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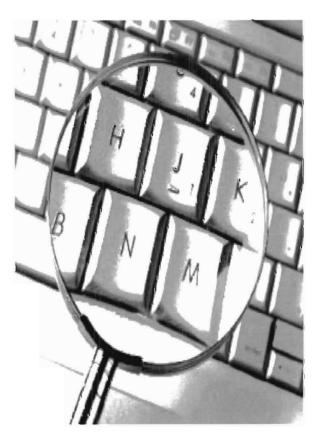*Eastern Michigan University*

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Graduate Research Fair 2011
13th Annual

March 21, 2011

Program Schedule and Presenter Abstracts

Table of Contents

College of Arts and Sciences

Department of African American Studies

El-Ra Adair Radney
Professor Victor Okafor
Memory Replacement: The Manchurian Candidates of Oppression in African American and African Societies
This presentation provides a cursory exploration into the concept of memory replacement as referred to by Dr. Maulana Karenga in the film *500 Years Later* (M.K Asante, Jr., 2009). Memory replacement is a process of transforming the worldview and personal view of oppressed peoples and their culture as a mental alteration that facilitates, "makes sense of," and psychically accommodates oppression. It is an elaborate outgrowth of ethnic domination or racial subordination and falls under the psychology of colonialism and oppression. It is, moreover, in constant flux, always making and unmaking itself like Gramsci's model of cultural hegemony. While it arranges a structure of psychological conformation in imagery stimuli, it is ultimately a war waged in the cultural arena of Eurocentric hegemony. The presentation also uses the film and novel *The Manchurian Candidate* as a theoretical and comparative analysis.
Oral Presentation: Room 301, 7:00 p.m.

Department of Art

Matthew T. O'Brien
Professor Tom Suchan
Lee Ming-sheng = Art: **How One Artist Triggered a National Conversation that Opened the Door to the Democratization of the Arts in Taiwan**
In 1987, Taiwanese artist Lee Ming-sheng began a series of Dadaist performance art pieces entitled *Lee Ming-sheng = Art.* The last two pieces of the seven-part series were performed uninvited on the grounds of the Taipei Fine Arts Museum only days apart in 1989, as acts of protest in opposition to the strict control of the arts by the ruling Kuomintang government. For his last performance, Lee Ming-sheng received a beating at the hands of the museum's security officers. Publicity from these events, played out in the national media, led to strong public outcry for democratization of the arts in Taiwan. This presentation will focus on an analysis of the last two pieces in the series and the relaxation of government control of the arts due to public discourse. I will also discuss Lee Ming-sheng's artistic career and the history of government control of the arts in Taiwan, as well as provide a primer on Dada and performance art.
Oral Presentation: Room 208, 4:35 p.m.

Traci L. Shipley
Professor Amy Sacksteder
Finding the Next Frankenstein
My work generates narratives based on dolls from my childhood. They are my doppelgangers; their existence is to identify and seek monsters. Since monsters can appear as Aquastors, beings that take shape through imagination rather than their true form, the validity of what is a monster is speculative. To substantiate the role of monster hunters I assigned for these dolls, I have drawn correlations through the paintings *Night Watch,* by Rembrandt Van Rijn, and *The Death of Socrates,* by Jacques-Louis David. By defining and simulating formal aspects and history associated with these paintings, I am creating a didactic tool that will be used as a field guide in the pursuit of the next Frankenstein.
Oral Presentation: Room 208, 4:15 p.m.

Department of Biology

Aaron M. Adams and **Lisa M. Larkin**
Professor Mike Angell
Development of a Scaffold-less Three-Dimensional Engineering Neural Conduit Utilizing Nerve-Fibroblast Induced Adipose-Derived Stem Cells (ADSCs)
Nerve transection injuries may necessitate surgical intervention. We previously established the use of scaffold-less engineered neural conduits fabricated from primary cells in sciatic nerve repair surgeries. We proposed that engineered neural conduits fabricated from induced stem cells would successfully recover a similar nerve transection. The ability to utilize stem cells would eliminate the limitation of conduit material and have minimal host donor site morbidity. We established protocols for isolating stem cells from inguinal adipose tissues, differentiation into fibroblast and neural lineages, and co-culturing methods. Both cell types were integrated into a 3-dimensional scaffold-less conduit. In vitro morphology and histology of these conduits showed similarity to primary cell conduits. These conduits can now be evaluated in vivo as a bridge for regenerating nerve in transection injuries.
Oral Presentation: Room 300, 6:20 p.m.

Shawn T. Duke
Professor Kristin Judd
Effects of Wetland Invasion by the Common Reed (*Phragmites australis*) on Rates of Soil Respiration and Greenhouse Gas Emission
Invasive species can substantially alter vital ecosystem functions, such as carbon and nutrient cycling. An invasive aquatic plant, the common reed (*Phragmites australis*) may strongly affect wetland processes. Reeds form monoculture stands, exhibit high primary productivity, and contain higher proportions of recalcitrant biomass than native macrophytes. These traits enhance *Phragmites'* ability to dominate large areas. This study compares organic matter cycling in invaded wetlands to cycling in native wetlands. I hypothesized that *Phragmites'* invasion reduces rates of organic matter turnover and greenhouse gas emission in freshwater wetlands. Sediment incubation experiments were conducted to determine the rate of CO_2 and CH_4 emission. Oxygen concentration and H_2O saturation were manipulated to mimic natural variation. Preliminary results suggest that less CO_2 and CH_4 is released from *Phragmites* invaded wetlands. This indicates that *Phragmites* is impacting wetland function and may be acting as a temporary sink for carbon.
Poster Presentation: Room 310, 4:00 p.m.

Michelle Giedt, Brandon Neel, Katherine Nowak, Sagar Shelake, Yr Johannsdottir, Durga Attili, Athanase Kawou, Mark Schaecher, Keerthi Kotturu, Divya Lenkala, Rafla Matti, and **Ram Bharat Merugumala**
Professor Daniel Clemans
Molecular Analysis of Microbial Content in Various Sites Along the Huron River
Microbial diversity and content within an aquatic environment plays a significant role in shaping and regulating the rest of the community. Information about the effects of seasonality and location within a river ecosystem remains insufficient from past studies. This study attempts to provide information regarding the microbial composition found in a natural site, agricultural site, and an urban site around the Huron River in Michigan. Molecular techniques were used to analyze microbial composition in bacterial periphyton communities at three sites along the Huron River watershed. Results showed similarities among sites, but there were unique characters within each site that reflected environmental conditions around each individual locale. Phylogenetic analysis of these data will be presented.
Poster Presentation: Room 310, 4:00 p.m.

