texas, and Penn State are collaborating to construct a survey instrument that will be

implemented nationally, and help to assess what undergraduate rehabilitation alumni do in their current jobs. A student from the Rehabilitation Services Program at the University of Maine at Farmington will share what he has learned from his involvement in the research process. The focus of the presentation will be on the actual amount of time research takes versus expected time, the process of recruiting participants, formative evaluation, and the value of presenting preliminary data at a national conference.

11:10 - 11:30 No Child Left Behind: Research on Teacher's Opinions

*Nicole Coutu, Rebecca Paker*

Rebecca Berger's EDU 125 class studied the effects of No Child Left Behind, and then interviewed teachers to find out what is happening in the classroom. Rebecca Parker and Nicole Coutu have analyzed in interviews, and have prepared a presentation on NCLB and the response from current professionals in the field of education.

11:35 - 12:00 Knowledge Gap: High School Students Making the Jump to College

*Amy Clearwater*

As this year's Maine Public Policy Scholar for the University of Maine at Farmington, Amy Clearwater is working with policy makers and advisors to shape public policy in the State of Maine. The goal of this research and policy development is to find methods to facilitate the enrollment of more first generation college students in order to improve overall education levels within our workforce. This presentation will include an overview of this project, including findings from a sociological pilot study of students' decision making processes about higher education, and will focus on the policy recommendations which have resulted from the research.

1:00 - 1:20 The Philosophy of Warfare

*Michael Coffey*

In this presentation, I will discuss some of the philosophical issues relating to warfare. I will briefly discuss the origins of warfare, and how it has evolved as we as a species have evolved. I will discuss the issues of whether a just war can be waged, and under what circumstances, as well as some of the ethical issues that arise in modern warfare, such as the killing of civilians. I will also discuss pacifism and whether or not human beings will ever be able to live peacefully without making war upon one another. This presentation is part of an independent study; the sponsor is Matthew Freytag, whose name was not included in the list above.

1:25 - 1:45 A National Compulsory Service Program

*Stephen Dacko*

My presentation calls for the implimentation of a national compulsory service program for all students graduating high school. Its purpose would be to restore a greater sense of community and civic engagement among the youth of America, and foster a higher degree of unity among the diverse youth of the United States.

1:50 - 2:15 What's going on in Darfur?

*Michaela Hitchcock, Matthew Davis, Chelsey Martin, Kailen Phelan*

Never again. After every genocide the world community speaks out, but are we listening? Currently there is a genocide taking place in Sudan, hear their voices and find out what you can do.

2:20 - 2:40 One or None: Forever Peeling the Onion of Existence

*William Gray*

I will give a brief summary of my writing project for the course: my own personal search for truth and the way to live, and at what spots it coincides or is similar to some of the philosophers we have read in class. I'll talk mostly about the conditions for truth in our existence.

2:45 - 3:05

Economy and Stress in Relation to Families

*Andra Spearrin*

The topic will explore The Family Stress Model (Conger and Elder, 1994) in relation to how economic conditions can create important external factors for families, which influence income and furthermore, income stability. Several studies which examine the effects of income and how it relates to the stress of families. Studies in the United States have documented significant relationships between economic pressure and emotional distress (as well as other factors such as: depressive symptoms and hostility). U.S. studies have also reported positive relationships between economic pressure and marital distress, indicated by family life satisfaction, among other things. Statistics from court records have also revealed that divorce rates increased in the years following economic crisis.

3:10 - 3:30

The Science of Ecofeminism : relationships between modern science and feminist theories.

*Prema Long*

From the Wild-Woman archetype to the Gaia hypothesis, ecofeminism is a wide topic that blends feminist theories, activist interests and ecological sciences. This presentation will focus on the interrelated connection between women and the environment and how modern science is projecting certain values and ways of thinking that perpetuate the domination of both.

**Venue 7: Ricker 202**

**Psychology**

9:00 - 9:10

Personality Traits and You

*Amy Doucette, Stephanie Gillingham*

What kind of person am I? This is a question that many people ask themselves at some point in their life. In their lives people encounter many social situations in their jobs, relationships and other aspects of their lives. It is important that a person becomes aware of how their personality traits are affecting these areas of their life. Participants in this study were given a survey. In this survey there were three areas of personality that were focused on. These three areas are self-esteem, generativity, and extroversion. These areas are important parts of people's personalities and are involved in their everyday lives. The questions on the survey were centered off of the measures of the "big five" traits of psychology. The main subject group that was part of this survey was college aged students.

