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Graduate Research Fair Presentation Abstracts, 2004

EMU Graduate School
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Department of Art

Craig Linderman

Professor Richard Fairfield

Technology in Printmaking and Drawing

1:30 p.m. Guild Hall

I will discuss the numerous technologies available to the modern draftsman and printmaker, from elementary tools such as projectors and light tables to more sophisticated equipment like scanners, digital cameras, computer cut stencils and photo-transfer techniques. Using my own artwork as examples and through physical demonstrations, I will illustrate different ways to transfer a sketch or photograph to stone, woodblock, plate and screen. I will also contrast age-old methods with contemporary trends, exposing the evolution and current prominence of technology in art through in-depth research and self-discovery.

Department of Biology

Barbara J. Barton

Professor Catherine Bach

Population Ecology of the Mitchell's Satyr

2:00 p.m. Intermedia Gallery

Mitchell's satyr (*Neonympha mitchellii mitchellii*) is an endemic fen species currently listed as endangered by the U.S. Fish and Wildlife service and is considered one of the rarest butterflies in North America. To protect the species from extinction, life history information must be known. The objectives of this study were to estimate population size, determine distribution within the study site and characterize habitat use by a colony in Jackson County, Mich. A mark-release-recapture study was conducted and all capture points were digitized using hand-held Global Positioning System units and mapped using ArcView Geographic Information Systems software. The results of the study indicate an estimated population size of 1,106 individuals. Compared with prior studies of two populations in southwestern Michigan, these individuals flew significantly farther and had larger population and home range sizes. This provides evidence that individuals may be capable of dispersing to new areas if corridors are created between isolated colonies.

Sangita Baxi

Shawna Shafer

Madhavi Vaka

Professors Daniel Clemans and Kevin Kuehn

Analysis of Lignin-degrading Genes from Two New Isolates of White Rot Fungi

4:30 p.m. Guild Hall

White rot fungi are one of the few microbial organisms in nature that degrade lignin, which is a major component of woody plant tissues. Lignin (LiP) and manganese (MnP) peroxidase enzymes are thought to play a significant role in lignin degradation. Two unique white rot fungal isolates, *Panellus copelandii* and *Marasmiellus* spp, were isolated by Dr. Kevin Kuehn and found to possess these lignin-degrading enzymes. Eight different isozymes of lignin-degrading enzymes were identified by PCR cloning and DNA sequence analysis. Results of our

investigations indicate that these isolates possess genes encoding the lignin-degrading enzymes LiP and MnP.

Stacey L. Gray

Professor Peggy Liggitt

Improving Science Process through Problem-Based Learning

3:20 p.m. Main Lounge

The Michigan Curriculum Framework and National Science Education Standards suggest that science activities should focus on investigating and answering science questions rather than just verifying science through exercises with known outcomes. The purpose of this study was to determine middle school students' application of the scientific process and to strengthen their science process skills through problem-based learning (PBL). The goal of PBL is for students to strengthen their skills in experimental design while developing a connection between science and a current environmental issue. In an after-school science program, West Middle School (Ypsilanti) students designed experiments testing the sensitivity of *Chlamydomonas*, a unicellular green alga, with environmental pollutants such as motor oil. The application of the scientific process and presentation of results using Microsoft PowerPoint was evaluated. Results indicate that although students have moderate ability in experimental design, most lack skills in organizing, analyzing and interpreting data.

Gitanjali Kundu

Professor Daniel Clemans

Induction of Interleukin (IL)-8 from Respiratory Epithelial Cells after Stimulation by Haemophilus influenzae Proteins

1:30 p.m. Guild Hall

Nontypeable *H. influenzae* (NTHi) causes recurring respiratory infections in patients with chronic lung diseases. These infections are characterized by a brisk inflammatory response that is in part due to the expression of the cytokine interleukin (IL)-8. We hypothesize that secreted, NTHi proteins (i.e., modulins) mediate cellular interactions with respiratory epithelial cells leading to the production of IL-8. Our results showed that secreted NTHi protein modulins stimulate IL-8 secretion from human respiratory epithelial cells. Characterization of the secreted NTHi modulins showed that they were large (>100-kDa) proteins that were negatively charged at pH's >7.5. Mass spectral analysis of candidate NTHi modulins revealed four functional groups of proteins (nutrient transport, biosynthetic, stress and hypothetical proteins). Further experiments are being performed to determine the role these genes play in epithelial IL-8 secretion. In conclusion, these results suggest that secreted proteins contribute to the NTHi stimulation of the respiratory epithelial cell IL-8 production.

Abhishek Sohni

Professor Michael Angell

External Sponsor: Dr. Roshini Abraham (Dept. of Hematology, Mayo Clinic, Rochester, Minn.)

Analysis of the Peripheral Blood B Cell Repertoires in Patients with Immunoglobulin(Ig) Light Chain Amyloidosis(AL)

5:10 p.m. Tower Room

Light chain amyloidosis (AL) is a plasma cell disorder characterized by the deposition of monoclonal Ig light chains as fibrils on vital organs causing organ dysfunction. In order to

understand the etio-pathogenesis of AL, the peripheral blood B cell repertoires from AL and multiple myeloma (MM) patients were compared to normal controls by analyzing their constitutive V germline genes. Interestingly, the peripheral repertoires of AL and MM patients were restricted, and the dominant V germline genes used were the same as those in their respective bone marrow. This is the first report to establish the presence of clonally-related B cells in periphery of AL patients in absence of plasma cell leukemia. Intra-clonal somatic mutations in CDR 3 region of V genes suggests that these cells may be at different levels in their clonal relationship to bone marrow population, thus suggesting AL is distinct from MM both clinically and molecularly.

Erin B. Winterhalter

Professor Allen Kurta

Nightly Emergence and Roosts of the Big Brown Bat (*Eptesicus fuscus*)

4:30 p.m. Guild Hall

A maternal colony of big brown bats (*Eptesicus fuscus*) was studied in summer 2003 at EMU's Kresge Environmental Education Center at Fish Lake, in Lapeer County, Mich. This colony roosted in two bat houses on the west side of the dormitory. Bats were captured by mist-netting, and transmitters were attached in order to radio-track them to various roosts. Emergence behavior and total number of bats using a roost was recorded on 41 nights. Population size varied from zero to 65 bats at the bat houses, and time of emergence was highly correlated with time of sunset. Three other roosts were found: two large oaks (*Quercus*), a barn and a utility pole. Up to 131 bats used these roosts on any one night.

Department of Business and Technology Education

John A. Nickles

Professor Linda M. Kinczkowski

Wireless Campus: Implementation of 802.11 Wireless Technologies at Eastern Michigan University

3:40 p.m. Tower Room

Over the past few years, the popularity of wireless (Wi-Fi) networking has grown spectacularly. "Going wireless" is becoming mainstream in academia and the private sector, and the costs of implementing Wi-Fi have dropped dramatically. Eastern Michigan University should consider adopting 802.11 wireless networking technologies to improve access to information and facilitate communication. A safe and secure implementation would be guided through technical competencies and effective information security policy. Wireless technologies today are affordable and provide much needed configuration freedom, especially in environments characterized by unpredictable change and growth. Here at Eastern, where enrollment, facility changes and curriculum needs are difficult to forecast, wireless technology delivers flexibility and nearly instant scalability.

Department of Chemistry

Steve M. Fernandes

Professor Deborah Heyl-Clegg

Cyclic Peptide Analog Mimics of the α -Hairpin of Tendamistat Inhibitor for α -Amylase.

4:30 p.m. Alumni Room

A family of endo-amylases, α -1,4-glucan-4-glucanohydrolases (E.C 3.2.1.1) catalyze the hydrolysis of α -D-(1,4) glycosidic linkages in starch. Inhibition of glycolytic enzymes has been reported to reduce postprandial blood glucose peaks and therefore has medical relevance in the treatment of Diabetes Mellitus. Tendamistat (PDB entry 3AIT) is a proteinaceous tight-binding inhibitor of α -amylase with K_i of 9pM. Triplet Trp¹⁸-Arg¹⁹-Tyr²⁰, important in binding, forms a slightly distorted β -turn. Segment analogs were designed as Ac-YQ(Z)WRY-D-Pro(Z')Q-CONH₂, where Z, Z'=Cys, Pen. These were cyclized by disulfide bond formation between cysteine and/or penicillamine residues flanking the segment, in order to decrease flexibility. Analogs were analyzed in a spectrophotometric assay. Although there is no expectation that small molecule mimics would attain the same affinity as Tendamistat because of its large interaction surface with α -amylase, we are evaluating the template approach to mimic design and the effect of conformational restriction on affinity.

Luiza I. Genes

Professor Maria C. Milletti

Theoretical Prediction of Fragmentation Patterns for Polychlorinated Biphenyls

4:50 p.m. Alumni Room

Polychlorinated biphenyls (PCBs) are known to bioaccumulate in tissues and cause adverse responses in many organisms. Understanding the fragmentation patterns of PCBs can resolve metabolic questions that will help define regulation levels of toxicity. A series of molecular orbital and molecular dynamics calculations have been employed to develop a method that allows prediction of fragmentation patterns for this type of molecules. The appropriate level of theory and basis set size that most closely duplicates experimental findings (specifically mass spectrum patterns) were determined to be Becke's three-parameter hybrid method using the Lee-Yang-Parr correlation functional (B3LYP) at the 6-311*G basis set level. In addition, natural atomic orbital and natural bond orbital analyses were used to determine relative bond strength. Fragmentation patterns were also produced from calculation of vibrational frequencies. Finally, molecular dynamics calculations at the AM1 semi-empirical level were employed to explore dissociation pathways for these molecules.