Jennifer K. Kirk
Professors Kristin Judd and Daniel Clemans
Effects of Glyphosate on Wetland Soil Microbial Community Composition
Phragmites australis is an invasive plant that has strong negative impacts on wetland ecosystems. To control *Phragmites*, the broad-spectrum herbicide glyphosate is often applied. While its toxicity effect on macro-organisms and specific model microorganisms has been well researched, effects on microbial community structure have not. Because microbes are important regulators of nutrient cycling in wetlands and changes in their composition can alter this function, the purpose of this study was to determine whether differences in microbial community structure occur after glyphosate treatment. We collected a series of soil samples from a local wetland prior to and following glyphosate application. Using T-RFLP analysis, a bacterial community profile was constructed through time. We hypothesized that an overall shift in the microbial community composition would be seen and some microbial groups would be enriched based on their ability to use glyphosate as a nutrient source. Here we present the results from T-RFLP analysis.
Poster Presentation: Room 310, 4:00 p.m.

Greg Norwood
Professor Peter Bednekoff
Nocturnal Nest-desertion Patterns of a Common Tern (Sterna hirundo) Colony in Response to Black-crowned Night Heron (Nycticorax nycticorax) Predation
Adult common terns (Sterna hirundo) temporarily abandon their nests at night when there is nocturnal predation of adults and chicks. We monitored 55 nests in one colony using cameras and temperature sensors to determine the frequency, duration, and synchrony of nocturnal nest-desertion in response to black-crowned night heron predation. Field cameras revealed predation by one heron on 69% of nights from 26 May (9 days after first tern hatched) until 30 June when there were still 43 active nests, resulting in 0.35 (± 0.75) chicks per pair in 2010. There was a mean of 80 (± 94) minutes between the first and last heron detections. Adult terns abandoned nests on 85% of nights for a mean of 5:58 (± 2:41) hours. Terns temporarily abandoned their nests less synchronously than when they arrived to continue incubating.
Poster Presentation: Room 310, 4:00 p.m.

Kaveridevi Rajula
Professor Anne Casper
Analysis of Breaks in the Human Common Fragile Site FRA3B using Saccharomyces cerevisiae
Human common fragile sites are loci that form gaps and breaks in metaphase chromosomes under replication stress conditions. These sites are often located in tumor suppressor genes. The chromosomal aberrations occurring in tumor cells could be due to instability of the common fragile sites. The exact location at which fragile site breaks occur still remains unknown. Since most of these sites contain AT-rich regions, the formation of secondary structure by the regions could contribute to the instability in these sites. We are using a yeast artificial chromosome (YAC) carrying FRA3B sequence to identify and analyze the breakpoint locations. We determined that the YAC contains most of the FRA3B sequence by using multiplex PCR. By using genetically modified yeast, we induced breaks in the FRA3B under replication stress conditions. The location of the FRA3B breaks will be determined by using multiplex PCR, and the sequence near the breaks will be analyzed.
Poster Presentation: Room 310, 4:00 p.m.

Danielle M. Rosen
Professor Anne Casper
Effects of Fragile Site FS2 on Mitotic Crossovers in the Yeast Saccharomyces cerevisiae
While crossovers during meiosis are encouraged, mitotic crossovers can cause loss of heterozygosity and sometimes lead to tumorogenesis and are therefore suppressed. It is hypothesized that mitotic crossovers result from the repair of double strand breaks in the DNA. Specific loci called fragile sites are more susceptible to DNA breaks under replication stress. FS2, a common fragile site in the yeast Saccharomyces cerevisiae, is susceptible to breaks under low levels of DNA polymerase. This study will be the first to investigate whether fragile site breaks stimulate mitotic crossovers. Through analysis of single nucleotide polymorphisms that alter restriction sites, we will determine the sites of the crossovers. We predict that mitotic crossovers will occur more frequently when cells are under replication stress created by low levels of polymerase alpha, and these crossovers will occur as a result of double strand breaks at a common fragile site (FS2) in S. cerevisiae.
Poster Presentation: Room 310, 4:00 p.m.

Prannda Sharma and **Christine Mella**
Professor Aaron H. Liepman
Visualizing the AtCSLA1 and AtCSLA14 Gene Expression Patterns in Arabidopsis thaliana Using Promoter:GUS Reporter Gene Fusions
Plant cell walls are an important renewable resource used to produce fuel, paper, textiles and many other products. Despite the importance of cell walls, there still is much to learn about the identities and functions of proteins that are responsible for cell wall biosynthesis. Several genes in CELLULOSE SYNTHASE-LIKE A (CSLA) subfamily encode for mannan/glucomannan synthase enzymes, proteins that produce mannan polysaccharides of cell walls. Our objective is to determine the expression profile of all nine CSLA genes present in Arabidopsis thaliana at various stages of growth and development using CSLA promoter:GUS analysis. The expression patterns of CSLA genes will be compiled into a gene expression map that will be used to determine where and when these genes are expressed. Moreover, this study will aid future efforts to functionally characterize these genes using reverse genetics. Here, our progress analyzing the AtCSLA1 and AtCSLA14 genes is presented.
Poster Presentation: Room 310, 4:00 p.m.

Stephanie Simon
Professors Daniel Clemans and Steven Pernecky
Interactions between Probiotic Bacteria in the Production of Lactate and Butyrate
Short chain fatty acids have been shown to have a positive impact on the human immune system and on gastrointestinal health. The purpose of the experiment was to characterize and quantify short chain fatty acids (butyrate and lactate) in in vitro cultures of gut bacterial cells. Quantifiable amounts of short chain fatty acids were detected by GC-MS, and bacterial cell numbers were determined using quantitative PCR (QPCR). The ratio of cell number to short chain fatty acids specifically was

determined by QPCR. The interplay between short chain fatty acid precursors and producers will be characterized by studying probiotics under variable cell growth conditions. The methods can be used to determine the factors that influence the production and fate of short chain fatty acids that are potentially beneficial to one's health.
Poster Presentation: Room 310, 4:00 p.m.