9:12 - 9:22

Healing the Spiritual Heart: A Survey of Altruism, Self-Compassion, and

Ashtanga Yoga

*Lucas Hayden*

Ashtanga (also called "power yoga") is an ancient system of yoga known for its breathing and moving techniques that are believed to cleanse the body by means of blood circulation, perspiration, and purification of the nervous system. According to Ashtanga tradition, with this internal purification comes the burning away of six "poisons" of the heart: Desire, anger, delusion, greed, envy, and sloth. While this belief is firmly grounded in Ashtanga tradition, little formal research has been conducted to determine to what extent constructive emotions, namely altruism and self-compassion, are associated with Ashtanga yoga. The purpose of this project is to see if Ashtanga yoga is indeed related to the presence of a kinder, gentler heart by measuring people's levels of altruism and self-compassion and comparing them with their participation in Ashtanga yoga.

9:24 - 9:34

Seatbelt Use and Attitudes

*Stacey Ruel*

Seatbelts have been shown in numerous studies to be an effective way to avoid injury in vehicular accidents. Yet many people do not use their seatbelts. This survey is examining reasons why some do or do not wear their seatbelts. The questionnaire was designed to evaluate numerous reasons as to what factors

could predict seatbelt use and attitudes regarding seatbelt use. These factors include personal values and how these values are affected by family and peers personal beliefs and practices, actual use of seatbelts when driving a vehicle and when riding in a vehicle, past history (such as vehicular accidents and whether or not a seatbelt was beneficial), whether or not participants reside in a state that mandates and enforces seatbelt laws, and demographic background information. A short quiz was included in the questionnaire to aid in evaluating myths and beliefs that people may hold to be true but are actually shown to contradict those beliefs.

9:36 - 9:46

Self Esteem and Athletics...Who Has Higher Self Esteem?

*Sara Kannenberg*

This study examines the relationship between self esteem and participation in varsity athletics. Do these students have higher self esteem than students who do not participate in the athletic program? The students were given a questionnaire that asks about group dynamics, and opinions on group activities. The questionnaire also asks about pressure to perform and self confidence while performing in these situations. Findings are discussed in the presentation.

9:48 - 9:58

Bullying and its long term effects

*Eben Schultz*

Bullying is a growing problem in our schools today, and has many adverse effects on its victims. In a survey of male UMF students, positive and negative gender traits, as well as ability to cope with stress and past bullying were measured. It was hypothesized that bullying in adolescence would have a positive correlation with positive feminine qualities, and a negative correlation with positive masculine qualities. Past bullying was also hypothesized to increase stress coping skills, and therefore have a negative correlation with stress in the present. The actual results of the survey, and an analysis of their import will be discussed in this presentation.

10:00 - 10:10

What is Causing the High Rate of Student Departures from UMF on Weekends?

*Julie Anne Hutchinson*

This study examined the issue of students leaving the UMF campus during weekends. Are the majority of these student departures related to employment and/or job responsibilities? A survey was used to ask students about their opinions and experiences regarding leaving the UMF campus during weekends. The survey asked about employment opportunities, family obligations, and other aspects that may contribute to the high departure rate as well. Questions were also asked about activity involvement on campus, and whether there are certain things that could be done in order to make students want to stay on campus rather than depart on the weekends.

10:12 - 10:22

Student Apathy and Personality Traits

*Tia Bartley*

Is apathy something that students have control over? This study examines the relationship between students' apathy toward college and their personality traits, based on the "Big Five" model of personality. Questionnaires were given to students asking them questions about how they (the student) felt about themselves; how they felt about their classes and their time in college as a whole. Questions were also asked about past experiences in academics (high school), and some general questions about each student (i.e. gender, age, class rank etc).

10:24 - 10 34

Social and academic issues involved with being a student from out of state

*Jessica Skarin and Erin Riemer*

We have conducted a study on the social and academic issues involved with being a student from out of state. Participants were given a 37 question survey to fill out. These participants were informed of the opportunity to be involved with our survey when we presented our idea to their General Psychology class. The questionnaire included general questions as well as questions about social life, work, academic

topics, study habits, and financial aid. Our goal for this project is to find statistically significant information concerning out of state students in order to better accommodate them at this university. As out of state students, this topic of study was of personal interest to us. Similar studies have been done and we wanted to expand on these to produce additional information on the subject. This presentation will summarize our hypotheses, methods, results, and conclusions. This information will be presented using PowerPoint.

10:36- 10:46

Do Looks really matter or does personality count for something?

