

UMF SYMPOSIUM

April 11, 2001

Schedule and Complete List of Abstracts

Any late changes to this Symposium program will be listed on handouts available by the Student Center mailroom on April 11.

UMF Symposium 2001 Program

TABLE OF CONTENTS

Why a Symposium? 1

Schedule 2

Abstracts for Venue 1 4

Abstracts for Venue 2 5

Abstracts for Venue 3 7

Abstracts for Venue 4 9

Abstracts for Venue 5 9

Abstracts for Venue 6 10

Abstracts for Venue 7 12

Abstract for Venue 8 13

Abstracts for Venue 9 13

Abstract for Venue 10 16

Abstracts for Venue 11 16

Abstracts for Venue 12 17

Abstracts for Venue 13 18

Abstract for Venue 14 21

Why a Symposium?

The normal everyday life of a university has a certain inescapable logic, built on social contracts between students, faculty, staff and administration, and the center of student academic life is the exchange of work for grade. Faculty hold out As and Bs as incentive for students to go through the effort of demonstrating their learning, and students attempt to efficiently distribute their work load so as to maximize GPA. But almost every college graduate has experienced the exhilaration of being able to learn something just because it was interesting or potentially useful. The fact that learning is an end in itself, and a pleasant one, as opposed to something forced on students by the need to get good grades, is often lost in the life of a college campus.

That is why we take a day in the spring to teach and learn and show off our learning, outside of the usual life of the university. Students, faculty, staff and administrators can circulate together among sessions ranging from art to zoology. An attendee can follow a thread of ideas from venue to venue, or stay in one place and visit, for instance, East Germany, Iceland, Chechnya and "a Florida of the mind," or Mars, the asteroid belt and Great Wass Island, or consider tobacco marketing, Sun Tzu's advice and how to dress for business. For a day, we learn for no better reason than to learn, and we hope that some of that sentiment infects our academic interactions for the rest of the year.

UMF SYMPOSIUM 2001 SCHEDULE

NOTE: Venues 1-5 are in the Student Center (NDH = North Dining Hall, CR = conference room); Venue 7 is the electronic classroom on the library's third floor; Venue 9 is in Preble Hall; Venues 11-13 are in the white Ricker Addition building across the sidewalk from Ricker Hall; Venue 14 is in Merrill Hall.

	Venue 1 NDH-A (soc. sciences)	Venue 2 NDH-B (business)	Venue 3 NDH-C (health / ed)	Venue 4 CR 123 (composition)	Venue 5 Student Ctr. Lobby (posters)	Venue 6 Roberts C131 (science)	Venue 7 Library (business)
9:00	Balduc <i>et al.</i>	Doucette <i>et al.</i>	Pandora <i>et al.</i>	ENG 100F - Johnsen	<i>posters up for viewing</i>	LeClair & Marden	
9:25	Gagnon	Larochelle <i>et al.</i>	VanOrman <i>et al.</i>			Ramú & Barker	
10:00	Dunst <i>et al.</i>	Gervais & Hiebert	Bransky <i>et al.</i>	ENG 100F - Cooke	<i>posters up for viewing</i>	Haywood <i>et al.</i>	Buckley & Baum
10:25	ARC student Grow <i>et al.</i>	Dailey & Ouillette					Vose & Hubbard
11:00	Tranten & Swan	Sen <i>et al.</i>	Glass <i>et al.</i>	ENG 100F - Yetter	Roberts <i>et al.</i> Wheeler <i>et al.</i> Condon <i>et al.</i> Bartholomew & Griffin	St. Clair & Woodside	Warner & Ellis
11:25		Rankin & Normand				Ryan & Hoctor Dulac	
12:00	LUNCH	LUNCH	LUNCH	LUNCH		LUNCH	
12:25							
1:00	PSY 400 students	Cormier & Schwartz	Clawson <i>et al.</i>	ENG 100F - Sayres & Wegner	<i>posters up for viewing</i>	Pollard & York	
1:25		Spry <i>et al.</i>				St Saviour & Robinson	
2:00	Danforth <i>et al.</i>	DeLalio & Meyer					
2:25							

	Venue 8 Art Gallery (art)	Venue 9 Thomas Auditorium (science)	Venue 10 Ricker 15 (music)	Venue 11 Ricker 202 (rehab)	Venue 12 Ricker 205 (fiction / lit)	Venue 13 Ricker 217 (health / ed)	Venue 14 Nordica Auditorium (music)
9:00	X	Brewster <i>et al.</i>	Chaparin <i>et al.</i>	Decker	advanced fiction students	Yardley <i>et al.</i>	X
9:25		Arris <i>et al.</i> Savasuk & Barton		Johnson		Carrera <i>et al.</i>	
10:00	X	Traynor & Szymczuk	X	Tauro	Dumaine <i>et al.</i>	Camire <i>et al.</i>	X
10:25		McCahan & Passarelli		Nowak		Arnaudin <i>et al.</i>	
11:00	X	Beeney & Magri	X	Pelletier	X	Cilley <i>et al.</i>	X
11:25		Takagi		Tozier		Bacheider <i>et al.</i>	
12:00	gallery open	LUNCH	X	LUNCH	X	LUNCH	X
12:25							
1:00	Chaparin <i>et al.</i>	Beeney <i>et al.</i>	X	Wolfe	X	Cote <i>et al.</i>	X
1:25		Magri		McGuire		Buzzell <i>et al.</i>	
2:00	gallery open until 4:00	X	X	X	X	X	Mollicone (Woodrow Wilson Fellow)
2:25							

LUNCH:

From 12:00 - 1:00, presenters and audience members are invited to have lunch in the Student Center cafeteria, compliments of the Provost's office. This is a chance to foster community and to pat each other on the back for taking part rather than taking the day off.

Administrative heads are encouraged to arrange or reduce the day's office activities such that staff members can attend presentations if desired. Employees – if you plan to attend the Symposium and would also like to join us for lunch, please visit Sandy Lord in the Provost's office on April 9 or April 10 to pick up a complimentary lunch ticket.