Mary E. Skinner, Evan R. VanDenBosch, Prannda Sharma, Adnan K. Syed, Danielle M. Rosen, Yvonne Kang, Alexis I. Stein, and **Christine Mella**
Professor Aaron Liepman
Characterization of the Expression Patterns of *CELLULOSE SYNTHASE LIKE A (CSLA)* Genes in *Arabidopsis thaliana*
The walls surrounding plant cells serve important physiological functions creating structure, providing defense, and enabling cell signaling. Plant cell walls also are the largest source of renewable biomass, with many practical applications including food, building materials, and biofuels. Plant cell walls consist primarily of carbohydrates, including cellulose, hemicelluloses, and pectins. Mannans are hemicellulosic polysaccharides with cellular functions including structure, storage, signaling, and possibly other functions. Numerous members of the *CSLA* gene family encode mannan synthases (enzymes involved in mannan synthesis). This project aims to create an expression atlas that documents the expression pattern for each of the nine *CSLA* genes in the model plant *Arabidopsis thaliana* by using *GUS*-reporter gene fusions. The atlas will be used to identify focal points for characterizing mannan patterning and abundance using fluorescence microscopy. Understanding the synthesis and patterning of mannans will enhance our understanding of the roles of these polysaccharides in plants.
Poster Presentation: Room 310, 4:00 p.m.

Jamie N. Slater
Professors Robert Winning and Geoffrey Murphy
A Novel Transgenic Mouse as a Model of Age-Related Cognitive Decline
It is estimated that 40% of people over the age of 65 experience age-related cognitive decline that impacts quality of life. With an increase in the aging population, this is an important issue to address. A number of biological pathways are thought to contribute to age-related cognitive decline, including the up-regulation in L-type voltage-gated calcium channels (LVGCC). To determine the relative contribution of LVGCC up-regulation to age-related cognitive, our laboratory has developed a transgenic line of mice that over-express an LVGCC in the forebrain. We anticipate that the over-expression of LVGCCs in young animals will mimic the cognitive impairments observed in aged mice. We present a molecular characterization of this new line of mice. In the future, these mice will be used as a model of aging. This project will contribute to research leading toward development of pharmaceutical therapy to alleviate the symptoms of age-related cognitive decline in affected individuals.
Poster Presentation: Room 310, 4:00 p.m.

Department of Chemistry

Greg Abernathy
Professor Cory Emal
Pyrrolidine Core Improves Binding Affinity and Potency of PAI-1 Inhibitors
Plasminogen activator inhibitor-1 (PAI-1) is a mammalian protein active in the regulation of fibrinolysis. Data indicates that individuals in various disease states – namely cancer, diabetes, and cardiovascular disease – have elevated levels of PAI-1, resulting in disordered fibrinolysis, and an increased risk of thrombosis and embolism. Reduction of excessive levels of active PAI-1 may decrease the risk of thrombosis and embolism. Several inhibitors of PAI-1 have been synthesized, however, most either compete directly with naturally occurring inhibitors in vivo or possess inhibition activity in vitro exclusively, and are not feasible drug candidates. Here we present a novel class of inhibitors designed to have improved pharmacological potential. Based on previous research, the inhibitors take advantage of functional groups that have proven inhibitor-activity relationships while making use of a novel pyrrolidine ring core. Half maximal inhibitory concentration (IC50) data indicates that the pyrrolidine core improves inhibitor binding affinity and potency. The design and synthesis of the inhibitors is discussed, and the supporting IC50 data are presented.
Poster Presentation: Room 310, 4:00 p.m.

David J. Arnold and **Kevin Kawchak**
Professor Gregg Wilmes
The Effect of Chain Rigidity on Reversible Block Copolymer Micellization Observed by NMR Relaxation
Amphiphilic block copolymers are composed of distinct segments exhibiting different solubilities. In solution, block copolymers may self-assemble to form micelles when triggered by a change in solvent polarity. The effect of chain rigidity was investigated for its role in micellization. Monomers were chosen for their similar chemical properties but their difference in reported glass transition temperature (Tg), a proxy of chain rigidity. Four diblock acrylate copolymers were synthesized by a controlled free radical (RAFT) polymerization. The reversible self-assembly of the polymers was monitored as a function of temperature and solvent polarity by observing peak broadening and measurement of their longitudinal (T1) and transverse (T2) relaxation time constants by 1H NMR. It was found that the rigidity of the segments in the core of the micelle has an effect on the point of micelle formation. Better control of the length of the polymer blocks is necessary for further investigating this effect.
Poster Presentation: Room 310, 4:00 p.m.

Sunisha Chalasani
Professor Timothy Brewer
Fluorescence Study of Gold and Silver Nano Particles by Single Photon Emission Measurements
Metal and alloy nanoparticles have attracted much attention over the last decade resulting in the synthesis of new materials of varying size, shape and composition. These nanoparticles have gained much attention due to the diverse chemical and physical properties dependent on their size, shape and composition. The present study describes the effect of various sizes of gold (Au), silver (Ag) and Au/Ag alloy nanoparticles on the fluorescence properties of phosphorescent dye, tris (2,2 – bipyridyl) dichloro ruthenium (II) hexahydrate (Ru(bpy)32+). There are several methods for the synthesis of metal and alloy nanoparticles but only some methods result in the formation of controlled and homogenous nanoparticles. For our preparation of Au/Ag alloys starch was been used as protective agent and glucose was been used as mild reducing agent. The phosphorescent quenching of Ru(bpy)32+ by gold, silver and alloy nanoparticles was studied by steady state measurements. Steady state measurements resulted in the presence of quenching of adsorption of Ru (II) complex on the nanoparticles surfaces. This quenching may be due to electron transfer between the nanoparticles and the Ru (II) complex. The fluorescence quenching of Ru (II) complex differs according to the type and size of nanoparticles.
Poster Presentation: Room 310, 4:00 p.m.