*Jason Guest*

This study examines what characteristics people find attractive in one another. Can a good or bad personality make you appear more attractive or even less attractive to a member of the opposite sex? Or do most people base their attraction on physical characteristics? Participants were given a questionnaire that lists physical characteristics and were asked to rate these characteristics in order of most importance to them. After they completed the rating scales a section of questions were asked to determine what personality type people found most attractive.

1:00 - 2:30

Music, Majors, Mind, and Munchies

*Students of Dr. Susan Anzivino's PSY 400 (Research Methods)*

Students will present their original research projects conducted at UMF during this spring semester. Included are the following: Effects of Various Musical Genres Upon Memory Recall (Dylan Engler & Cassie Moore); Perceived Intelligence and Race (Kevin Kennedy & Megan Hutchinson); Does Music Affect Perceived Waiting Time? (Michelle Moulton & Ginny Weill); College Major and Emotional Intelligence (Ashley Denis & Pamela Nixon); Does Chocolate Affect Learning? (Meagan Foss); Gender Stereotypes' Influence on Children's Memory (Lexie DeLong); Differences in Attitudes Towards Persons with Disabilities (Sean Siebert); Professor Perception: Professor Characteristics and Perceived Effectiveness (Rebecca Bascom)

2:30 - 4:00

Asperger's and High Functioning Autism

*Ms. Deb Lipsky with Dr. Susan Anzivino*

Ms. Deb Lipsky, who herself has high functioning autism, will discuss the special talents and challenges of persons with Asperger's or high functioning autism. Ms. Lipsky has a BS in Pre-Law and a M.Ed. in Family and Community Counseling. Deb's presentation is being co-sponsored by the Autism Society of Maine and UMF's Psychology Department.

## **Venue 8: Ricker 205**

## **Literature / Sociology**

9:00 - 9:20

Smashed: The Story of a Drunken Girlhood Telling the Female Story

*Chelsea Goulart*

The autobiography is an individual work created through a separate selfhood of the autobiographer. The writer must separate him/herself from the landscape and identity of culture in order to write a complete and whole truth. The male story focuses solely on the autobiographer; it lacks a larger connection. The female story is universal for all females; while individual stories may differ, women unite as a group because of their minority status and often their treatment as being inferior. Female autobiographers find a true identity in this manner; only through others can women truly identify themselves.. It is through the alliance of women that Koren Zailckas tells her autobiographical story in "Smashed: The Story of a Drunken Girlhood."

9:25 - 9:45 Conflict between Society's Female Expectations and Anticipated Autobiographical Form in Zailckas' Smashed

*Jennie Ferris*

This paper will be read as part of a student panel discussing Koren Zailckas' autobiography, "Smashed." Other student panelists are Meredith Hillman and Chelsea Goulart. In *Smashed*, Koren Zailckas expresses her difficulty in negotiating her identity as an individual and as a member of a larger demographic, women. Through emphases upon self-definition and societal expectations of a larger group, Zailckas portrays the difficulty of crafting an individualistic autobiography when faced with social pressure to conform to stereotyped and often self-contradictory expectations.

9:50 - 10:10 Photography and its Effect on an Autobiographer's Memory

*Meredith Hillman, Jennie Ferris, Chelsea Goulart*

In this panel discussion, I will present my essay on the theories regarding photographs and how they affect memory as discussed in the article "Family Pictures: Maus, Mourning and Post-Memory" and apply them to the photographs mentioned in the autobiography *Smashed: Story of a Drunken Girlhood*. I will be focusing on how photographs both serve and block memory for the autobiographer and how they simultaneously reveal her life and demise due to her alcohol abuse.

10:15 - 10:35 The Africanist Presence in Edgar Allan Poe's "The Raven"

*Abigail G. Stevens*

Toni Morrison calls for closer examination of the presence of Africans and African Americans in early American Literature. Her work, "Playing in the Dark, Whiteness and the Literary Imagination" is a tutorial that instructs readers in the art of centralizing this marginalized presence. Using Morrison's work as a guide, I will present an analysis of Edgar Allan Poe's poem, "The Raven." Tabitha Clark, Benjamin Mason and I will make up the panel on Toni Morrison.

10:40 - 11:00 Freedom and Freak Shows in Toni Morrison's Beloved

*Ben Mason, Tabitha Clark, and Abigail Stevens*

I will present my paper, "Freedom and Freak Shows in Toni Morrison's *Beloved*" in conjunction with two other students from the Toni Morrison seminar, Tabitha Clark and Abigail Stevens. This paper is a close reading of the carnival scene near the beginning of "*Beloved*." For white Americans in post-Civil War America, the freak show was a place to remind one's self of how normal one's body was, and therefore how free one was, when contrasted with the various acts of the show. This ego forming relationship is different for the African American characters of "*Beloved*," however, because, like the freaks in a show, they are marginalized by a white society that defines its own freedom in relationship to their relative lack of it. Given this, the carnival scene in "*Beloved*" is not a site where these characters can easily reinforce their own egos, but instead one where they must battle with the freaks to show who is the less freakish member of society.