Complete Abstracts for Venue 1: Student Center, North Dining Hall A

9:00 - 9:25 Transitions from Communism: Comparing East Germany and Cuba

Sean Balduc, Paul Sabin, Richard Cote, and Scott Erb

Students of POS 223 are studying various cases in how Communist states deal with the end of the Cold War. Comparing Cuba, which remains committed to Communism, with East Germany, which has unified with a western state, shows interesting insights at the nature of the transitions the end of the Cold War necessitates.

9:25 - 9:50 A Florida of the Mind: Mathematics, Apportionment and Elections

Heather Gagnon

The recent elections provide examples galore of the problems of counting votes and deciding winners in a republic. I will explain other methods of counting votes and show that there is no clear "best method." I will also discuss apportionment as it relates to Congress and the Electoral College.

10:00 - 10:25 Fieldtrip in Geography to Iceland

Beverly Dunst, Robin Frost, Nate Killam, Dorthy McAllister, Cathleen McAnney, Karyn Moore, Ed Pedersen, Scott Shannon, and Sarah Wishhart

A group of students traveled to Iceland in May, 2000. We traveled the circumference of the island over 13 days. We will make a presentation about the geology, a little about their history and present economy, and traditions.

10:25 - 10:35 Current Archaeological Research at the UMF ARC and What is Consulting Archaeology?

Student representative of the Archaeology Research Center

This talk will focus on a very exciting prehistoric Native American site recently excavated in Maine. The presenter is a work study student at the lab and he will describe his duties here and the types of information that are obtained through his and others' work.

10:35 - 10:45 Women's History In The Classroom

Heather Grow, Jessica Rankin, Charity Williams, Erica Beaulé, Kirsten Poulin, Leane Quattrucci, and Aubrey Pervier

In the past couple of years, a movement towards integrating women's history into traditionally taught history courses has been made. On the collegiate level, we have gone so far as to offer courses dealing only with women's issues and history. But to what extent have these new ideas penetrated into high school courses? By surveying high school history classes on their general ability to name prominent women's figures of history and modern day influence, as well as surveying teachers on the depth by which they cover women's topics, the presenters hope to answer the above question for general interest, as well as potential use for all education majors in their respective concentrations.

11:00 - 11:50 **Girls Talk: A Mentoring Partnership**

Laurie Tranten and Kirsten Swan

Girls Talk is a pilot mentor program with Kingfield Elementary School. Fifth and sixth grade girls at Kingfield Elementary School are partnered with professional women in the Kingfield area and student leaders from UMF. Girls Talk is a program designed to raise aspirations, build self esteem, emphasize personal responsibility and create an environment that fosters a strong commitment to community. This literature based program enables girls to develop to their fullest potential and enables girls to create their own vision for the future.

This Symposium Presentation features current mentors, girls from Kingfield Elementary School and the coordinators who will share their experiences utilizing a panel format. Highlights include: literature selected for the program, selection and training of mentors, monthly program format, financial planning for the program, cultural trips and personal stories. The Girls Talk program has received tremendous support in the Kingfield community, SAD #58 and local media. This is a unique collaboration between Kingfield Elementary School, the Kingfield community and UMF.

1:00 - 1:50 **What Variables Impact College Grades**

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

Students in PSY 400 have undertaken various group projects to explore variables related to students' grades at UMF. Each group will review its methodology and present its findings. The questions studied in relationship to students' GPA include the following: Do hours and time of sexual activity affect grades? How are hours of sleep and grades related? Does student depression affect college grades? Are the GPAs of residential students higher than those of non-residential students? Does increasing age result in better grades? Is there a difference in exam grades between online and paper testing?

2:00 - 2:50 **The International System: Economics, Politics, Human Rights, and War**

Mike Danforth, Kim Lefenesty, Lianne Thompson, Alana Querze, Bobby Beaulieu, and Scott Erb

Students in an advanced Political Science research course on the international system share their methods and results so far on topics including the US embargo of Cuba, Human rights abuses in Afghanistan, the Russian war in Chechnya, diamond trade in Sierra Leone, and trade with Vietnam since the end of the cold war.

Complete Abstracts for Venue 2: Student Center, North Dining Hall B

9:00 - 9:25 **Americans with Disabilities Act**

Heidi Doucette, Steven Thomas, and John Byrne

We will be discussing the major points of the American Disabilities Act (ADA). This will include what it says, the history of the Disabilities Act, and why it was formed. Also included will be a legal definition and case studies as well. And we will conclude with how it applies to communities including the UMF community.

9:25 - 9:50 **Defining Sexual Harassment**

Amy Larochelle, Kate Backman, and Corey Ellis

Both forms of sexual harassment will legally be defined. Victims' rights and procedures to follow will also be presented. Video examples will help clarify some questions of types of behavior that could be considered sexual harassment. We will also discuss composition of a sexual harassment policy and establishing reporting procedures.

10:00 - 10:25 **The Marketing of Tobacco Products**

Loni Gervais and Lucas Hiebert

The marketing of tobacco products, especially cigarettes, is a rather controversial topic. Tobacco Companies may have paid their settlements, but their stocks keep rising and profit margins increasing. We will attempt to explain how they market their products so they can continue to not only be powerful, but profitable.

10:25 - 10:50 **Telemarketing Strategy and Regulations**

Sarah Dailey and Tyler Ouillette

Telemarketing is one of the most effective ways for companies to market their products. However, companies can utilize this branch of marketing in very different ways. Some companies take a "soft-sell" approach, while others use high pressure tactics to sell their product. Telemarketing is governed by many strict laws that protect the consumer's privacy. For example, there are many states that are strict about how many objections a representative can overcome before ending the call. This presentation will focus on the various styles of Telemarketing, as well as the rules and regulations that govern the process.

11:00 - 11:25 **Global Marketing and its Potential in China**

Mom Sem, Shane Genakos, and Ayako Tezuka

Our PowerPoint presentation will go over the basic questions dealing with the global marketing environment focusing on the advantages and disadvantages of price, promotion, place, and product. Furthermore, we will discuss the strategies and programs companies should consider when entering the global market. Finally, we will take this information and its usefulness and apply it to the growing market in China.