Leena Khullar

Professor Deborah Heyl-Clegg

Cyclic Peptide Inhibitors of α -Amylase Based on Tendamistat

1:30 p.m. Guild Hall

The enzyme α -amylase catalyzes the cleavage of sugar units from dietary starch as one means of controlling blood glucose levels. Inhibition of this enzyme would be beneficial in controlling blood sugar levels in diabetic patients. The crystal structure of the complex formed by the enzyme and the natural 74-amino acid protein inhibitor, Tendamistat, indicates that only 15 amino acids of the inhibitor actually interact directly at the active site. Smaller octapeptide analogs of this inhibitor, which include only the key amino acid segment required for activity, were designed and synthesized and then analyzed for α -amylase inhibitory activity in a spectrophotometric assay. The peptides were conformationally restricted by cyclization via disulfide bond formation between cysteine and/or penicillamine residues flanking the segment. This resulted in analogs with fewer accessible three-dimensional arrangements than previously

studied linear peptides. Preliminary results surprisingly indicate that the target compounds are activators of the enzyme rather than inhibitors.

Mallika Nethi

Professor Steven J. Pernecky

The Production of Toxic Aldehydes from Polyunsaturated Fatty Acids by the Native and an Oxidatively Modified Derivative of the Muscle Protein Myoglobin

1:30 p.m. Guild Hall

Oxidative destruction of polyunsaturated fatty acids in kidney cell membranes results from release of myoglobin (Mb) following muscle tissue disease or trauma. Interestingly, Mb-H, an oxidatively modified product of Mb, has been shown to be more toxic than Mb, although the extent of participation of Mb and Mb-H in loss of kidney function remains to be elucidated. The aldehydic products of lipid peroxidation such as hexanal, 4-hydroxynonenal and malondialdehyde are known to be toxic. The purpose of our research is to determine the relative abilities of Mb and Mb-H to generate products of lipid peroxidation under a variety of conditions relevant to this type of kidney damage.

Department of Communication and Theatre Arts

Cristian-Paul Badiu

Professor Kerry Graves

Translating “The Time Merchant,” a Presentation and Performance

1:20 p.m. Alumni Room

In 1993, benefiting of a scholarship offered by the French Ministry of Culture — Department of Theatres and Spectacles, Matei Visniec wrote *Negustorul de Timp* (*The Time Merchant*). Even though the play was originally written in French and produced for the first time in Germany (Regensburg University), it was first published in 1997 in Romanian by Editura Eminescu. Noticing a lack of English translations of Romanian playwrights, I’ve decided to make available for the English reader/theatre practitioner, as one of my projects, a play that captivated my attention and interest through its exquisite beauty and highly artistic value: *The Time Merchant*. I’m going to discuss the problems and challenges I’ve encountered during the translation work, which made this first translation of mine a very rewarding process, and also I’m going to perform a sample of it.

Kate Brindle

Professor Henry Aldridge

Seeing Clearly Now: The Introduction of the Camera in David Henry Hwang’s *M. Butterfly*

1:00 p.m. Main Lounge

My paper explores the notion of fantasy versus reality in the stage and film version of David Henry Hwang’s *M. Butterfly*. I compare and contrast how both works treat the constructs of gender, race and sexuality. I also examine their exploration of Western misconceptions of the East. My paper traces the history of the Butterfly character and outlines how the film and play portray her in different and unique ways. I ultimately determine which piece is the most successful at critiquing the relationship between East and West.

Karen Moon Schaefer

Professor Ray Quiel

“Framing” the Family: The Role of Family Photographs in Public Discourse

2:00 p.m. Main Lounge

Who selects and places the visual images, such as photographs, in a home that “frame” a family in public discourse? What does this process reveal about the messages that households and their members provide through this medium? This research, based on a survey in the Ann Arbor/Ypsilanti area, explores how the communicator shapes these messages and their significant role in constructing the identity and representation of a family.

Department of Computer Information Systems

Mustafa Kader

Shivprasad Parab

Vijyesh Saxena

Professor Randal Baier

Developing Research Guides for the University Library: From Design to Implementation

2:00 p.m. Tower Room

Our research team has developed a web-based “ResearchGuide” application for scholarly research and instructional purposes with the University library’s Information Services Group. Interactive research guides allow subject specialists to create subject guides and references, which can be used by faculty and students for research. The intention of this research guide is to provide students and faculty a system where they can easily locate a guide to related resources within a subject area. The application also provides a very user-friendly interface for the subject specialists to enter and edit information related to their discipline without worrying about the technical aspects of the underlying technology. The University library is currently using the guides at <http://caxton.emich.edu/guide/>. Our presentation will focus on the design and implementation of the ResearchGuide software.

Department of Computer Science

Matthew P. Cowie

Professor William McMillan

The Simulation of Infinite Space in a Finite Machine

1:40 p.m. Alumni Room

By removing the finite boundaries of the digital universe in which John Conway's *Game of Life* is played, we can measure, in terms of space and time, the mathematical complexity of running simulations with dynamic boundaries. While it is impossible to create true infinity, there does exist a method for laying the framework of an unbounded universe in which memory is only allocated to those cells that are either alive or that could become alive in the next iteration. As cells traverse the universe, they are not simply filling pre-allocated memory blocks in a two-dimensional plane but are, in fact, pulling previously unused memory off of the heap. Once the cell is no longer in need of the memory it is returned to the heap for use somewhere else in the universe. This implementation is, however, costly in terms of speed and efficiency.

Scott Everett Lynn

Professor Susan Haynes

EzMPI: A Parallel Programming Environment for Networked Windows Platforms

2:00 p.m. Alumni Room

Parallel programming is a powerful tool that leverages multiple computers to solve problems that require extensive processing power. However, parallel programming platforms are not easily accessible: parallel computing machines are rare, and clusters are difficult to maintain. I developed a parallel platform, EzMPI, to support the popular MPI (message passing interface) standard. EzMPI provides an alternative parallel platform that can run on common Windows networks, making parallel algorithms a more accessible and cost-effective tool for research and problem-solving. EzMPI is being developed as an OpenSource project through the Computer Science Department at EMU.

Department of English Language and Literature

Mary Caraballo

Professor Nancy Allen

Prejudice and the Piano: A Rhetorical Analysis of the History of Women and the Keyboard

1:00 p.m. Alumni Room

For centuries, the role of women in science and technology has been depicted as a valley-and-peak adventure. As women made great strides in establishing their presence first in society and then in the world of technology, they soared to the highest heights but were also pushed down to the lowest depths by a primarily male-dominated culture. Nowhere is this more apparent than in studying women's interactions with the development of the keyboard and its early predecessors. This presentation provides a rhetorical analysis of keyboard technology, nomenclature, societal conditions and the world of art, and it examines how each aspect played a part in helping and hindering the female endeavor in the world of piano and technology.

Christian F. Casper

Professor Nancy Allen

In Praise of Carbon: The Epideictic Nature of the 1996 Nobel Lectures in Chemistry

4:00 p.m. Alumni Room

Epideictic rhetoric, the rhetoric of praise and blame, is the most extensively explored area of rhetoric overall, but it is strangely neglected in the rhetoric of science. This essay examines the 1996 Nobel lectures in chemistry as epideictic discourse and explores the effect of kairos, or rhetorical timing. This research shows that the three lectures exhibit significant differences but that all are epideictic at their core. The lecture by Robert Curl demonstrates how forensic rhetoric can be transformed into epideictic by kairos.

Jeremiah Crotser

Professor Abby Coykendall

Secret Agency: The Recursive Nature of Deception in *Moll Flanders* and *The Female Husband*

4:30 p.m. Reception Room

This presentation will examine 18th-century English notions of personal agency as played out in Daniel Defoe's *Moll Flanders* and Henry Fielding's *The Female Husband*, one a fictional account of a picaresque heroine of humble beginnings, the other a "historical" account of the exploits of Mary Hamilton, a female caught impersonating a male. Moll wrests her own agency

from patriarchal society by deploying the traditionally masculine tools of amatory and economic deception, while Mary attains agency directly by disguising her gender. Both women attain their agency through a masquerade based in patriarchal notions of power. To the extent that these strategies are successful, they demonstrate the profound difference between the patriarchal signification of worth and the actual substantive value that each woman can salvage for herself. Though often deeply troubled and roughly hewn, these tactics expose, however tenuously, the confines of feminized power within of the void of presence that they reveal patriarchy to be.

Joy L. Dockham

Professor Gilbert Cross

Examining Multicultural Children's Literature: Whose Culture are we Learning?

1:00 p.m. Intermedia Gallery

Nancy Larrick's 1965 essay "The All White World of Children's Literature" drew attention to the lack of multicultural and multi-ethnic children's literature in the United States. These deficiencies were not the product of any conscious theory but rather of an insensitivity to America's minorities and cultures. In my research, I focused on the period before 1965 and examined the treatment accorded three minorities — African American, Latino and Asian — as portrayed in Newbery Award and Honor books.

Marisa Ferrara

Professor Veronica Grondona

Collecting Linguistic Data: Tigrinya

1:20 p.m. Reception Room

With more than two-thirds of the world's languages becoming extinct today, the collection and preservation of linguistic data has become a necessary and important process. In the graduate linguistics course "Introduction to Field Methods," Tigrinya — a poorly documented endangered language spoken in parts of Eritrea and Ethiopia — was studied in order to teach students how to collect linguistic field data. A native speaker of the language who attends the university was the primary informant for the study. This presentation will focus on how these data were collected and the results of the study, which include preliminary phonological and morphological descriptions of the language.