11:05 - 11:25 Voodoo Beliefs in 'Sula'

*Tabitha Clark*

Toni Morrison, described by John Leonard as "the best writer in America" earns this respect not just through her embrace of the historical novel, but through her ability to draw so many influences into her texts. In my paper, *Voodoo Beliefs in 'Sula'*, I examine how Morrison envelopes tradition Voodoo beliefs through her characters and the community presented in her novel *'Sula'*. I apply the information about traditional Voodoo beliefs as presented by Zora Hurston, author of *'Tell My Horse'*, to help flush out the references Morrison makes to multiple traditional voodoo Gods and Goddesses.

1:00 - 1:20

Looking Towards Working in the Nonprofit Sector

*Tara Vary*

This presentation looks at the nonprofit field, from the perspective of a female soon to be collage graduate. Hoping to answer the questions of: Why someone would prefer to work in the nonprofit sector over the profit sector? What are the benefits and disadvantages of working in this sector? What is looked for in someone applying for work in the nonprofit sector? What sort of things you should be thinking about when applying for your first job in this field?

1:25 - 1:45

Liberation Theology and Economic Justice in Maine

*Jordan Shaw*

In the 1960's and up to present day the concept of Liberation Theology has been a driving force for faith communities doing social justice work all over the world. Looking at the work of faith communities, with special attention to the Maine Council of Churches, we will explore the importance of Liberation Theology as a catalyst for economic justice work in the State of Maine.

1:50 - 2:10

War and Political Cartoons: Looking for Recurring Themes in Political

Cartoons on War

*Alison Dube*

My project deals with the themes present in political cartoons dealing with war. I looked at cartoons from four different war eras, World War I, World War II, the Vietnam War, and the current war in Iraq. I looked for general themes in the cartoons, and checked for recurrence, both within the frame of the war that each cartoon dealt with and the span of the four wars in general.

2:15 - 2:35

Improving Public Internet Access at Local Libraries

*Andrew Clearwater*

Andrew Clearwater is working on an individual effort to improve public internet access at local libraries. He is refurbishing desktop computers, some he collected from sources around the UMF campus, and others were donated by community members. Many machines were destined for the trash, and so required significant hardware upgrades. Once the machines have been refurbished, he installs Linux, a low demand yet highly effective operating system. The resulting workstations should provide library patrons with internet browsing and productivity applications.

## **Venue 9: Ricker 207**

## **Business Economics I**

9:00 - 9:20

Past, Present and Future of: The Great Atlantic and Pacific Tea Company

*Vincent M. Rubino*

A brief history of The Great Atlantic and Pacific Tea Co., Inc. Followed by Corporate and store objectives, combining the use of three unique platforms to successfully and strategically operate in the highly competitive New York Tri-State metropolitan grocery market as well as the mid-atlantic, Detroit, MI, and New Orleans markets. Realizing savings of many recent, key strategic cost saving changes.

9:25 - 9:45

Management development in Russia

*Julia Chepurnova*

The topic of the presentation is the peculiarities of management development in Russia with regards to the influence of Russian economy and also the history of the country. Besides, in this work we will try to outline its major differences from management in the USA (and other countries).

9:50 - 10:10 Business Ethics

*Alyssa Laney & Caitlin Sullivan*

Business ethics are vital to organizations today due to government and public pressures of what determines an ethical business decision. Economic analysis, legality and normative philosophy are all considerations of ethics.

10:15 - 10:35 Individual Retirement Accounts

*Andrew Dennis*

This presentation will analyze and discuss the Individual Retirement Accounts (IRAs). The IRA is a retirement plan account that provides some tax advantages for retirement savings. The four main types of IRAs; Traditional IRA, Roth IRA, SEP IRA, and SIMPLE IRA will be analyzed.

10:40 - 11:00 Business Ethics: An Integration of Maslow and Kohlberg

*Jessica Dorr, Brian London*

This presentation aims to combine the development theories of Kohlberg and Maslow. A discussion of Kohlberg's Theory of Moral Development and Maslow's Hierarchy of Needs will be followed with an integration of the two as they apply to Business Ethics.

11:05 - 11:25 Change Management

*Owen Cassidy, Ryan Goldhammer*

To demonstrate the use of change management; for students as well as companies, who face change and are seeking constant improvement. Also show how "managing" in itself plays a crucial roll in improving efficiency and effectiveness.