11:25 - 11:50 **The Evolution of a Retail Empire**

Jessica Rankin and Julie Normand

This PowerPoint presentation will explore the past, present, and future of the Wal-Mart industry. Beginning with Sam Walton's dream to "Give people high value, low prices, and a warm welcome." That dream was realized in 1962 with the opening of the first Wal-Mart. Since this time Wal-Mart stores have been popping up all over the United States and continue to grow and compete against small businesses. We plan to show how Wal-Mart has become the success that it is and why so many people are against its "big box" expansion strategy.

1:00 - 1:25 Business Casual

Allison Cormier and Melissa Schwartz

What is business casual? At one time, strict dress was called for in the work place, but as business environments have changed, so has the style of clothing. Many companies have enlisted the use of business casual to improve the workplace mentality. This presentation will describe the different aspects which entail business casual through a PowerPoint presentation. Following the presentation, will be a display of the varied styles that represent what business casual is.

1:25 - 1:50 Internet Marketing: The Effects on the Ski Industry

Erin E. Spry, Amanda L. Spry, and Chris R. Clark

We plan to discuss the effects that Internet Marketing has had on sales in the New England ski resorts. The presentation will target specific mountains such as: Sugarloaf, their marketing plan, implementation and results. There will be ample statistics to back up our research.

2:00 - 2:25 Sun Tzu and the Art of Business

David De Lallo and Peter Meyer

Sun Tzu is a premiere Chinese strategist whose timeless strategies have given guidance to strategists from many different walks of life. While his book, "Sun Tzu and the Art of War", was mainly written as a guide to wartime strategy, Sun Tzu's message applies to the long-term strategies employed by the business world. In taking Sun Tzu's message and applying it to the business paradigm, business managers can deal with competitors and potential entrants to any industry by using preventative tactics designed to win without fighting.

Complete Abstracts for Venue 3: Student Center, North Dining Hall C

9:00 - 9:25 Healthy Campus Community

LeeAnna Pandora, Mike Fullerton, Jill St.Jean, and Faith Sargent

In the fall of 2000, six students returned from the Blaine House Summit on a Healthy Maine full of energy and enthusiasm for the message they had been hearing. The students met with Dr. Bill Geller and shared their enthusiasm for a campus health initiative with him. Dr. Geller agreed that campus health efforts need further development and support. Student efforts have led to a campus wide initiative involving students, faculty, and staff. Plans include expansion of the wellness dorms, health promotion for employees, and a continued emphasis on public discussion of social norms and substance abuse.

9:25 - 9:50 **The Wellness Carnival: A Health Promotion Event for Students**

Melissa VanOrman, Kevin Guidi, Jeff Bird, and Hannah Simpson

The Wellness Carnival was held on the University of Maine at Farmington Campus on February 7, 2001. The goal of the Carnival was to present health promotion information in a festive way that would attract student interest. One of the hottest items at the Carnival was the beer goggle course, which gave students the opportunity to see the difference in the way they functioned when they were under the influence and when they weren't. Melissa and students from HEA 310 will talk about why the beer goggles and other health promotion ideas used at the Carnival were effective. They will also look at what wouldn't work well in this particular setting, with this particular audience and why.

10:00 - 10:50 **UMF Health and Wellness Challenge: A Service Learning Project in Social Marketing**

Elizabeth Bransky, Scott Deschambault, Beth Whitman, and Mike Wilcox

Under the direction of Dr. William Geller, Vice President of Student Affairs, the University of Maine at Farmington has taken on the challenge of developing a healthy campus community and becoming a model healthy campus for the University of Maine System. The students in HEA 310, Principles of Prevention and Health Promotion, are working with Dr. Geller on this exciting undertaking. Through the use of social marketing techniques, the students' goal is to promote changes in health behaviors among the UMF campus community members that will result in improvements in the health and well being of the campus as a whole.

In the Symposium Presentation, the audience will be provided an overview of social marketing techniques. The presentation will also show how the Spring 2001 class in HEA 310 has used Social Marketing techniques to plan, implement and promote the "UMF Health and Wellness Challenge." This project is designed to raise awareness of the health issues on the UMF Campus and to provide the student body an opportunity to determine what those issues are.

11:00 - 11:50 **Experiences and Opportunities in a Bilingual School in Cuernavaca, Mexico**

Ray Glass, Becky Danis, and Kate Morgan

This past February six UMF students participated in a study trip to Cuernavaca, Mexico, conducted by Ray Glass. The students worked for five days at a bilingual elementary school, visited colonial towns and archeological zones, and practiced their beginning Spanish. The authors will present an account of the trip, show slides, and discuss possibilities for future visits to Cuernavaca. The authors will also discuss several interesting opportunities for UMF students including one-three week visits to study Spanish as well as opportunities to live in Cuernavaca and work as a teacher of English.

1:00 - 2:50 **Preparing for Student Teaching and the Professional Portfolio in Early Childhood Special Education**

Mellisa Clawson (Facilitator), Annie Aoki, Denelle Bryant, Naomi Cook, Katie Douglas, Aimee Ellis, Denise Fleming, Faye Joost, Hilary Nichols, Michelle Ouellette, Katy Pangburn, Jenifer Robinson, and Jasmine Tibbetts

Early Childhood Special Education seniors share their insights on how to use coursework, practicum, and other experiences to prepare for student teaching and the professional portfolio. Seniors describe their current student teaching experiences, share the wisdom they have gained during their four years at UMF, and present portions of their portfolios. Questions from attendees are welcome.

Complete Abstracts for Venue 4: Student Center, Conference Room 123

Writers Read

9:00 - 9:50 Students from Norma Johnsen's section of English Composition 100

10:00 - 10:50 Students from Elizabeth Cooke's section of English Composition 100

11:00 - 11:50 Students from Luanne Yetter's section of English Composition 100

1:00 - 1:50 Students from William Sayres' and Marilyn Wegner's sections of English Composition 100

Students from English Composition 100 will read their essays--some personal, some research, some critical--that echo life in the new century. Come listen to them read about your world. Drop in for one reading, then try to extricate yourself. It will be impossible.