Badrinath Dhakal
Professor Ruth Ann Armitage
Chromatography—Mass Spectrometric Characterization of Carbohydrates in Archaeological Materials
Chemical characterization of rock paintings is important for reliable dating using radiocarbon analysis. Identification of the sugar composition of these materials can tell about their sources, which would thus help in selecting the right candidates for dating. A GC-MS method, which involves the formation of diethyidithioacetal trimethylsilyl derivatives of monosaccharides, was employed to characterize carbohydrates in archaeological materials such as rock paintings and a stone tool residue. Carbohydrates were not detected in any of the three rock painting samples while the stone tool residue was found to contain carbohydrates. The GC-MS method of determining carbohydrates in artifacts involves complex chemical derivatization, even though it is successful. We are now developing a more rapid, efficient, and reliable method to determine sugar composition in these and other archaeological residues using thin layer chromatography coupled with DART-MS. Results from GC-MS and the ongoing TLC-DART-MS method will be discussed.
Poster Presentation: Room 310, 4:00 p.m.

Reshma Kankanala
Professor Hedeel Evans
Characterizing the Oligomeric structure of the Dihydroorotase and Aspartate Transcarbamoylase from the bacterium, Bacillus anthracis
Bacteremia is the bacterial invasion of the blood. Bacterial proliferation in the blood requires that the organism adapts its metabolism to available nutrients. Nucleotide precursors that could be used are present at low levels in the blood and thus the invading bacteria must rely on de novo nucleotide biosynthesis for survival. The dihydroorotase domain is a key enzyme in pyrimidine biosynthesis and catalyzes the third step in the pathway. It was recently shown to be a promising drug target. The genes encoding the dihydroorotase and aspartate transcarbamoylase were

5

cloned from the bacterium, Bacillus anthracis and expressed in Escherichia coli. The proteins were purified by affinity chromatography and visualized by SDS PAGE. The activity of these enzymes was determined by using enzyme assays. Interestingly, the activity of ATC was increased by about 2-fold when mixed with DHO in a 1:1 mole/mole ratio. In addition, their oligomeric structures were determined by S-300 gel filtration chromatography and cross-linking methods.
Poster Presentation: Room 310, 4:00 p.m.

Kevin S. Kawchak and **David Arnold**
Professor Gregg Wilmes
Kinetic Determination and Chain Length Variation Dependency of Amphiphilic Block Copolymers by RAFT and ATRP Controlled Radical Polymerizations
Amphiphilic block copolymers, materials that contain regions of differing chemical properties, show great promise as potential drug delivery devices. Controlled radical polymerizations by Reversible Addition-Fragmentation Chain Transfer polymerization (RAFT) and Atom Transfer Radical Polymerization (ATRP) were employed to synthesize diblock copolymers from different monomers. Hydrolysis of polymers from one block afforded the amphiphilic diblock copolymers, which were analyzed by Nuclear Magnetic Resonance (NMR) spectroscopy, to determine their ability to form micelles in solution. Rate determining experiments on the two polymerization techniques were performed to determine which would be the more useful for the synthesis of further materials. Further considerations of amphiphilic block copolymers rearranging in solution as a function of diblock chain length's ratios along with relative RAFT and ATRP rates of reaction will allow us to synthesize a promising amphiphilic macromolecule for medicinal applications.
Poster Presentation: Room 310, 4:00 p.m.

Mahalakshmi Kotichukkala
Professor Hedeel Evans
Probing the Interaction of Enzymes Involved in Pyrimidine Biosynsynthetic Pathway in Aquifex aeolicus
Mammalian CAD, a multifunctional protein that catalyzes the first three steps of the pyrimidine bio synthetic pathway is known to be over expressed in several types of tumor cells. The analogues complex of CAD, found in Aquifex aeolicus, a hyperthermophilic organism, was used in this research to understand its structural organization. Gel filtration chromatography was used to study the interaction between the proteins along with chemical cross-linking with dimethyl suberimidate. Peptides designed to disrupt the interaction between specific proteins that form the DAC (dihydroorotate and aspartate transcarbamoylase) complex were used. It was found that these peptides inhibit the activities of the proteins by disrupting the complex at specific sites. Gel filtration chromatography is being used in order to unravel the interaction between carbamoyl phosphate synthetase (CPSase) and the other components of the pathway.
Oral Presentation: Room 300, 2:15 p.m.

Jacinda M. Lisi
Professor Corey Emal
The Design of Sulfur-based Third Generation Synthetic Plasminogen Activator-1 Inhibitors
A variety of sulfur-based polyphenolic compounds have been synthesized to improve on previous generations of inhibitors found to have potent and selective inhibition to plasminogen activator inhibitor-1. This new class of compounds is designed with the intent of improving our understanding of relevant structure-activity relationship in plasma-based assay systems.
Poster Presentation: Room 310, 4:00 p.m.

Srikanth Maddali
Professor Harriet Lindsay
Progress Towards Syntheses of Indolizidine, Pyrrolizidine, and Quniolizidine Alkaloids
The main goal of this project is to synthesize pyrrolizidine, indolizidine, and quinolizidine alkaloids. These are bicyclic nitrogen-containing compounds, some of which have glycosidase, anti-cancer, and/or anti-HIV activity. The plan for synthesizing these compounds involves four efficient synthetic steps. A key step in the synthesis plan is an intramolecular pinacol coupling reaction of a nitrile and an aldehyde, which is a pioneering approach in synthesizing the bicyclic core of these compounds. This pinacol coupling reaction forms one of the two rings of the bicyclic core, installs a stereocenter, and provides a handle for forming another stereocenter. Efforts to optimize the key reaction conditions and to determine the relative stereochemistry of these products will be discussed.
Poster Presentation: Room 310, 4:00 p.m.