1:00 - 1:20 Blind Vertigo: The Next Step!

*Rory Flynn, Scott Marquis*

An inside look at student entrepreneurship of a retail clothing line. The acquisition of a business license and the process of trademarking a namebrand/logo.

1:25 - 1:45 The Finance Paradigm

*Stephen Nolin, Amanda Parker*

In recent years there have been numerous corporate scandals that have left many questioning the true nature of our business practices. This presentation will examine the current finance paradigm with its adoption into our 'corporate culture' and the attitudes then generated regarding the distinction between morality and legality. Drawing from the works of John Dobson, "Finance Ethics", Thomas Kuhn, "The Structure of Scientific Revolutions", and moral theorist Alasdair MacIntyre, a further analysis will be made regarding the role business ethics plays today versus that which will be resultant of a paradigm shift.

1:50 - 2:10 SIC Films

*Sean Duggan*

SIC Films is a film company started by Sean Duggan and Sam Peters in 2002. Focusing primarily on skiing in the northeast, SIC Films has released three ski films, with number four in the works. This presentation will focus on the development of SIC Films as an independent business entity with regard to the entrepreneurial efforts of several UMF students involved with the company. The presentation will cover all of the elements of producing ski films, including on-location filming, music licensing, editing, distribution, design, athlete relations, sponsorship, financial management, and event coverage. For more information contact Sean Duggan at donshuggin@yahoo.com or ring 207-899-7267.



2:15 - 2:35

An Industry Analysis of Commercial Radio

*William McArthur*

A look at the present and future of commercial radio and the effects of changes in government regulations and increased competition including changes in station ownership rules, and the increasing popularity in satellite and internet radio.

**Venue 10: Ricker 217**

**Business Economics II / Health**

9:00 - 9:20

History of Starbucks

*Trafton M. Teague and Jeffrey O. McIver*

Analytical Account: We are going to identify the history of Starbucks. Starbucks has grown into one of the leaders in the retail coffee industry. Starbucks has done this by a strategic vision that has help propel them into an influential market share leader. The history of Starbucks is fascinating to see how once a struggling company turned themselves into a company revered by its own peers.

9:25 - 9:45

Target Market of Starbucks

*Adon Shaw, Thomas Parsons*

Starbucks, arguably the world s most prestigious coffee shop has a very specific target market. This presentation will identify the specific target market for Starbucks. How Starbucks narrowed down their target market will be covered as well as pros and cons for the various customer groups. We will compare Dunkin Donuts (Starbucks biggest competitor) customers with the customers of Starbucks.

9:50 - 10:10

Starbucks Demographics

*Jon Brown*

An analysis of demographic factors that influence Starbucks retail site locations. Along with logistical decisions, marketing plans, research and development, and constituent behaviors will be analyzed.

10:15 - 10:35

Starbuck's International

*Jeremy Akeley & Ashley Black*

This presentation will discuss Starbuck's international presence in the European and Asian markets. Part of our analysis will explore the growth plans of the company as well as its current international positioning. We will be discussing trade barriers that Starbuck's faces when they enter new markets, the cultural challenges they face and the distinctions between their Asian and European strategies.

10:40 - 11:00

Starbucks: Managing the 4 P's of Marketing

*David Kilgour & Steve Nolin*

This presentation aims to educate participants on the marketing techniques of Starbucks. The four P s of marketing (product, price, place and promotion) will provide the context which this knowledge is conveyed. We will also look at the new AMA marketing definition and how Starbucks applies it to their company. Specific topics include, but not limited to, gorilla marketing, mass advertising and other related concepts.

11:05 - 11:25

Starbucks Competitive Analysis

*Ryan Campbell*

In this presentation we will lay out a full competitive analysis of Starbucks. We will attempt to lay out how Starbucks competes in its industry and who it competes with. This will look at the coffee industry as well as how it considers itself along the lines of other industrial catagories.

11:30 - 11:50                    Starbucks Real Estate and Franchising

*Peter Taylor and Steve Bleck*

Starbucks has established a policy of not franchising its coffee shops. It does this because it wants to own all capital assets of its product and also to have the ability to make universal changes to all shops within the company. Starbucks uses its power to strategically place its shop locations in accordance to high traffic areas of potential customers. We are going to examine the success of the Starbucks model, and specifically looking at real estate and franchising. Starbucks only product isn't its coffee its real estate and corporate ownership of each store, thus we will examine this aspect of the coffee house.