Complete Abstracts for Venue 5: Student Center Lobby Poster Session

NOTE: Posters will be up all day; authors will be available 11:00 - 11:50 to discuss their work.

Poster #1: Applied Journalism: Going Places

Teresa Swartz Roberts (instructor) Kathleen Moore, Joshua Keezer, and Matthew Mitchell

Applied Journalism is an advanced course offered as a followup to the survey Journalism course. Service learning is the core of the coursework. Students write for publication or work in some other facet of journalism. This semester's class members are involved in various activities that will be represented in our poster session: hiking the Appalachian Trail and producing reports for a teen publication, producing the Mainstream both in print and online versions, and writing for the Sun Journal.

Poster #2: Lichen Diversity, Air Quality, and Human Health in Western Maine

Michelle Wheeler, Amanda Brown, Ryan Woodside, Caitlin Reagan, Ryan Burton, Kendall Curtis, and Ron Butler

Increased attention has been focused on the ecology of lichens because of their potential importance as indicators of air quality, forest integrity, biodiversity? hotspots?, and possibly even human health. The UMF Lichen Research Unit (LRU) was formed in 1998 to give students the opportunity to participate in real-world research projects involving lichen ecology. New members initially work together with more experienced students while they learn the necessary taxonomic and identification techniques required for the project (e.g., lichen morphology, field identification and sampling, use of complex dichotomous keys, microscopic analysis, chemical testing). During this training period, new students assist experienced LRU members in the field and learn sampling protocols, field identification of lichens, and the use of GPS/GIS technology. Senior members direct the day-to-day activities of the research group including: teaching, field work and logistics, specimen collection and identification, and data entry and analysis. Over the past three years, numerous UMF students have had the opportunity to participate in this program. This poster will highlight the results of a study that investigated the potential relationship between lichen diversity, air quality, and human health in western Maine.

Poster #3: Selection of Opposite-Sex Partners: A Study of Personal Advertisements

Shawn Condon, Richard Cote, Jacob Grindle, Cassandra Hensley, Lorie LaLiberte, Joseph Niman, Brandi Rollins, Denyell Suomi, and Coleen Whitehurst

This study examines personal advertisements in the Lewiston Sun Journal to explore the role of traditional sex stereotypes in opposite-sex partner selection. The results of three sets of stratified random samples (N=200) by season and month of personal ads will be displayed to find out if the attitudes of the subjects, in terms of desired companion attributes, are consistent with traditional sex roles stereotypes. Are men more likely to emphasize stereotypically desirable feminine traits such as appearance and deemphasize the nonfeminine traits of financial status and employment? What factors do women emphasize? Do the findings suggest that sex role stereotyping is still in operation?

Poster #4: Ski Mountain Liability, and New Laws That Will Stiffen Liability of Skiers and Mountains Alike

Sven Bartholomew and Matt Griffin

A look at ski mountain liability, with a focus on a new court case that occurred in Colorado. Two skiers ran into each other one died and the other got charged with murder.

Complete Abstracts for Venue 6: Roberts C131

9:00 - 9:25 Increasing UV-B Resistance in Photosynthetic Organisms

Renee LeClair and Jerimiah Marden

As global radiation increases due to the reduction in stratospheric ozone, effectiveness of present DNA repair mechanisms, evolved to withstand current levels of UV-B radiation, will not be sufficient to prevent genetic defects in subsequent generations of many plant species. Repetitive UV repair mechanisms, along with a new mutation prevention gene found in *Deinococcus radiodurans*, will be engineered into cyanobacteria and plants, through the use of known DNA extraction and insertion techniques. Successful transformation will be measured by comparing UV resistance of transformed plants and cyanobacteria to control groups. It is hypothesized that increased resistance to UV light would give plants a competitive advantage.

9:25 - 9:50 Does the "Five Second Rule" Exist?

Katriel Ramú and Jean Barker

Based on the common belief that one can eat food once it has briefly contacted the floor, this presentation addresses the results of current research here at UMF designed to examine the "five second rule". The results of this research could have wide ramifications. What types of bacteria are found on food once it has contacted the floor? Are certain areas better places for you to drop your favorite snack, blow it off, and eat it anyway? Does the kind of food you're eating make dropping it more or less likely that bacteria are hitch hiking back to your body? Come compare what you have "always" believed with scientific evidence. It may just change your mind.

10:00 - 10:50 Molecular Breeding and Isolation of MTBE-Munching Microbes

Erica Haywood, Wendy Michaud, and Allyson White

According to a recent governmental report, between 1400-5200 (1.1%) of Maine's private groundwater wells are dangerously contaminated with a chemical called methyl tert-butyl ether, or MTBE. This chemical is added to reformulated gasoline (RFG) in order to reduce harmful air pollution caused by automobile emissions. MTBE has been labeled a potential health hazard and possible carcinogen by the U.S. EPA. Thus far, no method has been found to effectively remove MTBE from the many contaminated water sources and spill sites in Maine.

This presentation will examine the methods and results of two separate research projects. The first was an effort to isolate a microorganism from MTBE-contaminated sites that had the ability to biodegrade the chemical as a part of its natural metabolic processes. The second project attempted a molecular breeding experiment, forcing a microorganism to rapidly evolve in order to use MTBE as its primary carbon source.

The success of these projects could have a significant impact on clean-up efforts after accidental gasoline spillage and drinking water contamination. The only remedy we have today for MTBE water contamination is time, and when confronting a threat to Maine's natural environment, we shouldn't have to wait.

11:00 - 11:25 Treat Before You Drink: Do You Really Know What's in Your Water?