Angela Hiller

Professor Sheila Most

Art at its Best: The Work of Chris Van Allsburg

4:00 p.m. Faculty Room

A successful picture book illustrator must develop his own artistic style through experimentation of different media and layouts and also by working within various picture book categories. Chris Van Allsburg is one such author and illustrator known for his realistic and narrative interpretations of his often surreal storylines. His ability to appeal to both young and old audiences through illustrations and text is unforgettable and can be related to his talent but also to the different styles of illustration that his work embodies and the evolution that occurs within his subsequent books. Although many of his books do have similar characteristics, his illustrations are what change and develop with each book he writes. Whether it is choosing a changing perspective, using different media or limiting

the color palette, Chris Van Allsburg has created a name for himself as a talented and innovative illustrator.

Kathryn Ingram-Wilson

Professor Abby Coykendall

Swift: Against Corruption and Hypocrisy

4:50 p.m. Reception Room

Throughout his writings, Jonathon Swift uses ironical humor to show how 18th-century English society deludes itself about the degradation and decay that he sees pervading its institutions. Swift's disgust at his world is most obvious in his scatological poetry. In these poems, Swift uses the human body (especially the female body) to emphasize the corruption and hypocrisy that he sees throughout his world. These poems are funny, often vulgar and even disgusting. However, Swift has a powerful message: ideas are human creations, often fallible and the consequences of those ideas are ultimately played out on the bodies of other humans.

Brit Klanert

Professor Daniel Seely

Floating Quantifiers

5:10 p.m. Reception Room

Floating quantifiers are interesting in that they are able to change their position within a sentence without changing the meaning of that sentence, or so that is the assumption of the leading theories of Dominique Sportiche (1988) and others.

- 1) a. **All** the students have finished the assignment.
- b. The students have **all** finished the assignment.

These examples, while different in the position of "all" (the floating quantifier), are identical in meaning.

However, in my research I have discovered data that show an alternation of the meaning of a sentence after the quantifier "floated." The data taken into account by Sportiche and others does not consider cases in which the determiner phrase consists of a conjoined noun phrase as in (2).

- 2) a. **All** tigers, dogs and alligators have sharp teeth.
- b. Tigers, dogs and alligators **all** have sharp teeth.

In addition, whether a definite article precedes the noun phrase plays an important role. In this presentation I will discuss the findings of my study on floating quantifiers with respect to the problems traced above. After outlining my data and establishing its relevance to current linguistic theories, I will consider a number of possible analyses of the data and show their strengths and weaknesses.

Rosemary Metz

Professor Sheila Most

Presentation Problems in Young Adult "Lesbian" Literature

1:40 p.m. Main Lounge

Romantic relationships carry their own emotional baggage. But with an added burden of homosexuality, the baggage becomes decidedly more problematic. Research suggests that the act of "coming out" is fraught with dilemmas and obstacles, despite the advances in understanding and accepting homosexuality in this current society. In the examination of three young adult novels by Nancy Garden, the issue of lesbian relationships becomes the focus. The three works

are *Lark in the Morning*, *Holly's Secret*, and *Annie on my Mind*. Each novel is unique in its unflinching look at lesbian relationships and the difficulties encountered between lovers, parents, siblings and friends. The urgency in these relationships is overlaid with uncertainty and a need and desire for total honesty. This honesty is reflected in each main character and her interactions with those who surround her. Furthermore, within creative circles, Nancy Garden has met censorship issues. *Annie on my Mind* has caused much controversy. It has been banned and removed from library shelves, with an ensuing court case. In a series of e-mail messages, Garden reveals some of the challenges she faced during this time. Her e-mail outlines some of the confrontational issues she was forced to address in the legal context. Yet the common thread that runs through her novels and the subsequent censorship issues is Garden's commitment to truth and honesty. This commitment is demonstrated in her novels and her testimony, in and outside of court.

Steven Moran

Professor Veronica Grondona

A Case Study for Best Practice

1:40 p.m. Reception Room

In a Field Methods course in 2001 at Wayne State University, field work began on Sisala, a previously undocumented, unwritten, endangered language of Northwestern Ghana. After the course's completion, the researcher spent a summer living with the Sisala tribe, where he continued to document Sisala through the collection of linguistic data including word lists, typological data and audio and video recordings of oral traditions. This presentation describes linguistic field work and addresses the benefits of adhering to best practice strategies in language digitization and archiving. These practices are being developed by a number of collaborating international initiatives, including the E-MELD project led by the LINGUIST List at EMU and WSU.

Erica Pilon

Professor Nancy Allen

Paradigm Shifts in Diabetes Nutritional Education: Constructing Knowledge in Scientific Discourse

5:30 p.m. Reception Room

A new assumption in a scientific community must swim through a sea of rhetoric from its theoretical infancy until it reaches the shore of elevated paradigm status or is debunked and drowns along the way. Understanding the rhetorical principles involved in the creation of scientific knowledge provides the scientist and the student of rhetoric with insight into the construction of these paradigms. In this presentation, I plan to address two purposes. First, I will discuss the rhetorical principles of exigence, kairos, and the rhetorical triangle as they relate to the construction of knowledge in scientific discourse. I will then examine this ideology as it applies to the development of dominant research in the field of diabetes nutritional education, concentrating on the shift that resulted when the "Report of the National Commission on Diabetes" was presented to the United States Congress in 1975.

Daria Plumb

Professor Sheila Most

Robert Sabuda: Bookmaker Extraordinaire

3:20 p.m. Tower Room

Robert Sabuda, a Pinckney, Mich., native, is a self-proclaimed “bookmaker.” He illustrates and writes children’s books. To date, he has created 14 picture books and 18 pop-up books.

Sabuda’s picture books are extremely creative and utilize innovative and mixed media. He selects the technique that will best enhance and extend the meaning of the text and frequently re-tells the stories of true historical characters. Sabuda’s pop-up books, however, are his shining achievements. He creates intricate and stunning 3-D pop-ups that not only “pop up” but also include motion. Recently he has appeared on National Public Radio, the CBS’s *The Early Show* and NBC’s *Today Show* to promote his latest pop-up, *Alice’s Adventures in Wonderland*.

James T. Schaefer

Professor Heidi Estrem

The Symbiosis of Media and the Educational Community in a Linguistic Ecosystem

1:20 p.m. Main Lounge

Research projects are not always nice, neat and tidy. Instead, when someone like Professor Heidi Estrem launches a class like English 517 in fall 2003 under the rubric, "Exploring the Water We Swim in: Language and Politics in the English/Language Arts Classroom," it can evoke complex reactions. My final project, "The Symbiosis of Media and the Educational Community in a Linguistic Ecosystem," emerged from our interactions in that class. I used the project as an opportunity to explore my roles as teacher, educator and community member in interacting with the power of the media in discourse formation, especially since we all share concerns about literacy, violence, teaching methods and student performance. My presentation will include samples of a revised syllabus, longitudinal media archive and videotape (from a four-person research project in the class on language as a linguistic ecosystem).

Marilyn K. Strube

Professor Heidi Estrem

Clout in the Classroom: How Students’ Revision Practices are Affected by Teachers’ Comments

1:20 p.m. Intermedia Gallery

What types of comments motivate thoughtful revision? What sorts of suggestions most effectively invite students to participate in the writing process and develop their ideas more fully? To discover more about this, I observed a 15-week English 111 class at Washtenaw Community College last summer. I surveyed the students and conducted one-on-one interviews. At the end of the semester, I was given copies of their portfolios and compared their rough drafts to their final drafts. Did their final drafts reflect the changes their teacher had suggested on their rough drafts? Are students’ revision practices indeed affected by their teacher’s comments? The answer to both questions is a resounding “yes.” Consequently, learning what kinds of feedback students prefer will help writing teachers achieve what they and their students want most: successful revisions leading to higher quality writing.

Department of Geography and Geology

Devon M. Akmon

Professor Ted J. Ligibel

Old West Side: A Neighborhood Preserves Its Heritage

1:00 p.m. Reception Room

The Old West Side Association, a neighborhood organization encompassing the “old Fifth Ward” in Ann Arbor came to rise in 1967 in order to curb expansion and unwanted development and to preserve and maintain the historic residential environment. This grass-roots organization used a myriad of strategies and tools to educate, inform and empower the neighborhood’s citizens. Having obtained placement on the prestigious National Register of Historic Places, the association utilizes resources at the federal, state and local level to assist in their continuing preservation efforts. Today, as the current historic preservation movement seeks to widen its scope to focus more on historic districts and less on individual historic buildings, the success of the Old West Side serves as an excellent model for communities nationwide.

Karen Brandt

Professor Lauren Sickels-Taves

Speeding Toward Obsolescence: The Ann Arbor Bus Depot

5:10 p.m. Faculty Room

The Ann Arbor Bus Depot, built in 1930, is an important example of a Streamline Moderne-style bus station. Although hundreds were built between the World Wars, very few remain today as examples of the era’s burgeoning emphasis on new modes of transportation, faith and advances in technology, and its optimistic futuristic outlook. Although the depot is in poor condition and slated for a “façade-ectomy” and demolition, this presentation will discuss its history and how the depot can be preserved as the last remaining example of Streamline Moderne architecture in Ann Arbor.

Aletha M. Lippay

Professor Lauren B. Sickels-Taves

Mies v. Martha: The Juxtaposition of the Barcelona Chair and the Lolling Chair

4:50 p.m. Faculty Room

The Barcelona chair was the highlight of the Exposition of 1929. Designed for the king and queen of Spain by Mies van der Rohe, it was premiered in the German Pavilion, also built by Mies. It was constructed using modern materials of steel and leather, in shapes not normally found on seating furniture. It was fresh, crisp and clean-looking, a chair truly fit for a king. Contrastingly, the lolling chair, a pseudo-Martha Washington chair and ancestor of the easy chair, could also be fit for a king, one from the 1800s. Its delicate lightness contrasts greatly against the stark sheen of the Barcelona chair, but both are classic in use and style.