Hasina Y. Saraha
Professors Maria Milletti and Cory Emal
Conformational Analysis of Asymmetric Ring-Based Inhibitors of PAI-1
Plasminogen Activator Inhibitor-1 (PAI-1) plays a key role in the inhibition of fibronolysis, the process by which blood clots are broken down. In many cases it becomes necessary to increase the rate of fibrinolysis, which can be accomplished by inhibiting PAI-1. Many symmetric polyphenolic compounds have been shown to be effective inhibitors of PAI-1. In this work, a series of asymmetric, ring based sulfonamide compounds are examined. The structures of these compounds vary in terms of the amount of strain introduced by the ring systems and the orientation of the rings. Density Functional Theory is used to explore the relationship between the activities of several inhibitors and their structural traits. Specifically, relaxed scan calculations at the B3LYP/6-31G and B3LYP/3-21G levels of theory are used to sample low energy conformations. These are then examined for possible correlations between inhibitor activity and the relative position of key atoms in the molecule.
Poster Presentation: Room 310, 4:00 p.m.

Elli Spitery
Professor Lawrence Kolopajlo
Analysis of Animations Used in High School Chemistry Classes
This research, conducted over four trimesters, explores the role of computer animations in a secondary science classroom setting. The purpose of this study is to promote understanding of chemical concepts to secondary science students and focuses on the nature of matter, atomic structure and types of chemical reactions. The goals of this research include having students make clear connections between the nature of matter, atomic structure and types of chemical reactions and the microscopic world of chemistry. Students benefited greatly through the usage of animations, both coupled with lecture-based learning and creating their own animations, through retention of the material as well as a deeper comprehension of chemical concepts. Results and conclusions indicate that students had an over-all positive impression of the animations while coupled with lecture-based learning used in the classroom and had a positive impression of their own animations created in laboratories.
Oral Presentation: Room 300, 1:35 p.m.

Priyanka Tumuluru
Professor Deborah Heyl-Clegg
Synthesis of Uncharged Analogue of hIAPP (1-19)
Amylin (human Islet Amyloid Polypeptide, hIAPP) is a 37 amino acid polypeptide, co-secreted with insulin from pancreatic beta cells, which plays a role in cell membrane damage by forming amyloid fibrils in Type 2 diabetes. Recent studies suggest that the N-terminal region of hIAPP (hIAPP 1-19) is responsible for initial interactions with the membrane, rather than the central amyloidogenic region (hIAPP 20-29), likely by attractive forces between the positively charged residues and the negatively charged membrane phospholipids. This research involves the synthesis of an uncharged peptide analogue of hIAPP (1-19) by replacing positively charged residues lysine and arginine with isosteric aminoheptanoic acid (Ahept) and acetylation of the N-terminus. Expected to have minimal activity and test the charge attraction theory, the peptide was synthesized, cleaved from resin, purified, and analyzed. A dye leakage assay was then employed to assess the membrane disruptive potential of the synthesized peptide.
Oral Presentation: Room 300, 1:15 p.m.

Chirag G. Vaghela
Professor Corey Emal
Modified Third-generation Synthetic Inhibitors of Plasminogen Activator Inhibitor-1
A series of polyphenolic sulfonamide and sulfonimide inhibitors of plasminogen activator inhibitor-1 (PAI-1) have been synthesized and screened for biological activity. These compounds were designed to improve on previous generations of sulfonamide and sulfonimide polyphenolic inhibitors of PAI-1, which has been implicated in a variety of conditions, such as myocardial infarction and stroke. The design rationale, synthesis, and structure-activity relationships of this series of compounds will be addressed.
Oral Presentation: Room 300, 1:55 p.m.

Anila Waris
Professor Donald Snyder
Study of the Comparison between "Impedance Resonance" and Standard Impedance Spectroscopy Using Interdigitated Electrode Arrays in Metal Ions Solutions
The focus of this project is the comparison between standard impedance and resonance impedance spectroscopic techniques using interdigitated electrodes (IDE). Standard impedance spectroscopy graphically shows phase angles and impedance as a function of frequency, plotting the log of impedance verses the log of frequency. A new modification of the standard impedance technique involves inclusion of a magnetic inductance element as a part of the standard IDE connection. The impedance/induction interaction produces a different impedance phase angle data set where graphical presentation produces a sharp resonance peak. This study focuses on comparison of a new impedance resonance technique with the standard impedance spectrum to determine if the new technique offers any significant advantages in sensitivity and/or selectivity.
Poster Presentation: Room 310, 4:00 p.m.

Department of Communication, Media, and Theatre Arts

Tracey Frazier
Michael Tew
The Weight Is Over
More than 75% of African-American women are overweight or obese. Based upon current trends, a recent John Hopkins University study predicted that by 2034, all African-American women will be overweight. C. L. Armstrong presented a post-modernistic view of obesity as counter-publicity for women, based upon image rather than identity. Beauboeuf-Lafontant posited that the racialization of being overweight and African-American socializes the masking of identities, inviting the African-American woman to identify with an image outside of herself. Beauboeuf-Lafontant also argued that self-imposed silence is culturally expected behavior, making the performance of blackness, for overweight African-American women, a simulacrum complicated by the additional image indictment of dress size. African-American women remain silent statistics, dying over weight. I want to break the silence of women and weight, before it's too late.
Poster Presentation: Room 310, 4:00 p.m.

Brian A. Golden
Professor Jeannette Kindred
Male College Students: Gender, Career Choices, and Student Retention
The United States Bureau of Labor Statistics has classified 62 current United States professions as fastest growing or fastest declining jobs for the years 2008–2018. The goal of this study was to determine whether gender-based stereotypes exist within certain job classifications and whether male students are choosing professions based on gendered societal expectations and norms. Moreover, this study examined whether gender-based stereotypes influence college students' curriculum choices, and

whether perceived gender bias within growing professions correlates with student retention rates. A final goal of this study, achieved by analyzing current university communication messages being sent to male college students, is to determine whether gender-based career bias exists and whether the communication messages male college students are receiving influence their career and curriculum choices.
Oral Presentation: Room 350, 1:15 p.m.

Kenton Jones
Professor Jessica Alexander
Involuntary Memory: The Rest of the Story
This presentation continues research in exploring, devising, and performing personal narratives in a course taught by Jessica Alexander. Drawing on dramatic theories of Sartre and Boal and literary ideas of great writers, I develop techniques for remembering and sharing unique, individual stories with universal appeal. I hope that this may lead to a syllabus for a workshop next fall that would help shape my MFA project, developing an original script with EMU undergraduates. This presentation will focus on my final performance project for *Narrating the Self*. I will explore the concept of involuntary memory, which holds that every moment of experience necessarily contains memories of other moments. By examining, crafting, and sharing these moments, we explore our past and reveal layers of ourselves. This is the work I hope to continue with young people.
Oral Presentation: Room 350, 2:45 p.m.