1:00 - 1:40                    Advocacy for a Tobacco Free Campus

*Shane Gallagher, Nichole Brochu, Erik Gordon, Adam Pomeroy*

The focus of the HEA 411 service learning project is to advocate for a smoke-free policy on the UMF campus. This will be accomplished through the recruitment of key informants necessary to garner a grassroots campaign and the support of the students. The culture of UMF promotes the active involvement of grassroots change, oppose to making a top-down decision. Support will be gained through the use of interviews and media advocacy and with collaboration of other HEA 411 service learning groups. This project is currently in action.

1:40 - 2:20                    Third Annual 2006 Stride into Spring Activity Program

*Antonio Solis, Brianna Lizotte, Kate Wallace and Pamela Picard*

Students from HEA 411 will be presenting their current progress on a UMF community-based activity program, being implemented throughout the month of April. The presentation will explain the process the group underwent in motivating the UMF community to be more active on a daily basis in order to prevent chronic disease. Based on research and planning according to the Precede-Proceed model that students are studying this semester, the Stride into Spring program was revised and is slated to begin on April 2 and end April 29. Information for those interested in participating will be provided.

2:20 - 3:00                    Smoking Cessation Program

*Mike Miliken, Nickay Dudley, Molly Bell, Christine Marquis*

The Nicotine Ninjas are conducting a tobacco cessation program for students enrolled in HEA 100: Health promotion and Wellness. The goal of our project is to provide HEA 100 students at UMF with knowledge, encouragement, and skills to seek help in quitting smoking to reduce their own risk of chronic disease associated with tobacco use. This project applies a theoretical model for program planning.

3:00 - 3:40                    Working Toward a T-F Campus

*Beverly Dunst and Iva Berry*

IVB Health Associates is the subgroup of the Spring 2006 Health Education Planning class Tobacco Working Group which is responsible for assessing various segments of the UMF population with regard to tobacco use on campus. Our presentation will describe several methods of gathering and analyzing such data within the PRECEDE PROCEED Model, and compare local, state, national and university/college tobacco use data with that obtained from UMF community.

## Venue 11: Thomas Auditorium, Preble 17

## Genetics

9:00 - 9:20 Clean vs. Sanitary: The Truth About Bacteria

*Kerry Kowalczyk & Kimberly Trimpop*

Bacteria are everywhere. This project was designed to test the prevalence of bacteria in public dish areas, the effectiveness of triclosan-containing detergents, and the effect of various antibiotics on resistant bacteria. By collecting and cultivating bacteria from various places, we were able to isolate colonies and subject them to antibiotic testing. This, in combination with statistical analysis, enabled the determination of bacterial numbers, population dynamics, and resistance in the public dish wash area. By understanding prevalence and resistance in public areas management would be better able to maintain a sanitary environment and decrease the risk of infection.

9:25 - 9:45 Is Tanning Really that Dangerous? The Effects of Tanning on E. coli Bacteria.

*Adam Staier, Hannah Austin, and Becky Hall*

The goal of this project was to determine how ultra-violet (UV) light and UV radiation negatively affect Deoxyribonucleic Acid (DNA) in cells. This was done by exposing the DNA of cells from an Escherichia coli (E. coli) culture to UV radiation in a tanning bed. By analyzing the rate of growth and death of the cells in the culture exposed to the UV light from the tanning bed, the damage that UV light causes to human skin cells was inferred by comparison to the cells in the E. coli control cultures. E. coli cells relatedness is so close to human cells differing only in that E. coli lacks melanin pigment, and thus can be compared to a fair-skinned person.

9:50 - 10:10 The Development of Original Genetics Laboratory Activities for High School Biology Classes

*Katelyn Dumont and Rebecca Tanner*

This experiment demonstrates the various inheritance patterns demonstrated in *Drosophila melanogaster*. The project is part of a genetics unit designed for Honors or Advanced Placement Biology students in at least 9th grade. *Drosophila melanogaster* has long been used as a premier example of classic Mendelian genetics, and this project further demonstrates the various inheritance patterns by following several traits throughout successive generations of individuals to determine the relationship between genotype and phenotype for each of these traits. The results of this experiment will be used to explain various inheritance patterns to students in a real-life scenario.

10:15 - 10:35 Formation of Kanamycin Resistant Bacteria in Non-GM and GM Tofu

*Eben Baker, Adam Beede, Zachary Lopez*

Our project compared antibiotic resistance to kanamycin in genetically modified (GM) tofu and organic (Non-GM) tofu. Comparisons were made initially and throughout decomposition. Each of our three trials had increasing kanamycin concentrations to account for virulent bacteria that were still susceptible to kanamycin. Due to cross-family antibiotic resistance in bacteria there is the possibility for GM foods, such as tofu derived from genetically modified soybeans, to contribute to the current antibiotic resistance crisis.