Jessica St. Clair and Ryan Woodside

This presentation will display the results of a study comparing the effectiveness of different water treatment methods in removing several biological contaminants from potential drinking water. Three of the most common contaminants in the United States are: (1) *Giardia lamblia*, (2) *Cryptosporidium parvum* and (3) *Escherichia coli*. Due to regulatory restrictions, *Chilomonas* and *Paramecium aurelia* will be substituted for *G. lamblia* and *C. parvum* respectively. Six methods of water treatment, commonly used by people who engage in outdoor activities, will be tested: (1) PuR water filter, (2) addition of bleach, (3) addition of iodine, (4) boiling, (5) Aquamira water purification system, and (6) Brita filter. The effectiveness of each treatment will be compared to a control of water which is not treated.

11:25 - 11:35 Differential Reproductive Rates in Facultative Anaerobes

Thomas Ryan and John Hctor

The rate at which bacteria reproduce is largely dictated by the amount of available energy they possess for biosynthesis. A facultative anaerobe, such as *E. coli*, may generate useful energy (ATP) via substrate level phosphorylation in the absence of oxygen or by oxidative phosphorylation where oxygen is present. The latter yields 18X as much ATP as the former and we speculate that this will be reflected in their respective population growth curves. In addition, we shall grow these populations in the presence and absence of creatine monohydrate, a widely used performance enhancement supplement to gauge its impact on ATP production as well as gene composition and expression in *E. coli*.

11:35 - 11:45 Seabird Restoration in the Gulf of Maine

Lisa Dulac

The U.S. Fish and Wildlife Service maintain many national wildlife refuges on the east coast. I have worked as a research assistant at Monomoy National Wildlife Refuge and Petit Manan National Wildlife Refuge; two islands that are concerned with seabird restoration. This talk will be about the collaborate effort of many field biologists to increase species diversity on various islands in the Gulf of Maine.

1:00 - 1:25 Cross-Resistance to Antibiotics in Genetically Engineered vs. Organic Tomatoes

Jessica Pollard and Heather York

This experiment examines the antibiotic resistance of genetically engineered tomatoes and organic tomatoes to the antibiotics kanamycin, amikacin, tobramycin and streptomycin. By determining whether or not bacteria within the tomatoes have developed antibiotic resistance to kanamycin, conclusions can be drawn about the horizontal transfer of antibiotic resistance marker genes (to kanamycin) in genetically engineered tomatoes. If the bacteria colonies are subsequently resistant to the other aminoglycosides (amikacin, tobramycin and streptomycin), then cross-resistance has occurred. Implications include the danger of secondary transfer of multiple antibiotic resistance to microorganisms in the human body and development of pathogens with multiple antibiotic resistance.

1:25 - 1:50 Suspected Pathology in the Heart of Veal Calves Revisited

Torre St Saviour and Richard Robinson

It has been observed that over 90% of veal hearts dissected in anatomy labs demonstrate pathological-like symptoms. The focus of this research has been on whether or not the hearts are displaying normal or pathological conditions, and if the symptoms are pathologically based, what the source might be. Approximately 200 hearts have been dissected and rated on the degree of effect in the following areas: edema, erythema, blood blisters, internal hemorrhaging, and external clots. The majority of the hearts, probably around 90% or more, exhibit some degree of effect, predominantly in the ventricular valves and surrounding areas. Hearts that are the most severely affected often display a hardening of the tricuspid and bicuspid valve edges, fibrin clots, fluid-filled cysts, and what has been termed to be "chicken fat" clots. Histological samples have been taken on healthy and affected hearts and sent to a local laboratory for analysis. Extensive research suggests that the pathological symptoms may be a result of low Ig levels. According to The American Veal Association, less than 14% of calves sent to slaughter are in proper health and over 20% are less than three days old. The issues surrounding passive immunity have become the current focus.

Complete Abstracts for Venue 7: Mantor Library, Electronic Classroom

10:00 - 10:25 Event Marketing in Relation to the World Cup Games

Katherine Buckley and Gretchin Baum

Our presentation will discuss one of the five non-traditional areas where marketing has expanded. Our major focus will be on Event Marketing. We will illustrate Event Marketing through a major sports event the America's Cup. The America's Cup is a well known sailing competition against other countries that began in Newport R.I. Professional sailing is like no other sport because the professional sailors chosen to participate in the most honorable events such as the America's Cup are not sailing in them because they're going to receive a multi-million dollar contract. They have been chosen out of many others to compete with them. The individual crew members chosen are simply sailing out of honor and pride for their country and their pure enjoyment for sailing. However, difficulty arises when choosing the skipper and crew mates. This is because of the money involved.

It requires a great deal of marketing management to get these teams up and running. Boats are expensive as well as the many other factors that are involved. Lastly, we will show an economic standpoint of how much marketing goes into large sports events such as the America's Cup by showing the impact this event has on the economy.

10:25 - 10:50 Time Value of Money Workshop

Corey Vose and Adam Hubbard

The subject of this symposium presentation will be a hands on workshop on the Time Value of Money, highlighting the basic premise that a dollar today is worth more than a dollar tomorrow. This workshop will include everyday examples such as lease payments, mortgages, and car payments, demonstrating what would be a better deal, deferred payments, low first year financing, or special rebates for a car purchase. The workshop is intended to give a general knowledge of Future Values, Present Values, and Annuities.

11:00 - 11:25 Successful Websites

Derick Warner and Corey Ellis

Information presented will include demonstrations of positive and negative aspects of websites, including suggestions on improvements that could be made to sites reviewed and methods that help improve "stickiness" (what makes a customer return to a site) of the sites. We will also discuss ways to increase website traffic.

Complete Abstract for Venue 8: Art Gallery

1:00 - 1:50 UMF Seniors 2001 Exhibition

Sergei Chaparin, Rita Eleck, Ryan Kneeland, Maria Kovacs, and Tina Sorensen

Graduating UMF art majors will present their work in the gallery, speak about their work and answer questions.

NOTE: The gallery will be open 12:00 - 4:00 for viewing the work; the artists will be present 1:00 - 1:50.