The two chairs are centuries apart, made from different materials in different fashions and yet are linked through evolution. This presentation will discuss these two pieces and link them in various ways, however different they may appear.

Tricia Nault

Professor Lauren Sickels-Taves

The Michigan Stained Glass Census

5:30 p.m. Faculty Room

The Michigan Stained Glass Census is a statewide program that records buildings in Michigan that contain stained glass windows. As an intern, I spent time in the field registering a building: Concordia University’s Chapel of the Holy Trinity. The information gathered was entered into

the Census' database and then stored in their archives. This research included collecting information on the building itself and each stained glass window, researching the designer of the windows, Gabriel Loire, and photographing those windows. The information was also compiled into an article that introduced the November 2003 Window of the Month on the Census' Web site.

Carolyn Nelson

Professor Lauren B. Sickels-Taves

The "Normal" Company: The 17th Michigan Infantry – Company E

4:30 p.m. Faculty Room

This presentation represents the accumulation of a Michigan Humanities Council grant, which funded the publication of a small booklet on the history of the 17th Regiment Michigan Infantry – Company E. The regiment, formed in 1862, included faculty and students from the Michigan Normal School (now Eastern Michigan University). The booklet is scheduled for February publication and will be handed out on Civil War Day in the spring of 2004. The presentation will highlight sections of the booklet, which include the original muster with Normal students. Information on a few of the battles and "Normal" participants will be highlighted.

Xinyue Ye

Professor Yichun Xie

Modeling Housing Market in a GIS and Spatial Environment

3:40 p.m. Faculty Room

In this paper, we design a GIS-based CA-MAS model to simulate individual housing choice based on how individual households evaluate housing conditions, among other factors, to influence housing decisions and to quantify the possibility of stay, in-town move or out-of-town move. The model is built on relationships between socioeconomic attribution of households and real estate conventions of housing. Data processing efforts, extracting and interpreting from SF1, SF2, SF3, PUMS, land use/cover, zoning and socioeconomic forecasting data, are discussed. An agent-based model, where agents are households with residences partitioned as cells and with mobility determined by their socioeconomic endowments, is constructed to simulate demographic movement. We plan to calibrate a model in Michigan's Washtenaw County (the Ann Arbor-Ypsilanti region). This model is promising for its CA-MAS feature, which can model a complex system as realistic as possible, and for its integration, which tries to bring together socioeconomic data, market/policy and physical environment factors into an integrated GIS environment. It can be extended to simulate urban sprawl under various scenarios.

Department of Health, Environmental and Consumer Resources

Kyunghee Choi

Professor Alice Jo Rainville

Vending in Schools: National Survey of Healthy School Nutrition Environment

4:30 p.m. Guild Hall

The purpose of this nationwide survey was to learn more about issues related to Healthy School Nutrition Environment (HSNE). In October 2002, a survey was sent to a random national sample of 3,500 superintendents, principals, school foodservice directors, school foodservice managers,

teachers, coaches and school business officials. The response rate was 34.9 percent (n= 1,222). Fifty-five percent of school boards had a policy for vending contracts; 72 percent of respondents reported having vending machines for students. Bottled water and soft drinks were the most common offerings in vending machines. Thirteen percent of schools offered milk and/or ice cream products. Only 3.8 percent of respondents reported fresh fruit as an offering. The most important components of a HSNE were 1) behavior-focused nutrition education; 2) adequate funds provided by local, state and federal sources; and 3) a la carte menu items that contribute to healthy eating patterns.

Kathleen Kunkle

Professor Louise Jones

Content Analysis: Sustainable/Green Design in FIDER Accredited Interior Design Programs

1:30 p.m. Guild Hall

The Foundation for Interior Design Education and Research (FIDER), a non-profit organization recognized by the Council on Higher Education Accreditation, is considered the reliable authority on the quality of postsecondary interior design education. FIDER leads the interior design profession to excellence by setting standards and accrediting academic programs, as stated in the FIDER mission statement. Taking into consideration that professional practice in interior design is moving towards sustainability, the assumption might be made that interior design programs are integrating sustainability into their coursework in order to respond to FIDER professional standards regarding sustainable design. The purpose of the study was to determine if FIDER accredited universities are offering a sustainable/green design course and to determine if one region of the United States is more advanced in sustainability than another region. A matrix was established to present the data collected, and graphs were used to express regional comparison findings.

Maureen Norman

Professor Louise Jones

Shades of Green

4:30 p.m. Guild Hall

The goal of this qualitative action research project was to produce a Web site that would provide information regarding green/sustainable flooring that could be specified in order to create a healthier, sustainable environment. The primary objective of this Web site was easy accessibility. This project included designing a set of green/sustainable evaluation criteria and qualifiers, researching manufacturers, collecting company and product information, developing a Web site and disseminating the findings via the Web site. So the Web site “Shades of Green,” a resource guide for interior designers, architects, students and educators committed to making a difference, was created. The Web site, which includes 159 sustainable flooring companies, is divided into 12 categories: carpet, ceramic tile, bamboo, stone, cork, linoleum, resilient flooring, terrazzo, wood, rubber, plastic and vinyl. Company information, address, phone, Web address and product ranking, as well as additional sustainable resource links, are included on the site.

Monica Sklar

Professor Subhas Ghosh

Consumer Demand for Smart Textiles in the Apparel Market

1:20 p.m. Tower Room

A new class of fabrics with unique functional properties beyond conventional textile properties is being introduced to the market. These fabrics are commonly referred to as smart fabrics or smart textiles. Smart textiles react to stimuli to advance the fabric's capabilities in areas such as communication, construction and thermal regulation. This study evaluated mass-market consumer interest for smart textile products. Using a Likert-style survey of interest, a diverse sample of convenience from Southeast Michigan consumers over the age of 18 indicated their interest in smart textile products. Results aligned demographics with desired functions and technologies that could be incorporated into apparel. Levels of consumer interest determined the smart fabric products likely to be successful in the marketplace. The results of this study may influence decisions made by consumers, apparel manufacturers and distributors, and textile and material science researchers. In addition to the implications for the apparel and textile industry, the results show how recent technological revolution, in combination with changing and fast-paced lifestyles, has affected people's expectations from their clothing.

Christina Puzzuoli

Professor Louise Jones

Architects' and Interior Designers' Perceptions of Their Roles In Designing the Built Environment

4:30 p.m. Guild Hall

This quantitative, exploratory survey research project measured the perceived roles of interior designers and architects. A response rate of 38 percent was achieved from a study population of 650 architects and interior designers in Michigan. Analysis of data indicated statistically significant differences in their perceptions of who holds responsibility for various tasks. There is general agreement as to the responsibilities assigned to the architect by the American Association of Architects (AIA). However, the majority believed either architects or interior designers are responsible for most of the tasks assigned to interior designers by the National Council for Interior Design Qualification (NCIDQ). Interior designers had a statistically significant higher level of agreement than did architects with AIA's definition of the architects' role. Although not statistically significant, interior designers also had a higher level of agreement than did architects with NCIDQ's definition of the interior designer's role in the design of the built environment.

Sara Stanko

Professor Louise Jones

Perceptions of Employees' Interaction in Open Plan Offices

4:30 p.m. Guild Hall

This qualitative study focused on the interaction of employees, in two organizations, who moved to one of two types of open office plans. The study compared and contrasted employees' perceptions of an open office plan using high panels as space dividers with one using low panels to determine if employee interaction increased with a move to an open office plan and to identify any problems that were associated with the changes. Data were collected using a questionnaire and focus groups to enable the researcher to explore in depth the employees' perceptions. Employees were asked to rate their workspace on a scale of one to five, ranging from strongly disagree to strongly agree. The findings did not demonstrate statistically significant differences in perceptions of most characteristics of the two sites. However, there were statistically

significant differences in perceptions of interaction and vulnerability. The results will aid in the design of future work environments that foster a sense of interaction and satisfaction.

Gallayanee Yaoyuneyong

Professor Subhas Ghosh

Impulse Buying Habits of Teenagers

1:40 p.m. Tower Room

Impulse buying refers to a sudden and immediate purchase with no preshopping intentions either to buy the specific product category or to fulfill a specific buying task. Today, impulsive buying is well known in marketing and psychology research; however, there is a lack of knowledge regarding apparel product impulse buying habits, particularly for teenagers. This research has drawn on components of the Beatty and Ferrell impulse (1998) buying model, which consists of nine variables. This investigation, however, tests only three variables: the impulse buying tendency (IBT), in-store browsing and impulse buying. The EMU DECA representative distributed the self-administered questionnaire, which used Likert-style statements and multiple-choice questions, to the teachers in high schools around Michigan. The collected data were analyzed statistically and indicated which apparel products teenagers buy most impulsively such as shirt, jeans, shoes and so on. It also showed what influences them to buy impulsively and provided a relationship between the in-store browsing and impulse buying for teenagers. This study will benefit teenagers and their parents, marketer and store owner in apparel business.

Department of History

Edward J. Chusid

Professor Russell B. Olwell

Those Valiant Few: Romanticism and the Abraham Lincoln Brigade in the Spanish Civil War

2:00 p.m. Reception Room

Modern scholarship that focuses upon the exploits of the Abraham Lincoln Brigade in the Spanish Civil War, from 1937-1938, require careful evaluation as useful sources due to their tendency to resort to excessive romanticism. This paper attempts to examine several modern English language resources on the Abraham Lincoln Brigade, including Peter N. Carroll's *The Odyssey of the Abraham Lincoln Brigade* and Cecil D. Eby's *Between the Bullet and the Lie: American Volunteers in the Spanish Civil War*. This culminating class project examines many of the available texts on the Abraham Lincoln Brigade and points out the prevailing common thread of idealism and romanticism that potentially affects the objectivity of the authors' analyses. Extending beyond the Spanish Civil War, this paper concludes with a brief analysis on the issue of romanticism in military history in general and the impact it has upon historical objectivity.