10:35 - 10:55 Flying High: The Effects of Caffeine on *Drosophila melanogaster*

*Amber Richards and Tabitha Riendeau*

This study focused on one of the most socially accepted substances in existence today. Classifying caffeine as a drug has been highly debated by government and science alike. Our research attempted to show the adverse affects associated with caffeine abuse by exposing *Drosophila* to varying levels of the stimulant. The knowledge gained from this research could help raise awareness of the harmful affects of caffeine on our overall well-being.

## Venue 12: Student Center Corridor      Poster Session

**NOTE:** Posters will be set up during the morning. **Authors will be present at their posters for an hour between 10am and noon, and should leave a note to indicate additional times when they will be present to answer questions.**

Poster #1                      PIWI Monday Night Playgroup

*Stacey Irek, Melissa Holmes, Amy Knapp, Christina Davis*

The presenters will be sitting by the poster to answer questions about PIWI (parents interacting with infants) content and to talk with people who would like to potentially enroll in the monday night playgroup.

Poster #2                      Student Apathy and Finding Oneself in College

*Pamela Nixon and Jill Magee*

Academics are becoming increasingly concerned over students' apathy and lack of clear goals in their education. But do apathy and difficulty in "finding oneself" impact academic performance and satisfaction, intellectual development, and personal growth? Regression analysis of a survey of 101 students in various majors found that student apathy strongly predicted lower GPA, a lack of purpose in life, and lower self-concept clarity, whereas, difficulty "finding oneself" predicted dissatisfaction with college, lack of purpose in life, lower self-concept clarity, and having an undeclared major in college.

Poster #3                      AMD Dual Core Processors with Water Cooling

*Tom Merrill, Brandon Bergman*

We will just be displaying systems built from scratch one of which has a water cooling system rather than traditional fans for processor and graphic processing unit cooling. Water dissipates heat much more efficiently and thus allows the system to be overclocked or set at higher processing speeds.

Poster #4                      What is a Typical UMF Student?

*Students in MAT 102*

The students in MAT102 will present the results of their recent surveys. They have been surveying UMF students to answer the question "What is a typical UMF student?" The survey topics include but are not limited to fitness center use, oral hygiene, eating habits and study habits.

Poster #5                      The UMF Green Campus Coalition: Promoting an Environmentally Sustainable Campus

*Laura Lalemand, Aline Potvin, Rachel Thompson, Megan Kerivan, Zack Lopez*

The UMF Green Campus Coalition is a group of students, faculty, and staff who promote environmental sustainability on the campus and in the community. The coalition is coordinated by several faculty and staff members, and led by students who are paid through the Work Initiative and Work Study programs. We operate by raising issues, implementing projects, and promoting the work of others (e.g., Facilities Management, Aramark Dining Services). This poster describes some of the major green initiatives on campus, including many on which we've worked. It also highlights our current efforts on recycling, reducing energy consumption, campus organic gardening, promoting Maine-grown food, renovating the arboretum, and assessing the release of greenhouse gases by the campus.

Poster #6                      Five Posters: Potential Impacts of Climate Change on Maine

*Students in First-year Seminar: The Party's Over -- Climate Change & The End of Fossil Fuel*

There is scientific consensus that human addition of greenhouse gases to the atmosphere has increased the Earth's temperature. Global circulation models project further serious temperature increase and other alterations of climate over the next several centuries. If the projections for the end of the 21st

century come to pass, what might the impacts be on Maine? We will present five posters that address this question by examining how projected global change might affect Maine's climate and natural environment and the ski, maple sugar, and tourism industries.

Poster #7 An Invasive Asian Tree in a Farmington Woodlot: Reconstructing the mid-20th Century Colonization by Common Buckthorn

*Laura Lalemand, Aline Potvin, Rachel Thompson, Drew Barton*

Invasives are species that colonize and spread outside their native range, and cause environmental or economic damage. Most of the twelve invasive tree species in the Farmington area occur in disturbed sites (Barton et al 2004), but common buckthorn has been found in a local woodlot. Combining analyses of GPS-GIS maps, aerial photographs, and tree rings, we are investigating the chronology and spatial pattern of this invasion. Preliminary results reveal two distinct parts of the woodlot study area: a pasture abandoned in the early 1940s and a long-intact forest. Mapping reveals that buckthorns have established almost exclusively in the old pasture area and along the forest edge. A small cohort of buckthorn germinated in the 1950s, but most individuals are much younger, suggesting that colonization occurred well after other tree species (e.g., ash). Nevertheless, the population appears to be persisting in the woodlot, with positive growth of mature trees and a large number of young individuals.