Complete Abstracts for Venue 9: Preble Hall, Thomas Auditorium

9:00 - 9:15 Invasive Exotic Woody Plants in Western Maine

Lauri Brewster, Annie Cox, Drew Barton, and Pam Prodan

Invasive plants are non-native species that rapidly increase in abundance and threaten natural communities. Several naturalists have noticed the presence of exotic woody plant species in the Farmington area that have become invasive in other areas. In order to investigate the extent of this possible invasion, we surveyed peer reviewed journals, internet sites, and magazines regarding invasive species in Maine, neighboring states, and Canada. Because little is known about invasives in western Maine, we identified the fifteen most potentially threatening woody species. A more focused search on the ecology of these fifteen species provided insight as to how and where they are likely to invade. From this information, we developed a sampling scheme, which will be carried out in fall 2001, to quantify the presence of these species in the Farmington area. The scheme includes both field sampling and interviews with local farmers, botanists, and horticulturists. Our final product will be an assessment of potential threats and mitigation measures.

9:15 - 9:30 **Jack Pine Stand Dynamics on Great Wass Island, Maine: Verifying Tree Ages**

Marian Arris, Jennifer White, and Drew Barton

The Great Wass Island Research Team has been investigating the dynamics of jack pine on rock outcrops and in bogs at the southeastern margin of its distribution, in mid-coast Maine. Jack pine is a fire-dependent species, which is typically replaced by more shade-tolerant species in the absence of fire. Using analyses of age structure, we assessed whether jack pine is self-perpetuating on Great Wass Island, where there is little evidence of past fire. The stands generally exhibit patterns indicating self-perpetuating populations. The results also suggest recent invasion of this tree species into coastal plateau bogs. Tree age was determined by directly counting annual rings. Cores could have false or missing rings, which would lead to large deviations of ring counts from actual ages. We used COFECHA, a dendrochronology computer tool, to detect the presence of such mistakes. Since all trees grow faster in years in which weather is more favorable, one would expect wide and narrow rings to match up among trees from the same area. COFECHA assesses how well tree ring series are matched up, and suggests ways to fix problems when they arise. We will report on such results from our study.

9:30 - 9:45 **Invasion of Jack Pine into Rare Coastal Plateau Bogs on Great Wass Island, Maine: An Aerial Photographic Analysis**

Stasia Savasuk and Drew Barton

Jack pine is a tree species that typically grows on dry soils subject to frequent fire. On Great Wass Island, we have documented, for the first time, the occurrence of jack pine in bogs. These rare coastal plateau bogs are geographically restricted to a narrow band of coastal Downeast Maine and the Canadian Maritimes, and support several rare species. Results from age structure analyses suggest that jack pine invaded these bogs in the 20th century, and may be continuing to spread across these sites. We are testing these hypotheses by examining tree abundance in bogs on Great Wass Island using aerial photographs dating from 1940 to 1996. Using NIH Image spatial software, we found that the percentage of jack pine coverage in three bogs increased substantially from 1940 to 1996. We will compare these results with new analyses of the same aerial photographs using Image Analysis, an extension of ArcView Geographic Information Systems, which allows automated identification of open versus tree-covered portions of bogs.

10:00 - 10:25 **Analysis of Hydrogen Sulfide in Cigarette Smoke**

Lauren M. Traynor and Colleen J. Szymczuk

Hydrogen sulfide (H_2S) is one of many toxic chemicals generated when a cigarette is smoked. The H_2S from cigarette smoke, after being trapped in base, was analyzed using a student prepared Ion Selective Electrode. An outline of the methodology and results obtained from various cigarette brands will be presented.

10:25 - 10:50 The Feasibility of Hemp Seed Oil as a Fuel

Gabrielle McCahan and Mariella Passarelli

Cannabis Sativa L, hemp seed oil, has been used for hundreds of years in various applications. It was the most consumed lighting oil during the 1800s and has been used extensively in paints and varnishes. Upon the introduction of the lucrative business of petroleum synthetics in the early æ30s, all forms of the hemp plant were banned in the U.S., and it has been illegal to grow since 1937. Because it is expensive to import, hemp seed oil is rarely used in any modern application, and an extensive literature search has shown its absence in scientific study. As the fossil fuel supply is shrinking, however, hemp seed oil may prove useful in the creation of an alternative energy source. In addition to balancing consumption and emission of CO₂, the use of hemp seed oil as a renewable biodiesel fuel could reduce dependence on foreign oil, create new industry, and provide a less expensive alternative to heating oil. The purpose of this study is to compare the energy output of hemp seed oil to other fuels; favorable results of this comparative study will prompt further analysis of hemp oil as a feasible fuel for diesel-run machines and possibly home heating units.

11:00 - 11:25 Radar Constraints on the Composition of 45 Asteroids

Brett R. Beeny and Chris Magri

We use radar albedos estimated for thirty-six main-belt asteroids and nine near-Earth asteroids to estimate near-surface solid densities using two methods, one of which treats 433 Eros as a calibrator by using recent spacecraft results on its chondritic nature. Solid densities derived by these two methods for C-class and M-class objects are consistent with those previously inferred for main-belt radar targets. Most of the B, F, G, and P-class targets have very low solid densities, possibly implying ultraprimitive composition. Most radar-detected S-class asteroids are likely to have ordinary chondritic composition, although a minority group of stony-iron analogs cannot be ruled out.

11:25 - 11:50 Exploration on Mars

Mari Takagi

The Martian environment and geology will be introduced. The enigmatic Meddusae Fossae Formation (MFF) deposits, which cover one-quarter of the equatorial portion of Mars in the Amazonis Planitia region, will then be discussed using a geomorphic map I made during a summer internship at the Smithsonian Institution's Center for Earth and Planetary Studies.

1:00 - 1:25 Gasoline Components and a Clay-in-Water Dispersion: Does "Muddy" Water Aggregate Toxic BTEX's?

Brett R. Beeny, Jake Losey, and Erik Pollock

This study qualitatively and quantitatively assesses the interactions of Benzene, Toluene, and Para-xylene with a dispersion of Bentonite clay in water. The affinity of each of these toxic gasoline-range organic compounds to adsorb to dispersed clay is determined by gas chromatographic analyses. Implications to, and possible applications for, real-world aquatic systems will be addressed.