Jacob Hamric

Professor Robert Citino

Germany's Decisive Victory: Falkenhayn's Campaign in Romania, 1916

3:00 p.m. Tower Room

This thesis examines General Erich von Falkenhayn's 1916 military campaign against Romania. The major focus is the Romanian campaign as an example of *Bewegungskrieg*, or "war of movement" on the operational level, a mobile campaign in the midst of World

War I trench warfare. Another theme is Falkenhayn's redemption after his failures as Chief of the German General Staff. This study contains secondary and primary sources, including translation of Falkenhayn's memoirs and the German War Archive.

Department of Industrial Technology

Blaine Kelley

Professor Robert E. Chapman

Control Charts for a Foam Sheet Extrusion Process

3:40 p.m. Main Lounge

For a foam extrusion web process, applying standard control charts can result in wide control limits and unexpected false alarm rates. Therefore, the purpose of this study was to develop a statistical control method suitable to extruded foam sheet. The process has two major variance components: the average over time and the differences between streams that have fixed tendencies. To monitor the average, individual and moving range charts yield the best results, while multivariate methods are necessary for controlling stream differences. Exponentially weighted moving average methods enhanced the detection of small shifts. Various methods were tested with data from a foam extrusion line.

Hiral A. Shah

Professor Tracy Tillman

A Delphi Study to Develop Engineering Management Curriculum at Eastern Michigan University

1:40 p.m. Intermedia Gallery

The purpose of this research was to discover and describe the competency areas that are considered most important for practitioners to know in the discipline of engineering management and to update and validate the curriculum for the master of science in engineering management degree at Eastern Michigan University. A Delphi panel of about 200 individuals from across the U.S. with specific credentials of professional and/or academic expertise in engineering management participated in three iterations of a mailed questionnaire Delphi survey. The experts were asked to rate the importance of competency areas, provide qualitative comments in regard to their rankings and suggest additional competency areas. The results of this study are not only helpful for the identification and validation of the body of knowledge and curriculum for the engineering management program at Eastern Michigan University, but they also serve as a model for curriculum development at other universities across the United States.

Department of Interdisciplinary Technology

Liehui Ge

Professor John Texter

Combustion Resistant Acrylates from Inverse Microemulsion Polymerization

3:00 p.m. Reception Room

The L1 and L2 domains in the water, AOT [sodium bis(2-ethylhexyl)sulfosuccinate], methylmethacrylate ternary system have been mapped at 22°C. Compositions within the L2 domain and in the adjacent two phase emulsion region have been thermally polymerized to produce polymethylmethacrylate (PMMA) with entrapped water droplets. A primary objective is

to learn how to entrap water on the nanoscale, so that transparency to visible light can be achieved during and after polymerization. Another objective is to investigate the fire resistance imparted by such incorporated water. The length scales over which water-PMMA phase separation occurs decrease as water content and surfactant content decrease. Both water and surfactant appear to provide flame and ignition resistance. Cross-linking, hydrogel, and surfactant polymerization variations are being examined with a view towards further understanding of factors that control phase separation (and transparency) on meso- and nanoscales.

Jessica A. Patuano

Professor Denise Pilato

The New Cowboy: Air Mail Pilots Take Over the Heroic Image of the 1920s

4:00 p.m. Reception Room

Air mail pilots were a new breed of rough and rugged men, replacing the cowboy as the adventurous soul forging into new territory. They were hailed for their bravery and admired for their skill. These aviators flew airplanes that were limited in instrumentation and often required as much luck as skill to bring them back. The early American pilots were like family to the communities they served and as famous as the movie stars of today. These daredevils performed aerial stunts as well as sped the pace at which America communicated. They beat the train in travel time and changed the world's perspective on air mail. They created new dreams and aspirations for the people of the 1920s and were often the subject of musical lyrics and children's toys.

Christina Ann Wall

Professor Denise Pilato

The Eternal Quest for "It": Fashion, Consumption and Social Acceptance in the 1920s

3:20 p.m. Reception Room

The 1920s was a decade of liberation for women. Women could now vote. Birth control was more widely practiced. Women entered the workforce in various roles during this decade. These social changes led to many changes in women's fashions. As women became active members of society and comfortable with their sexuality, fashions evolved. Eveningwear reflected a new acceptance of sex appeal. Daywear allowed for mobility and had a boyish flair. The fashion world was in a state of constant change during this decade, and enormous pressures for women to keep up with these fashions existed. These pressures were exemplified through Hollywood, magazines and mail order catalogs. Hollywood and magazines taught women how to become fashion experts, and mail order catalogs provided easy accessibility to these fashions. While the social events of the 1920s were liberating for women, the effects these events had on the fashion scene suffocated women nationwide.

Department of Leadership and Counseling

Stacy Rosol

Kelle Ilitch

Professor Sue Stickel

4:00 Intermedia Gallery

Cassandra A. Wilson

Professor Sue Stickel

A Look At Conflict Resolution Programs in the Middle School

5:10 p.m. Main Lounge

Conflict is a necessary and unavoidable part of life. If conflict is handled in positive ways, problem solving skills and value exploration could result. However, many adolescents lack the skills necessary to handle conflicts in positive ways. The results of handling conflicts in negative ways include physical violence, poor attendance and poor social skills. Research reveals there is a need for conflict resolution programs in schools. This research project examines three popular conflict resolution programs: the Peacemaker Program, the Resolving Conflict Creatively Program (RCCP) and Second Step. Information was requested and received from companies representing each program. Finally, a plan for implementing a well-planned schoolwide conflict resolution program is detailed. School conflict is a pertinent part of student development. A good conflict resolution program could equip students with skills necessary to build meaningful relationships and good communication skills.

Department of Management

Cristina Moro Bueno

Professor Stewart Tubbs

Global Leadership Competencies (GLC) Model: Effective Leaders Demonstrate more of the GLC Levels than less Effective Leaders

5:30 p.m. Main Lounge

The evolution of business influenced by globalization and technology is requiring new thinking and new managerial skills. Opened global markets and changes in business interactions induce the development of new global leadership competencies. The goal of this study was a continuous analysis of the Global Leadership Competencies Model developed by Chin, Gu and Tubbs (2001). The model was obtainable in a pyramid that presented phases from deficiency to competency levels that leaders endure during their international experience. For this qualitative study, 26 interviews were conducted with international leaders from several countries. Results obtained demonstrated that the model was efficient, that effective leaders demonstrate higher global leadership competency levels than less effective leaders and that cultural sensitivity contributes to leadership effectiveness. The results presented also indicate that leaders consider flexibility and sensibility as the most important skills and abilities of an effective global leader.

Ashwini Chandramouli

Professor Fraya Wagner-Marsh

Indian Culture: Its Impact on Organizational Effectiveness in U.S. Firms

1:40 p.m. Faculty Room

This research project includes a description and discussion of various aspects of Indian culture. It focuses on the rising number of Indians who are working in the United States and Indians who are working for U.S. firms in other countries. Possible contributions of the Indian culture to the effectiveness of U.S. firms are explored.

Clement J. Goebel, III

Professor Diane Wong

Extreme Interviewing to Find Team-Oriented Programmers

4:50 p.m. Main Lounge

Many software development hires fail to add significantly to the team's overall productivity. The typical response is to increase the number of interviews and prepare an examination of sophisticated technical questions for the candidates. But what if your most important hiring goal was to find new technical employees with good teaming skills? One organization decided to create an immersion interview experience that provided candidates with the opportunity to demonstrate their teaming skills.

Jennifer Karteczka

Stephanie Kirsammer

Karla Mercer

Kelly Murphy-Elliott

Susuan Whitt

Professor Sanjib Chowdhury

Employee Commitment: An Investigation of the Relationships between Employee Satisfaction with Supervisor and Two Levels of Trust

3:40 p.m. Alumni Room

Based on the collection of information from an initial interview with the client and past research conducted at the client site, a broad problem area was identified within supervision and the levels of commitment with the employees. The literature review led to the following variables: satisfaction with supervisor, communication, leadership and trust, as they relate to the employee's level of commitment. Additionally, two levels of trust were evident throughout the research: affect-based trust and cognition-based trust. Three hypotheses were developed measuring the relationship between employee commitment and satisfaction with supervisor, supervisory communication, perceived leadership effectiveness, affect-based trust and cognition-based trust. A survey was developed and administered onsite. A total of 104 completed surveys were collected. Each hypothesis was tested using a multiple regression analysis. Recommendations include focusing on supervisory training on communication and leadership development and conducting further research in the area of trust with the exclusion of some independent variables.

Department of Marketing

Intakhab Alam

Professor Sam Fullerton

Launching Salad Dressing in the UK

3:00 p.m. Alumni Room

Naturally Fresh, an American Company, wanted to introduce its product into the United Kingdom market. This research project was done to understand the foreign market and recommend an effective marketing strategy. The presentation will cover environmental analyses and a recommended marketing strategy. This includes target market selection; Naturally Fresh's product positioning; the benefits of the product; product design, including size and flavor; product branding; packaging requirements; labeling; and intellectual property protection. Next, I

will discuss distribution objectives; channel length, width and intensity; and use of transportation and warehousing. Recommended promotional strategy covers promotion objective, advertising, sale promotion, personnel relations, in-store merchandising and internet promotion. Last, I will talk about pricing and a strategy to reduce the risk of currency exchange rates fluctuation.