Kristala Pouncy
Professor Jessica Alexander
Inside a Memory
How can one use memory, pages in a journal, to address grandiose ideas of being a cultural outsider? How can one memory be the strand that connects seemingly disparate ideas of exclusion, transience, and a striving of and for acceptance? In this autoethnographic performance piece, the concept of being an outsider is presented through a myriad of life memory. In order to feel less of an outsider, what does one need to let in? Last, as this autoethnographic performance will demonstrate, the constructing of such performance can reshape the meaning and emotion of the actual memory.
Oral Presentation: Room 350, 1:55 p.m.

Aleesa R. Searcy
Professor Jessica Alexander
Witness: Home
At events such as The Alzheimer's Association's Memory Walk, there are few if any survivors to testify to what Alzheimer's awareness and research has done for them. They do not walk for themselves. In autoethnographic performance, one is asked to bear witness, to give voice to others and groups who have no voice. Depending on the stage and severity of the memory loss, patients with Alzheimer's and dementia cannot speak about their pasts because they do not remember them. Their memories are in the hands of those who watched them live. Can ethnographic and autoethnographic performance give voice to those whose memories have dissolved and who live only

in the present? In this narrating self-performance, I work to give voice to memory loss patients through the lens of my great-aunt, a tiny, loud, self-proclaimed "fox" who lived boldly on a tiny island and found herself years later in another island: a gated assisted-living facility.
Oral Presentation: Room 350, 2:15 p.m.

Lisa Storc
Professor Ray Quiel
Elmo's Rhetoric
In 2002, Elmo Monster, best known from *Sesame Street*, appeared before the United States Congress as an advocate for music education. This presentation is a forum to examine Elmo's rhetorical use before Congress. A puppet may be present.
Oral Presentation: Room 350, 1:35 p.m.

Laura Tanner
Professor Jessica Alexander
Cry, Baby, Cry: Giving Voice to Victims of Sibling Abuse
"Cry, Baby, Cry" is an original performance that reveals a little-known form of domestic violence: sibling abuse. This type of violence is very common in modern households but is not often reported because it is mistaken for healthy sibling rivalry. The performance addresses gender, identity, and social stigmas attached to family violence. When sibling rivalry becomes abusive, the victim's emotional well-being is damaged significantly. As a result of this, the victim may experience dysfunction in his or her adult relationships. Through movement, music, and language, the presenter recounts her experience as a victim: how she coped and became a survivor. The purpose of this solo piece is to raise awareness for parents and give voice to those who have been victimized. The presenter wrote this piece as an exploration in narrating the self.
Oral Presentation: Room 350, 3:05 p.m.

Department of Computer Science

Jaikrishna Swaminathan
Professor William McMillan
Vehicular Collision Detection and Avoidance System
This research aims to devise an intelligent and affordable Real Time Automated Collision Avoidance system. The main hitch is attributed to discerning the relative position of the vehicles in order to calculate the probability of a collision. To overcome the problem, this mechanism uses a Binary Phase Shift Keying (BPSK) modulated carrier (preferably Ultra Wide Band), which is transmitted and received by all the automobiles within the carrier range. The system consists of four transceivers fitted in different directional orientations to calculate the azimuth, speed, and distance of other automobiles in range. The processor updates the relative positions of various automobiles in real time in its data array. An intelligent scenario-based algorithm is then used to detect a probable collision and take necessary actions to ensure traffic safety. The strength of the system is characterized by adaptability, scalability, cost efficiency, and use of simplistic technology.
Oral Presentation: Room 300, 4:15 p.m.

Department of Economics

Gaber Burnik
Professor Sharon Erenburg
Financial Development and Economic Growth: The Case of Central Europe
This study investigates the long- and short-run statistical relationships between economic growth and financial development (measured as the ratio of money supply to GDP) in the selected economies of Central Europe. Vector error-correction models (VECM) are used to establish causality to determine whether financial development is demand-following or supply-leading, or if financial development and economic growth are bidirectional.
Oral Presentation: Room 204, 4:55 p.m.

Dan Colligan
Professor David Crary
The Effects of Teacher Motivation on School Performance
The success of American schools has been under more intense scrutiny as secondary graduation rates have flattened over the past ten years. Despite more students enrolling in post-secondary programs over the past thirty years, the graduation rates have remained the same. In an attempt to remedy the slumping American education system, researchers have focused attention on the characteristics of schools and teachers that lead to the best outcomes. In the education world, "best practices" dominate the landscape of professional development. This study looks at the composition of teachers in the school community to see if the percentage of teachers who have attained a graduate degree has a positive effect on the performance of the school district. In this study, there is no conclusive evidence that increasing the percentage of teachers with master's degrees would raise the achievement status of the school district.
Oral Presentation: Room 204, 4:15 p.m.

Chi-Mei Liu
Professor Jennifer L. Rice
The Effect of Comorbidity Conditions on Prescription Drug Use and Expenditures in the United States
Previous studies show that insurance coverage and socioeconomic factors contribute to variation in prescription drug use among the U.S. population. However, few studies have examined the relationship between comorbidity (chronic conditions) and prescription drug utilization. This study examines whether comorbidity among the U.S. population is a key factor in contributing to increased prescription drug use and higher healthcare expenditures. This study uses the 2007 Medical Expenditure Panel Survey and applies a two-part model to estimate the relationship between comorbidity and prescription drug use and healthcare expenditures. The results indicate the size of the effect of chronic conditions on the use of prescription drugs and overall health care expenditures. Findings will be useful in helping pharmaceutical companies, policymakers, and providers in better understanding the utilization of prescription drug use, which will aid in determining budget allocations and developing health care cost reduction policies.
Oral Presentation: Room 204, 3:25 p.m.