Poster #8 Significance of Nearshore and Shoreline Habitat Integrity to Pond Damselfly Conservation

*Ron Butler & Phillip deMaynadier*

Development of shoreline by humans may negatively impact aquatic biota, including a variety of macroinvertebrates. Pond damselflies are keystone macroinvertebrates that are important as potential indicators of freshwater habitat integrity, in part because of their dependency on nearshore aquatic vegetation. To better understand the habitat associations and sensitivities of pond damselflies, we sampled adult abundance at 35 randomly selected ponds and lakes in southern Maine. Habitat data were also collected to assess site characteristics, shoreline disturbance, and aquatic vegetation. Using both univariate and multivariate analyses, we determined that the diversity and composition of damselfly assemblages were related to the abundance and richness of nearshore aquatic vegetation, extent of shoreline habitat alteration, bottom substrate granularity, and habitat productivity; all of which are subject to degradation on waterbodies that have been excessively developed by humans. Additionally, we generated a habitat tolerance index for distinguishing damselflies that are habitat specialists from relative generalists, and we documented species-specific damselfly associations with key genera of floating and emergent macrophytes. We conclude that protection of nearshore and shoreline habitat integrity, with special emphasis on emergent and floating vegetation, is critical to the conservation of a diverse damselfly fauna.

Poster #9 What is Beauty?: The role of facial symmetry in human attractiveness

*Karissa Ostheimer and Hannah Robbins*

Previous studies in evolutionary psychology have focused on underlying factors in human mate attraction. In humans, certain facial features can be indicators of health and hormone levels of individuals. Individuals of the opposite sex consider those individuals with features that suggest better health more attractive. Some of these factors include the size and symmetry of facial features. We want to determine if symmetry is the prevailing factor of an individual's level of attractiveness. Given a choice between the a completely symmetrical face derived from reflecting the right or left side and an unaltered photograph, both males and females will be asked to decide which is most attractive. Results will be discussed.

Poster #10 Chickadee Foraging Trade-Offs

*Jess Brummel & Elise Corbally*

When foraging for food, chickadees must choose to feed in locations where it is safe and economically efficient. Therefore, we believed chickadees would choose to feed at feeders with unshelled seeds in a sheltered area. In this study, we observed bird feeders in sheltered and exposed environments with shelled and unshelled sunflower seeds to see what feeders the chickadees would prefer. We found that

the chickadees statistically preferred feeders in sheltered areas over feeders in exposed areas, and they statistically preferred unshelled seeds to shelled seeds. This study may demonstrate chickadees' ability to weigh the costs and benefits of an area in terms of high and low predation risk and to choose the most economically efficient area in which to feed.

Poster #11 Feeling Lucky? Skip the Latte

*Elizabeth Hebert, Tabitha Riendeau, Amber Richards*

The effects of caffeine as a drug have been highly debated with conflicting results from numerous scientific studies. *Drosophila melanogaster* have been exposed to varying dilution of caffeine with observations taken on courtship behaviors, mating rituals, and reproductive output. We expected increasing amounts of stimulant would increase courtship behaviors in *Drosophila*, but decrease the actual mating success, due to their inability to settle and actually copulate.

Poster #12 The choice between food and reproduction in *Acheta domestica*, the common house cricket

*Carlyle Smart, Charles Longstaff*

In many animals a nutritionally balanced diet is a determining factor in choosing reproduction, or foraging to increase fitness. This study will examine the effects of nutritional deprivation on the courting behavior of *Acheta domestica*, the common house cricket, by providing them with the choice between food and a female. We predict that crickets without proper nutrition will exhibit a preference for food to increase future reproductive success.

Poster #13 Our Solar System: Posters from Descriptive Astronomy

*Students of Descriptive Astronomy, PHY 101*

Students in Descriptive Astronomy will present posters discussing the outer solar system. Topics will include Jupiter's weather, Saturn, Uranus, Neptune, Pluto, and space missions to comets.

Poster #14 Einstein's Physics

*Students of Elementary Physics, PHY 110*

In 1905 a little-known patent clerk named Albert Einstein began turning the world of physics on its head, and to celebrate the centennial of that "miracle year," the students of Elementary Physics will present posters discussing relativity and quantum physics, the twin subjects of Einstein's most sustained research. Topics will include black holes, the block universe, the accelerating universe, semiconductors, superconductors, superfluids, Gravity Probe B, experimental tests of special relativity, particle accelerators, and Einstein's impact on the public.

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