Department of Mathematics

Sandra E. Becker

Professor Ovidiu Calin

Algebraic Models on the Rubik's Cube

3:00 p.m. Main Lounge

The Rubik's Cube took the world by storm more than 20 years ago and continues to delight and frustrate people around the globe. Though it was invented by an architect, it became a fascination for mathematicians who have published a number of papers and books on the subject. This presentation focuses on the algebra of the Rubik's Cube, which allows one to work with the cube on paper using a numbering system and careful computation.

Department of Music

Timothy Loszewski

Professor Louise Patrick

A Historical Overview of the Roles of Technology in American K-12 Public School Music Instruction from 1900 to the Present

4:00 p.m. Main Lounge

For many centuries, musicians have employed technology to improve and refine educational systems, printing, instrument production and acoustic environments for performances. In the 20th century, electronic technology and computerized systems had a profound effect on methods of presenting music lessons in K-12 public schools. Beginning with record players, radios and electronic instruments that paved the way for development of computer-assisted multimedia applications, this study will explore technology and its use by K-12 music educators to enable students to function in a changing musical world where use of electronic recording, computerized music notation and software designed to improve musical study and perception are well established. The researcher gained experience with music technology as a graduate student of music education at Eastern Michigan University and concurrent professional experience in K-12 music education. The study was guided by research of pertinent authoritative texts found in books, journals and electronic sources. Knowledge gained by the audience will inspire appropriate use of music technology for education.

Department of Nursing

Yu-Wen Chen

Professor Tsu-Yin Wu

Variables Associated with Mammography Practice among Filipino Women

1:00 p.m. Faculty Room

Breast cancer is the most commonly diagnosed cancer in women and the most common cause of death in the population between the ages of 35 and 55. The purpose of this study was to explore

the practice of mammography among Filipino women and to examine the variables associated with Filipino women's attitudes and beliefs towards breast health practices. Health Belief Model (HBM) provided the theoretical framework for this study. Two research questions were proposed and examined based on HBM, including 1) what are the levels of perceived benefits, perceived barriers, perceived susceptibility and perceived seriousness toward mammography and their relation to the practice of mammography among Filipino women population? and 2) What is the influence of acculturation, such as years lived in the U.S. and use of English as the primary language, on Filipino women's beliefs toward practice of mammography? A convenience sample from a Filipino health fair was utilized, with a sample size of 47 Filipino women. Descriptive statistics, chi-square analysis and logistic regression analysis were used to answer the research questions.

Jane A. Dumaw

Professor Tsu-Yin Wu

Benefits and Barriers to Mammography Utilization for Rural Women 50 Years of Age and Older

4:30 p.m. Guild Hall

This descriptive study, based on the Health Belief Model, explored the benefits and barriers to mammography utilization in 50 rural women ages 50 – 64. The adapted instrument developed by Victoria Champion (1999) was used to measure benefits and barriers. Women were recruited from the Breast and Cervical Cancer Control Program in a midwestern community health department. A greater percentage of the women identified finding lumps early as the significant benefit to mammography and mammograms taking too much time as the most significant barrier. All the women were certain they would have a mammogram if a health care professional recommended it. The findings suggested the need for continuation of patient education, the recommendation of breast cancer screening by health care professionals and continued promotions for breast cancer screening.

Diane Porretta Fox

Professor Lorraine Wilson

The Relationship of Perceived Self-Efficacy and Confidence in Critical Thinking Ability in Associate Degree Nursing Students

1:20 p.m. Faculty Room

Nursing education calls for the development and assessment of critical thinking in student nurses. This descriptive correlational study focused on the relationship of perceived self-efficacy and confidence in critical thinking ability in associate degree nursing (ADN) students. This work is the first to relate the disposition subscale, confidence in critical thinking ability and perceived self-efficacy. A convenience sample of 82 ADN students from two community colleges was selected for this study. Perceived self-efficacy was calculated using the Generalized Perceived Self-Efficacy Score (GPSS). The critical thinking disposition, confidence in critical thinking ability, was calculated using the California Critical Thinking Dispositions Inventory (CCTDI). Correlations and analysis supported a relationship between perceived self-efficacy and the subscale disposition confidence in critical thinking ability. Study findings indicated the need for research of measurement tools for critical thinking in nursing students. Further research of teaching methods to support critical thinking and self-efficacy was also indicated.

Kathleen Fraley

Professor Tsu-Yin Wu

Using the Breast Self-Examination to Promote Breast Cancer Screening for Rural Women Age 20 Years and Older

1:30 p.m. Guild Hall

The purpose of this descriptive retrospective study was to examine the barriers and benefits of the breast self-examination (BSE) for rural women age 20 and older using the Health Belief Model as a theoretical framework. The sample consisted of 41 caucasian females with an age range of 20 to 64. Victoria Champion's questionnaire was utilized to identify the top three benefits and barriers of the BSE. The top three benefits in the current study for rural women were finding a lump early, finding a lump first and decreasing the chance of dying from breast cancer. The top three barriers were not having privacy, taking too much time and being unpleasant. Although there were no significant findings among age, income, education level and BSE practice, the current study provided support for identifying the benefits and barriers of BSE, which can improve nurses' understanding of factors that can encourage or discourage a woman's breast self-examination performance.

Andrea Speight-Watson

Professor Lorraine Wilson

Influence of Habitual Physical Activity and Aerobic Fitness on Constipation and Sleep Patterns in Coronary Patients

5:30 p.m. Tower Room

Adults with coronary heart disease (CHD) frequently report dissatisfaction relative to sleep and constipation. A potential solution may be increased physical activity and fitness.

Purpose: To clarify the effect of physical activity and fitness on sleep and constipation in adults with CHD.

Methods: A descriptive, comparative design was used to determine if physical activity and fitness affect self-reported sleep patterns and/or constipation problems. A non-probability convenience sample of 132 participants was surveyed and analyzed using a Kruskal Wallis test and Spearman Rank Coorelation Coefficient. Scores from recent exercise tests were used to determine fitness levels. Participants were divided into three categories based on fitness and physical activity.

Results: The study population (N = 132) each had a diagnosis of CHD. A P value of < 0.01 indicated a moderately significant inverse relationship between fitness and constipation.

Conclusion: Adults with CHD and above average/high fitness have fewer symptoms of constipation than those less fit.

Department of Physics and Astronomy**Peter Distelzweig**

Professor Weidian Shen

Study of Corrosion of Steel/Coatings System using Electrochemical Impedance Spectroscopy

4:00 p.m. Tower Room

Corrosion has drawn great attention due to its enormous economic impact and has been a research topic for many decades. Although progress has been made, we are still far from total

control of it, as the underlying phenomena have not been completely understood. Many techniques have been developed to study corrosion. Electrochemical impedance spectroscopy (EIS) is a very powerful one due to the electrochemical nature of corrosion. We will use EIS to study corrosion of the steel/coatings system, which consists of zinc-metallic coating, electro-deposition polymer coating (e-coat) and so on, with or without intermediate phosphate coating. The attention will be paid to the effects of microscopic defects, such as pin-holes and micro-cracks, on the surface as well as in the interface to find how the corrosion is initiated and developed, thus better understanding the mechanism, suppressing it and increasing the service life of metals, which will have tremendous impact on our economy.

Department of Political Science

Fredrick Abicht

Professor Joseph Ohren

The Americans with Disabilities Act: Non-Compliance of Title II by Cities and Municipalities

4:30 p.m. Tower Room

The Department of Justice, Office of Attorney General, has instituted, as a final rule, 28CFR35, the "Prohibition of Discrimination on the Basis of Disability in State and Local Government Services." This rule prohibits discrimination on the basis of disability in the services, programs or activities of all state and local governments. It extends the prohibition of discrimination in federally-assisted programs established by section 504 of the Rehabilitation Act of 1973 to all activities of state and local governments, including those that do not receive federal assistance, and incorporates specific prohibitions of discrimination on the basis of disability from Titles I, III and V of the Americans with Disabilities Act (ADA). This rule not only requires that the programs be made accessible to individuals with disabilities, but it also sets standards for what constitutes discrimination on the basis of mental or physical disability, provides a definition of disability and qualified individuals with a disability and establishes a complaint mechanism for resolving allegations of discrimination. This study focuses on the implementation of ADA in Southeast Michigan. The study first determines where each community in Southeast Michigan stands with respect to compliance with the ADA requirements. Then it points out the factors important in non- or less-than-full compliance. Finally, based on these, it recommends ways in which compliance can be improved.

Jacqueline Beaudry

Professor Barry Pyle

The 2000 Presidential Election and Equal Access In the State of Michigan

5:10 p.m. Alumni Room

Historically, the right to vote has been associated with struggles by certain racial and socioeconomic classes and later by women. Even after the passage of the 15th amendment, many attempts were made to hinder certain people from demonstrating this fundamental right. Today, as the United States and the world witnessed in the presidential election of 2000, new issues have been raised about the ability of all citizens to exercise their right to vote. The election of 2000 illustrated the important fact that many votes by citizens who cast their ballots are not accurately counted. And many more votes are lost as a result of denied access to the polls.

This study deals with this issue within the State of Michigan. More specifically the study, by using the 2000 statewide election results and the 2000 U.S. Census data, tests the following hypotheses:

- a) There is a relationship between the election technology and the accuracy of elections;
- b) there is a relationship between the election technology and the socioeconomic variables in the voting district; and
- c) there is a relationship between the accuracy of election results and the socioeconomic variables in the voting district.