Christopher J. Smith
Professor M. E. Yaya
South American Military Spending and Trade Openness: An Inverse Relationship?
Scholars and politicians have debated for years whether trade has a significant relationship with a nation's propensity to engage in militant behavior. Much of the research that has been done in the past has relied on anecdotal and unreliable evidence; more recent research has attempted to investigate the question by using empirical evidence and modern statistical methods. This study joins the new generation by analyzing the relationship between trade openness and total military expenditures of the South American nations from 1968-2008. This study assumes that military expenditure can be explained as a linear relationship with several different variables: trade openness, military activity, military alliances, population density, government stability, and other factors which may be statically significant. While results using empirical evidence have been mixed, using data from the last forty years from the various nations of South America may provide more evidence supporting the idea that trade reduces militarism.
Oral Presentation: Room 204, 4:35 p.m.

Department of English Language and Literature

Absalam D. Al-Ahmari
Professors Beverley Goodman and T. Daniel Seely
Verb-Deriving Morphology in an Ethiopian Cushitic Language: Oromo
Oromo verbal morphology seems very complex, although it functions in a quite systematic way. Three derived verb stems are attested in this language: autobenefactive (or middle), passive, and causative. These derived stems are followed by inflectional morphemes that express aspect and subject agreement. Two approaches are proposed in analyzing the derivational morphology in Oromo. The first one is concerned with the structure of these morphemes in the lexicon and how they are arranged if more than one form co-occurs. Halle's Word Formation model provides an explanation to both forming and arranging of the derivational affixes in Oromo. Findings suggest that these morphemes are structured in the lexicon according to certain operations. A contrasting approach, on the other hand, is based on the syntactic interference with the derived morphology. Evidence shows that the syntactic conditions play a crucial role in determining these forms.
Oral Presentation: Room 208, 2:15 p.m.

Andrea Boog
Professor Sheila Most
A Comparative Study of Fate, Omens, and Oracles in Greek, Roman, and Norse Mythologies
As different as the many ancient people of the European continent have been, there are almost always some striking similarities that transcend the obvious. An example is the personification of fate and destiny as a deity. Similar, too, are how each of these peoples handled that fate; how each conversed with their deities; and the regard with which each held such things as omens, curses, and prophecies; yet the similarities are kept in balance by each culture's own ability to develop relationships with their gods and goddesses. It is my goal to explore those similarities and differences as they pertain to the Greek and Roman people and mythology and the Germanic people of the Norse mythology. I will show these similarities and how the cultures, though far apart, are bound by them; then I will show the distinct differences that make each culture its own.
Oral Presentation: Room 350, 4:55 p.m.

Caitlin E. Conn
Professor Martin Shichtman
Lost in Translation: Orality, Expression, and Anxieties in *Havelok the Dane*
The Middle English Romance *Havelok the Dane* features all of the markings of orality. From the poem's opening lines in which the narrator-turned-speaker offers his tale in exchange for a cup of ale, Havelok is riddled with self-conscious moments that position this text as a written version of a spoken "original"—and although the parallel narrative structure and basic rhyme scheme suggest orality, whether this tale was spoken before it was put on paper is irrelevant. What is relevant is that it was written at a time when oral culture was on the decline. In fact, the spoken word's insufficiencies are presented in the tale's twin oath scenes. When both verbal vows are betrayed, it is clear that abstract language cannot be stabilized. Consequently, the tale expresses anxiety not only about the (in)ability of orality to translate into writing, but the ability of language to hold meaning at all.
Poster Presentation: Room 310, 2:15 p.m.

Daniel A. Earle
Professor Sheila Most
Science Fiction as Modern Mythology
In contrast to traditional mythology, the modern mythology of science fiction expresses entirely new and unique functions that mythologize human technology and the future of the human race. In traditional mythology, the gods act like people, but in science fiction mythology the people act like gods. There is something radically different about the apotheosis of science fiction that is unlike the individual apotheosis that happens to the heroes of traditional mythology; science fiction offers more of a cultural apotheosis. No longer does the destiny of humanity depend on the whims of some fickle deity; in the

mythology of science fiction, our destiny is, for good or ill, in our hands. This is what makes the mythology of science fiction so radically different and unique: the supernatural has been replaced with the possible, and the gods have been replaced by the people.
Oral Presentation: Room 350, 4:35 p.m.

Carly Francescut
Professor Sheila Most
Admiration and Fear – Differing Reactions to the Tricksters Hermes and Loki
The archetypical figure of the Trickster appears in various mythologies across the world. Two Trickster figures in particular, Hermes of Greek mythology and Loki of Norse mythology, both exemplify many of the traits of the Trickster archetype; most notably, each character operates within and is able to challenge the boundaries that order their mythological canons. Despite these similarities, however, the way that each Trickster figure is received greatly differs due to their unique cultural context: one Trickster is admired, while the second is hated and feared. The reason for these vastly different reactions to each Trickster is due to the Trickster's ambiguous nature and his ability to challenge the boundaries of social conventions and the natural order of the world, and the level of cultural comfort present when facing these archetypical conventions.
Oral Presentation: Room 350, 4:15 p.m.

Martin Goffeney
Professor Craig Dionne
Science Fiction in the Age of Digital Reproduction: Philip K. Dick on Human Subjectivity
The tile of Philip K. Dick's A Scanner Darkly alludes to one of the most famous verses from the biblical book of Corinthians, replacing the "mirror, dimly" with the fantastical cybernetic device of the holographic "scanner." He uses this scanner, the mirror/lens of electronic surveillance, to elucidate an imaginary future where the mirror functions as the antithesis of the one described in Corinthians: it obfuscates identity; it prevents the one who gazes into it from knowing or being known. The depictions of confused identity and ambivalence depicted in Dick's work offer a prescient depiction of the ambivalence toward technology that has characterized the cultural discourse of the turn of the 21st century. The influence of the philosophy of technology offered by Dick is discernible in not only popular culture and the works of subsequent science fiction writers, but in the emerging philosophical and theoretical fields of the new millennium.
Oral Presentation: Room 330, 4:55 p.m.