1:25 - 1:50 **Microwaving Kleopatra**

Chris Magri

Get the inside scoop on left-wing astronomers who are conspiring to collapse our wave functions, deform our spacetime, and whittle away at our Second Amendment right to emit thermal radiation. Radar imaging of the dogbone-shaped metallic asteroid 216 Kleopatra will also be discussed. Sponsored by the John Birch Society.

Complete Abstract for Venue 10: Ricker 15

9:00 - 9:50 **Cakewalking with MIDI: Music and Ideas from the Computer Music Composition Class**

Sergei Chaparin, Dan Godbout, Tina Marquis, Mark Russell, and Phil Carlsen

Since the late 1980s, UMF's Computer Music Studio has offered a place where students can learn some of the principles of digital sound synthesis and MIDI, gain facility with the use of sequencing software, and create compositions of their own. In this presentation, Philip Carlsen and students in this semester's Computer Music Composition class will offer brief introductions to the software and hardware, then play some of their compositions. Most of the gear will be on hand, and an extra hour after the presentation (10:00 - 10:50) has been allotted for interested folks to try it out.

Complete Abstracts for Venue 11: Ricker Addition 202

9:00 - 9:25 **What To Do With a Broken Heart**

Heather Decker

This presentation explores the aspects, aims and importance of cardiac rehabilitation. Who is affected? What are the psychosocial issues associated with cardiac disease? Come find out why cardiac rehabilitation is successful and important.

9:25 - 9:50 **What Works: Schools, Parents, Drugs and Prevention**

Heidi Johnson

An explanation of school prevention programs and what they should include. Also help for parents, and what they can do to become more involved.

10:00 - 10:25 **Rediscovering Our Natural Rhythm**

Dayna M. Tauro

The use of rhythm drumming is used to rediscover the natural rhythm that all humans are born with. Drumming is a growing field of therapy.

10:25 - 10:50 Why Do Teens Run?

Jessica Nowak

This presentation will cover some of the reasons teens run away and the different types of runaways.

11:00 - 11:25 Aquatics in Your Life

Cassie Pelletier

Aquatic therapy is a relatively new type of therapy that occurs in the water. Aquatics is beneficial because it can build muscle endurance and strength, cardiovascular health, coordination without the risk of joint trauma.

11:25 - 11:50 The Myths and Truths of Down's Syndrome

Amy Tozier

Are you down with Down's syndrome? This presentation will cover the responsibility of rehabilitation practitioners.

1:00 - 1:25 Looking in the Shadows

Laura Wolfe

An exploration of homelessness and mental illness, and the growing need to provide adequate services to this population. This presentation will also look at psychosocial aspects of mental illness.

1:25 - 1:50 Who's Responsible?

Elaine McGuire

Parents are being held responsible for their children's behavior, e.g., by paying fines and serving jail time. Is it constitutional to hold someone responsible for someone else's actions?

Complete Abstracts for Venue 12: Ricker Addition 205

9:00 - 9:50 Readings of Stories by Students in Advanced Fiction

To be determined

Two to three students will read from their original fiction. The class will select, from a group of volunteers, the stories they would most like to hear the authors read aloud. Depending on the length of the pieces, either two or three complete stories will be read by their authors.

10:00 - 10:50 Virtue, Passion, and Narrative Technique in the Nineteenth-Century Novel

Christopher Dumaine, Paul England, and Brenda Tarbox

In this session, three students from last semester's Austen-Eliot-James Seminar will present portions of their final papers. In "The Offense of Fanny Price," Christopher Dumaine examines the seemingly passionless morality of Austen's *Mansfield Park*, taking issue with the critical tradition which has idealized Fanny Price as a Christian heroine, an emblem of "social reform and spiritual renewal." In "Structure and Function in Middlemarch," Paul England explores the intersection between narrative shifts in perspective and Eliot's vision of human interconnectedness in Middlemarch. Finally, in "The Tradition of Sex," Brenda Tarbox argues that Austen, Eliot, and James all participate in a tradition that is preoccupied with sexual desire, treating it as a powerful subversive force, a "hindrance to duty." There will be a brief discussion following the presentations.

Complete Abstracts for Venue 13: Ricker Addition 217

9:00 - 9:25 From Design to Demolition: Students Construct A Service Learning Project

Kathy Yardley and students enrolled in ECE 440, Families and Child Care Settings, Fall 2000

Through slides, photographs, and discussion, students enrolled in "Families and Child Care Settings" will share their experiences creating a parent resource center for the Farmington Child Care Center. Students will describe the process of renovating three dilapidated rooms, soliciting donations of materials and money, and working with community partners. The impact of this service learning project on student learning will also be discussed.

9:25 - 9:50 Volunteer Recruitment and Retention as it Applies to SAVES:
Sexual Assault Victims Emergency Services in Farmington

Nicole Carrera, Cara Miller, Claire Turlo, Crystal Vallieres, and Tony Wild

Working with the Sexual Assault Victims Emergency Services in Farmington, group members are gathering information and will make recommendations to improve recruitment and retention of volunteers in order to staff SAVES. Targeted are Center staff as well as former, current and potential volunteers through personal interviews, surveys, e-mails, and phone contact. Other rape crises centers dependent on volunteers will be approached. Information from other organizations promoting volunteerism has been gathered and reviewed. Group members have attended a volunteer fair at UMF campus as well as a conference presented by the Maine Bureau of Health entitled "Healthy Communities" in Augusta, which have provided invaluable information. Specific actions include creating and conducting a general survey of the public, meeting monthly with the Franklin County Volunteer Network, sending questionnaires to former volunteers, and recruiting volunteers through faith-based communities. Meetings are held regularly with staff at SAVES as well as among group members. A report will be prepared detailing the entire project, including recommendations for SAVES recruitment and retention methods.