Jill E. Dennison

Professor Dogan Koyluoglu

Current Trends in Risk-Management In a Southeast Michigan Hospital Setting

3:20 p.m. Alumni Room

The United States' health care system is in a national crisis of rising costs. One factor that contributes to the rising cost of health care is malpractice litigation. Various studies conducted from the early to mid-1990s estimate the cost of malpractice litigation to be approximately 1 percent of all health care costs, which basically represents the malpractice insurance premiums. This, of course, does not include the costs of defensive medicine, liability-related administrative costs, medical device and pharmaceutical liability costs and many other direct or indirect costs relating to medical liability, which are passed on to consumers in the form of uninsured losses, legal fees and medical product and prescription prices. A 1994 report issued by Congress summed up these costs, stating that "legal liability has become a key factor in driving up the costs and decreasing the quality of medical care in the United States."

This study addresses this question: How does an individual hospital or health care entity reduce its malpractice liability and its resultant costs? Seven health care entities in southeastern Michigan were identified by the study and contacted to act as case studies in risk management. Interviews were conducted with officials of three of the seven entities who were willing to provide information about risk management and/or medical liability relative to their organization. Finally, based upon the interview data, a malpractice claims reduction policy was formulated.

John Frame

Professor Dave Ivers

The Impact of Judicial Policy-making on Public Administration: Case Studies on the Establishment Clause

1:00 p.m. Tower Room

The effectiveness of judicial policy and the ability of the court to effectively guide public administrators are the focus of this paper. The ability of public administrators to implement judicial policy is dependent upon the policy itself. This paper addresses issues pertaining to the impact of judicial policy on public administration, specifically pertaining to the Establishment Clause of the First Amendment. The Supreme Court has ruled differently over time on the Establishment Clause. This proves difficult for public administrators to know how to implement judicial policy in government agencies because the court changes its position or is not clear. Specifically discussed in this paper are two religion cases: religion in public schools and religious displays on government property.

Jeff McBee

Professor Jeffrey Berstein

Participation in Recreational and/or Social Activities and Juvenile Delinquent Recidivism

3:00 p.m. Faculty Room

Youth all over America are finding themselves in trouble with the law. This problem has led to considerable negative consequences for the youth themselves, the victims of their actions and society in general. There are a number of factors such as family problems, substance abuse or peer pressure, which may lead young people into these circumstances. In order to address the problem with juvenile crime, a number of treatment programs have been put into place.

Many youth who are released from treatment programs go on to lead productive and successful lives that are free from legal trouble. Some are not so fortunate and get back into trouble.

Determining the effect individual factors have on the success or failure of youth returning to the community could go a long way towards reducing the effects of juvenile delinquency. One such factor may be involvement in recreational and/or social activities.

By using data collected by a Michigan based nonprofit organization that provides treatment services for the troubled youth, this study tests the hypothesis that the recidivism rate among the juveniles who did not participate in recreational and/or social activities would be higher than among those who did participate.

Andrea Perkey and Erica Briggs

Professor Joseph Ohren

Developing Mission Driven Program Competencies and Values

4:50 p.m. Tower Room

The master of public administration (MPA) program offered within the Political Science Department at EMU is a professional, terminal degree program designed to prepare students for public and nonprofit service careers. The program serves a mix of preservice and in-service students with diverse educational and professional backgrounds. Eastern's MPA program is currently preparing for the 2004 National Association of Public Affairs and Administration (NASPAA) self-study and reaccreditation process. As a component of reaccreditation, the program must indicate how they have identified and measured student competencies. The presentation specifically describes the process to develop competencies, a process facilitated by the authors, and concludes with recommendations for action by MPA program faculty.

Department of Psychology

Nicole Bellamo

Professor Marilyn Bonem

The Effects of Inconsistent and Consistent Noncontingent Functional Reinforcement

4:30 p.m. Guild Hall

A functional analysis was constructed, identifying attention as the reinforcer maintaining a preschool child's disruptive behavior. Thus, the rationale for intervention would need to provide a way for the child to receive attention on a frequent schedule, whether or not the child engaged in disruptive behavior. It was hypothesized that the more consistent teachers were in providing attention according to the predetermined schedule, the greater the reductions in the disruptive behavior would be. The results confirmed this prediction.

Scott R. Brown

Professor Alida S. Westman

Effect of Self-Esteem and Family Attachment on the Development of Religious Orientation

4:30 p.m. Guild Hall

Orientations to religion differ. Some people accept the beliefs and rules to live by (intrinsic orientation) or the social support (extrinsic orientation), and others explore but cannot commit on faith alone (quest orientation). This research tested hypotheses about the origins of these orientations. Specifically, the hypotheses tested whether intrinsics are higher in both parental attachment and self-esteem than extrinsics and whether questers are low in parental attachment but high in self-esteem.

M. Lauren Earls

Professor Dean Lauterbach

Pharmacological Treatment of Agitation in Traumatic Brain Injury Patients

1:30 p.m. Guild Hall

The research up until the past 10 years on treatment of agitation in brain-injured patients focuses on the use of first generation anti-psychotics such as Haloperidol and anti-seizure medications such as Carbamazepine. Recently, other medications have been implemented, such as the stimulant Amantadine and the atypical antipsychotics Risperidol and Clozapine. Using retrospective data obtained from the charts of patients who were admitted to St. Joseph Mercy Hospital between January 2002 and November 2003, this study will focus on the pharmacological interventions used in agitation in the acute phase of recovery in the Physical Medicine and Rehabilitation Unit and the specific behaviors implicated in the sub-acute phase, which led to changes in pharmacology.

Veronica Jamieson

Professor Marilyn Bonem

Prompting and Feedback in Parent Training: A Review of the Literature

4:30 p.m. Guild Hall

Prompting and feedback have been shown to enhance the effectiveness of behavioral parent training, usually focusing on observable skills such as providing consequences and cues for child behavior. This poster will review the treatment utility of these methods, with emphasis on the use of videos for feedback. Some of the advantages of using videos are that the parents observe themselves, become more aware of their own behavior and the child's reactions to it and can observe more accurately than while engaged in parent-child interactions. Demonstrations of the reactivity effects of these methods might be enhanced by several factors, including immediacy and self-monitoring. Conclusions will focus on delineating the factors that enhance effectiveness of feedback.

Claire L. Lonergan

Professor Marilyn Bonem

Development of a Functional Assessment Instrument for Self-Injurious Behaviors Associated with Borderline Personality Disorder

1:30 p.m. Guild Hall

Self-injurious behavior (SIB) is one of the signature symptoms of borderline personality disorder. SIB is intentional injury to oneself. According to a behavioral theory, it is hypothesized

that the reinforcers maintaining this behavior might include consequences such as attention from others, escaping emotional pain, punishing oneself and “feeling something (emotion).” We further hypothesize that the specific consequences operating for a particular individual will depend on that client’s unique history of trauma and emotional invalidation, both of which are common childhood experiences correlated with the disorder. This presentation will focus on the development of a functional assessment instrument to identify which specific function is applicable for individual clients. Such an instrument would be beneficial for designing individualized treatment plans for borderline personality disordered clients.

Teresa J. Lynch

Professor Flora Hoodin

The Effects of a Modified Written Disclosure Protocol on Individual Bone Marrow Transplant Recipients’ Psychological and Behavioral Functioning

4:30 p.m. Intermedia Gallery

We improved the standard written emotional disclosure protocol to include factors we hypothesized important to exposure therapy and tested the new protocol with two adult recipients of bone marrow transplant. Computerized ecological momentary assessment procedures provided affect and distress ratings for six days before, three days during and six days after the writing protocol. Indicators of longer-term adjustment were provided using standardized assessments over three months. Classical test theory methods were used for idiographic statistical analysis of each single case. The results suggest both participants demonstrated engagement and habituation during written disclosure by significantly increasing their distress rating during each writing session and decreasing their distress ratings to minimal levels by the end of the sessions. Both participants’ subsequent writing sessions elicited significantly lower distress ratings, suggesting they habituated to the topics they wrote about across sessions. Finally, these changes were associated with short-term improvements in posttraumatic stress ratings.

Joan McDowell

Professor Carol Freedman-Doan

Attributions Others Assign to Depressed Individuals and the Relationship to Severity of Depressive Symptoms, Amount of Contact and Familiarity with Depressed Individuals

3:20 p.m. Faculty Room

This project is designed to contribute to the knowledge base concerning the attributions that other people make regarding individuals with depression. While there has been valuable research critical for furthering our understanding of how an individual’s social network affects recovery from depression, we need to know more about the interplay of others’ attributions and their relationships with depressed individuals that may impact recovery from the disorder. Others’ attributions for depression may foster or hinder the process of healing in depressed individuals by creating an environment of acceptance and understanding or one of hostility and criticism. This research investigates causal and controllability attributions based on data gathered at a large midwestern university. Such information will be useful for the design and implementation of new treatment models for depression that not only help the individual suffering with the disorder but also others around the individual who are affected.

Janet M. Roberts

Professor Carol Freedman-Doan

How Do Childhood Parent and Peer Relationships Influence Late Adolescent Perceptions of Possible Selves and Goal Choices?

1:30 p.m. Guild Hall

The purpose of this study is to identify how early parental and peer relationships predict late adolescent personal, educational and career aspirations based on the enumeration of possible selves. It was hypothesized that positive parental relationships would be related to the enumeration of many possible selves. Further, positive parental relationships in childhood and early adolescence also should be related to high aspirations and goal-directedness. It was also hypothesized that social self-concept of ability would be related to more positive personal goals and fewer fears of deviant behavior. Data for this study (n=801) were drawn from a larger 13-year longitudinal project, "Childhood and Beyond," that looked at the developmental factors associated with social and academic achievement from childhood through adolescence.

Shauncie Weber and Elizabeth Nelson

Professor Flora Hoodin

Parent Training for Disruptive Behavior Exhibited by an Autistic Child: A Case Report

4:50 p.m. Intermedia Gallery

Child noncompliance is a common problem encountered by parents of children with attention-deficit hyperactivity disorder (ADHD), conduct disorder and oppositional defiant disorder. Remarkably, the effectiveness of parent training as a mechanism for changing this and other problematic behavior exhibited by children has been well established (e.g. Bor, Sanders and Markie-Dadds, 2002; Reid and Webster-Stratton, 2001). However, the current empirical literature suggests that there are few parent-training programs available designed specifically to target the noncompliant and disruptive behaviors of autistic children. The purpose of the intervention addressed in this presentation was to establish the effectiveness of a conventional parent training protocol (the Barkley program) for addressing problematic behaviors displayed by an autistic child.

Department of Social Work**Marva Augustine**

Professor Tana Bridge

A Social Psychological Examination into the Effects of Supplemental Instruction

1:30 p.m. Guild Hall

Supplemental Instruction (SI) is an academic assistance program offered to students enrolled in historically difficult courses. While there is a great deal of research that establishes the effectiveness of SI for improving student performance and retention, researchers have neglected to examine why the program is effective. The purpose of this study is to assess the extent to which determinants derived from three social psychological theories mediate the link between SI inputs and targeted outcomes. Identifying key social psychological factors that serve as mechanisms through which SI inputs operate is important because it could provide researchers and academic assistance program administrators with empirical evidence as to which theories could be used to explain SI's effectiveness. Data were collected via mail questionnaires from

students systematically selected from class rosters of all courses that offer SI at EMU. Data were analyzed using ordinary least squares regression analysis.

Annaliese M. Gehres

Professor Marilyn Wedenoja

Parent Involvement at Holmes Elementary School: Parent and Teacher Perceptions

5:10 p.m. Intermedia Gallery

Studies have found that parent involvement can have positive effects on student academic achievement, attendance rates and behavior. Sometimes parents and teachers have different definitions of parental involvement. In order to make recommendations for a plan for increasing parent involvement at Holmes Elementary School, this study will explore the attitudes and definitions that parents and teachers have about parent involvement. It will also explore parents' social and cultural capital, and what parents and teachers think would increase involvement. Understanding the level of agreement between parents and teachers about what should constitute parental involvement and what might increase involvement may help facilitate a program to increase parent involvement. The researcher will conduct semi-structured qualitative interviews with five parents and five teachers from the school and use qualitative methods to analyze the data and report the findings.

Department of Sociology, Anthropology and Criminology

Diana Marino

Professors Denise Reiling and Marilyn Corsianos

An Exploration of the Manner in which the Quality of the Relationship between Suburban Adolescents and their Parents Affects their Involvement in Deviant Behavior

5:30 p.m. Intermedia Gallery

Numerous studies have been conducted regarding juvenile delinquency throughout the years, but the bulk of this research has focused on delinquency in urban areas. Delinquency in nonurban areas has received little scholarly attention. In particular, the delinquency of suburban youth and caucasian youth has been woefully understudied. Within this paper, findings from a survey of primarily caucasian students attending several suburban high schools will be reported. The relationship between their reported delinquency and indicators of the quality of their relationship with their parents will be explored.

Kristy Schindler

Professor Paul Leighton

When the Battle Occurs at Home: A Study of Domestic Violence in the Military

5:30 p.m. Alumni Room

Despite numerous advances in the areas of legislature and policy reform regarding domestic violence, one area where domestic violence is still largely ignored is in the military family. Women are being beaten, raped and occasionally murdered at the hands of servicemen; very little is being done to combat the problem. The Department of Defense has organized a task force to address this issue; however, they have yet to address the root causes. Upon reviewing the limited literature available, I discovered that characteristics of military personnel and the military lifestyle with its combat training and financial pressures only contribute to the scope of the

problem. Better intervention, such as increased offender accountability and elevated concern for the safety of victims, is needed to conclusively address the problem.

Robin Faith Wilson

Professor Dr. Paul Leighton

Female Genital Mutilation

4:30 p.m. Main Lounge

Between eight and 10 million women and girls in the Middle East and Africa are at risk of undergoing a form of genital cutting. In the U.S. about 10,000 girls are at risk for this practice. This presentation will explore the phenomenon that bears many names: female genital cutting, female genital mutilation or female circumcision. Topics include its different types, physical and psychological effects, justifications, gender and cultural identities, new rituals, prevalence in America and the role Amnesty International has taken to end female genital mutilation. Also, it will be explained why female genital mutilation is an issue of male dominance when it is endorsed and carried out only by other women.

Department of Special Education

Benjamin Darragh

Professor Bill Cupples

Determining the Outcome of Stuttering Treatment: A Survey of Opinions

1:30 p.m. Guild Hall

This study investigated the attitudes of Speech-Language Pathologists (SLPs) regarding the appropriate ways to measure whether treatment for people who stutter was effective. Research in this area indicates that there is some controversy about the appropriate measures to use when assessing the outcome of stuttering treatment. Some SLPs believe that the outcome of treatment should be evaluated by measuring objective data, such as the frequency with which a person stutters. Others feel that the clients' change in attitudes, such as increased confidence in speaking, is also important to consider. Still others think that measures of real-life ability are most important. This study surveyed SLPs who are board recognized specialists in stuttering to determine what they thought was most important in determining the outcome of stuttering treatment. This poster presentation will present and analyze the results of the survey.

Department of Teacher Education

Diane Campbell

Professor Caroline Gould

The Fight for Stem Cell Research

3:40 p.m. Intermedia Gallery

What is the current status of stem cell research, and what impact is it likely to have on the treatment of diseases common to an aging population? Who gets to decide? This research project distinguishes between embryonic and adult stem cells in exploring national policies and legislation, state laws overriding executive orders, international policy interests, economics and the venture capital market and ethics as defined by panels, review boards and activists.

Tyann Gentry

Professor Joe Bishop

Sociological Strengths and Challenges Associated with University/Community Partnerships

4:30 p.m. Guild Hall

The purpose of this study is to use sociological theory as a basis to investigate university perspectives of university/community partnerships. The major research implications also included both the strengths and challenges associated with these collaborations. This study will also include a summary of the results of an interview questionnaire, which provided supplemental, practical insights from direct partnerships within Eastern Michigan University and the Ypsilanti community.

Heidi Lipp**Rajshree Thakoree**

Professor Caroline Gould

Issues at the Intersection of Abortion, Capital Punishment and Euthanasia

3:00 p.m. Intermedia Gallery

Under the very broad topic of death and dying is a subgroup of complex and intertwined issues that challenge the consistency of our social, moral, ethical and political values. This small-group research project explored the subtopics of capital punishment, abortion/right to life and euthanasia to find the issues at the intersecting points of conflict and consistency in our fundamental beliefs about life.

Stephanie Matthews-Jordan

Professor Patricia Pokay

Efficacy of the NEST Anti-Bullying Program among Sixth-Graders

1:30 p.m. Guild Hall

The purpose of this study was to determine the efficacy of the No Elementary School Teasing (NEST) anti-bullying program. To determine effectiveness, I looked at perceived changes in the amount of time staff members spent dealing with bullying situations and students' knowledge of strategies for dealing with bullying situations without adult assistance. Questionnaires were collected from 46 sixth-graders, seven sixth-graders were interviewed and nine staff members were surveyed to obtain information about their involvement in bullying situations. The researcher determined that the program could indeed be considered effective in reducing staff time spent dealing with bullying situations, as well as effective with respect to students gaining knowledge of strategies to deal with such situations without adult intervention. It was recommended that staff continue to teach students strategies that do not require adult involvement so that they may expand their knowledge base of such strategies and perhaps be more likely to use them.

Mae-Yong Ogletree**Becky Slotnick**

Professor Caroline Gould

10 Ways for Parents to Affirm LGBT Adolescents

3:20 p.m. Intermedia Gallery

The alarming fact that 46% of LGBT teens attempt suicide points to the urgent need for parents and professionals to address the special needs of these youth as they come to terms with their

sexual orientation. Based on personal interviews, current sources of support for youth and families and a review of the literature on LGBT adolescents, we developed 10 basic guidelines to enable parents to be supportive and affirming of their LGBT adolescents.

Elizabeth Smith

Professor April Flanagan

Students and Environmental Action: A Study of a High School Green Earth Club and Its Impact

2:00 p.m. Faculty Room

Research studies show that most high school students know very little about environmental issues that pertain to everyday life or how to apply the knowledge they do have to find solutions to environmental problems (Gambro and Switzky, 1996). Formal instruction is only one aspect of what is necessary to change this. Experiential learning that fosters a connection to one's ecosystem will help to increase students' understanding and care of living systems, and as a result they will be more likely to advocate environmental issues in their communities. Engaging in activism gives students a sense of citizenship and empowerment. One group of Michigan high school students is accomplishing this through an extracurricular club called GECKOS. This presentation is the result of an action research study designed to show the impact of the GECKOS on its student members and the broader community.

Department of Technology

Michael G. Baldwin

Professor Thomas Soyster

RNs' Satisfaction with Continuing Education Delivery Methods

3:40 p.m. Reception Room

My research is concerned with registered nurses' (RNs) satisfaction with continuing education delivery methods such as lecture, demonstration, book/journal, computer and video. To begin, I conducted two focus groups at St. Joseph Mercy Hospital in Pontiac, Mich. The participants were randomly selected from a population of 480 registered nurses. A questionnaire based on data from the focus groups was then distributed to all St. Joseph's RNs. One hundred and forty-six respondents identified their years of employment as an RN at St. Joseph's, their overall satisfaction with continuing education delivery methods and their most and least preferred delivery method. In addition, respondents evaluated the importance of the attributes of delivery methods as well as their satisfaction with each delivery method. Among my findings, I discovered that age is related to satisfaction with continuing education delivery methods.