10:00 - 10:25 A Helpful Hint . . . A Guide to Wellness

Michele Camire, Erin Sylvia, Wendy Goldsmith, Emily Doak, Danielle DuBois, and Taryn Schofield

Because incoming freshmen are at high risk for unhealthy behaviors, there appears to be a need for information to be presented prior to or within the first few weeks of their arrival. Working in conjunction with the UMF Campus, faculty, admissions, and Melissa Van Orman, we have identified the following risk areas for incoming freshmen: tobacco use, alcohol consumption, nutrition, fitness, and lack of sleep. By focusing on these areas with information and anecdotes of current students we feel that the freshmen will have a foundation for good health and wellness. We anticipate presenting this information to the student via a newsletter which they will hopefully receive prior to their arrival at the University of Maine at Farmington.

10:25 - 10:50 March for Violence-Free Communities

Christine Arnaudin, Liz Brown, and Andrea Raynsford

The purpose of our project is to provide citizens in the Franklin County community a forum to speak out about violence. It is an opportunity for people to recognize victims and the courage that they portray. The march will promote awareness of all forms of violence including, but not limited to; domestic violence, gender based violence, date rape and dating violence.

Our group will plan and implement the march for Franklin County. There will be speakers, and a gathering afterwards at a local community church. We will be working with the public using the radio, public service announcements, flyers, and local businesses to publicize the upcoming event. The march will take place on April 27, 2001.

Our symposium format will be a formal talk explaining what we did from start to finish and explaining why it is an important topic to cover.

11:00 - 11:25 SCORE 5 for Heart Health at UMF

Laura Cilley, Deb Robertson, Sherra Bailey, Mary Bitterauf, and Chris Albert

In an effort to reduce increasing health care costs and improve overall health for the University of Maine employees, The University of Maine at Farmington has been selected as a pilot site to promote employee wellness by introducing the nationally recognized SCORE 5 program for cardiovascular fitness. UMF will collaborate with the Western Maine Center for Heart Health to evaluate, assess, advise, and assist individuals by providing free screenings and personalized guidelines for encouraging healthy lifestyle changes.

The SCORE 5 program has been proven to:

- * Improve health and morale
- * Improve the "bottom line"
- * Reduce lost productivity
- * Become an asset for negotiations with insurers

Students of HEA 411, Health Planning and Promotion, have been asked to develop a marketing strategy in order to introduce the SCORE 5 program to a target audience - facilities management. Marketing this program includes:

- * A clear definition of the SCORE 5 screening process
- * Emphasis on the benefits of making certain lifestyle changes
- * Tools and suggestions for preparing to change

11:25 - 11:50 **What's For Lunch?!! Nutrition in Schools**

Jean Bachelder, Allison Trussell, Becky Menard, Allison Marcoux and Rick Drapeau II

Nutrition in schools is a service learning project initiated by HEA 411 (Program planning) and in association with the Nutrition Task Force and the Healthy Community Coalition of Farmington under the advisement of Judy Rawlings, MPH.

The population focus for our project is SAD #9 schools, grades K-12. The project focus is to evaluate the school lunch nutritional value and how well it retains quality in transition from the menu to the plate. In recognition of National Nutrition Month (March), our group will rate the quality of school lunches from the student's point of view as well as the views of parents and food service workers. Our goal for this project is to develop strategies and recommendations for improvements based on nutritional analysis, observations and personal experiences. The project analysis will be presented in a formal talk format with overhead aids.

1:00 - 1:25 **Nutrition Education**

Tricia Cote, Jen Robertson, Jeff Meinhart, Kristyn Prevost, Nick Potts, and Justin Gifford.

In our nutrition education program our group will be working with the University of Maine Cooperative Extension of Franklin County. The group will be planning and implementing a community program based on nutrition education. Our target population is the head start and early head start parents. Many of them are considered to be in the "underserved population." The objective of this program is to increase the knowledge and skills of the community members so that they can make healthy food choices for themselves and their families.

Our group will be traveling to various head start buildings in Farmington, Jay and New Sharon. There, we will conduct meetings with the parents and present our Nutrition Education Program. In our presentations we will be cooking for the parents, explaining our program, and giving visual aids to help them understand the topics covered. We will also display a few cost comparisons, to demonstrate to the parents where they can save the most money.

Our Maine objective of the program is to increase the knowledge of these parents in regards to making healthy food choices, and with our program we are confident that this objective will be met.

1:25 - 1:50 **Ski Helmet Awareness**

Arianna Buzzell, T.J. Plourde, Nicki Murray, Magane Flaherty, and Todd Chamberlain

While working with the Healthy Community Coalition, we developed a ski helmet awareness campaign. We worked with two local ski slopes, Titcomb Mountain in Farmington and Spruce Mountain in Jay. We surveyed the parents on their knowledge of ski helmet awareness. We then developed educational brochures and a video to help educate the parents on the benefits of wearing ski helmets.

We will discuss what we accomplished during our project and what we found are the feelings on ski helmet use. We spent a day at each mountain giving instructional classes on proper helmet sizing, risk factors, and what to look for in a helmet. We then returned to the mountains to observe if the amount of ski helmet use had changed. Also during our discussion we will show a video that shows what the average person knows about ski helmet use.

Complete Abstract for Venue 14: Merrill Hall, Nordica Auditorium

2:00 - 2:50 The Poetic Muse: How Words Inspire Music

Henry Mollicone, 2001 Woodrow Wilson Fellow

UMF is pleased to host our 2001 Woodrow Wilson Fellow, Henry Mollicone, a composer whose work has been performed by the Houston Grand Opera, the San Francisco Opera, and Opera San Jose. His one-act operas, "Emperor Norton," "Starbird," "The Face on the Barroom Floor" have been performed extensively. He has also been a guest conductor with many opera companies in Baltimore, Central City, and Lake George. In addition to opera, Mr. Mollicone has written musical pieces for children, ballet, and oratorios. He worked as a musical assistant to Leonard Bernstein for the show "1600 Pennsylvania Avenue" in 1976. He is currently working on two orchestral works and is planning a new music theater work based on the life of Albert Einstein. In this performance/discussion, a vocalist will sing some of his work and Mr. Mollicone will talk about the influences on his music.