Ruth L. Haller (Pranschke)
Professor Martin Shichtman
"Enflame Our Hearts to Love Him": Sensuality, Violence, and the Body in Medieval Devotional Writing
Over the centuries, lyrics, poetry, sermons, plays, and narratives have been the products of the imagining of Christ's death. Medieval meditations, in particular, often ask the Christian to focus on the crucifixion with love, but not merely a platonic love – physicality, particularly in medieval affective devotional texts, plays a significant part in this process. This tendency in Passion art and literature has taken different forms, recently in Mel Gibson's film *The Passion of the Christ*. The treatment of Christ's body in the movie prompted reviewers to use such terms as "pornographic." Interestingly, some of the most disturbing images used in the movie were borrowed from medieval devotional treatises. It is not certain, however, if any medieval Christian would have thought of these images as "pornographic." This paper will examine the significance of Christ's body in medieval renderings of the Passion, while questioning modern American Evangelicalism's presuppositions about the body.
Oral Presentation: Room 208, 7:00 p.m.

Kyle M. Janke
Professor Martin Shichtman
Inequality of Exchange in Sir Gawain and the Green Knight
Sir Gawain and the Green Knight is a Christmas poem. As such, an understanding of the poem's own definition of the holiday is required, in order to read the text's complexities. The definition of Christmas found in the text implies a central theme of inequality of exchange, which is expressed in the question: How can men celebrate the birth of one who was born specifically to die? In analyzing the exchange of merry-making for self-sacrifice, this paper will examine the inequality of the Green Knight's presence in the poem, the challenges accepted by Sir Gawain, and Sir Gawain's qualities as a lover. The paper will conclude with how these aspects of the text indicate the Gawain poet's use of meaning in language and how this affects our approach to the text as readers.
Oral Presentation: Room 208, 6:40 p.m.

Tara L. Keezer
Professor Ann Blakeslee
Media Fandom as a Framework for Understanding Audience of Technical Communication
Media fandom can best be described as "an amorphous but still identifiable grouping of enthusiasts of film and television" (Textual poachers: Television fans & participatory culture, 1992). Fannish activity reflects a level of engagement with the source material that is significantly beyond the engagement casual viewers or readers may experience. Aside from simply viewing or reading the source material, also called "canon," fans may reinterpret it by way of writing fan fiction. This reinterpretation of canon is a popular medium for fans to review it in a fresh light or to develop a deeper understanding of the content creator's text. Media fandom audience is not passive, and this subculture asserts its right to comment on and interact with the subject of its interest. This approach to source material

may have direct bearing on how technical communicators view their own audience and may provide new insight in how to engage audience.
Oral Presentation: Room 208, 3:45 p.m.

Lindsey Macdonald
Professor Natasa Kovacevic
Cities of Salt: Urban Arrangement and Mobility as Resistance
Abdelrahman Munif's *Cities of Salt* provides a detailed representation of the colonization of Saudi Arabia after the discovery of oil beneath its land. Though a fictional account with only figurative references to actual places and historical events, the novel describes the effects of colonial urbanization, including the creation of an intermediary comprador class and the efficient marginalization of the area's indigenous population. The novel addresses different methods of socioeconomic resistance employed by members of the Bedouin, which are centralized around ideas about personal mobility and its legitimized regulation within the urbanized setting. In order to synthesize a cohesive theoretical understanding of post-Marxist biopolitical resistance, this paper will explore the politics of mobility within the territorialized sociopolitical sphere, in addition to the ability and ultimate effectiveness of both the vagabond and the vigilante in destabilizing the power dynamics of the colonized nation-state.
Oral Presentation: Room 208, 6:20 p.m.

Kelli Massa
Professor Heather Neff
"Do you know Mr. Rochester?" Performing the Proper English Gentleman in *Jane Eyre* and *Wide Sargasso Sea*
Revealing the secret past of English gentleman Edward Rochester, Charlotte Bronte's novel *Jane Eyre* questions socially constructed gender identities of the Victorian era. Concealed in the attic of Thornfield Hall, madwoman Bertha Mason threatens not only Jane and Rochester's relationship but also Rochester's very identity as an English gentleman. In her novel *Wide Sargasso Sea*, Jean Rhys crafts a story behind Edward Rochester and Antoinette "Bertha" Mason's marriage that holds the British patriarchal value system accountable for Rochester's treatment of Antoinette. Acknowledging the social ideologies behind young Rochester's actions, Rhys explains how he becomes the conflicted man who violently threatens Jane in Bronte's novel. By examining Rochester's efforts to constantly appear as an "English gentleman," I explain how both Rhys and Bronte critique society's investment in gender and class identities.
Oral Presentation: Room 208, 6:00 p.m.

Brent A. Miller
Professor Beverly Goodman
"To err is human": Nominalization by -er Suffixation
The suffix -er (as in work-er) is one of the most productive and versatile morphemes in English. However, linguists are unsure where -er suffixation is processed in the mind. Several studies have examined how -er nominals are derived, what semantic roles they possess, and how the suffix has grammaticalized across time. In this paper I provide an overview of the problems -er nominals pose to

linguists, and the differing solutions that research in various fields has revealed. Difficulties surrounding -er include determining where the suffixation process takes place in terms of the lexicon and syntax, ascertaining what morphological "meaning" -er has and conveys to a particular referent and base, and discovering how that meaning is inherited by the word to which it attaches. In applying lexical, syntactic, and also cognitive approaches, I will elucidate possible solutions to these problems.
Oral Presentation: Room 208, 1:15 p.m.

Justin A. Petro
Professor T. Daniel Seely
Mutual Exclusivity and the Problem of Bilingualism: A Pilot Study
In attempting to explain how children are able to acquire words so rapidly, Markman (1994) proposes a set of constraints on word-learning, including the mutual exclusivity constraint: that each object may be assigned only one label. However, Markman doesn't account for bilingual learners, who must assign at least two labels to each object. The following study modifies Markman's own methodology to test for mutual exclusivity in a bilingual learner of English and German. The methodology proposed advances Markman's central idea while at the same time providing insight into how bilingualism is possible. By gauging a subject's willingness to attach an unfamiliar label in one language to an object whose label in another language is familiar, one can assess whether they are relying on mutual exclusivity when learning new words. The results of such a study provide valuable new insights into the nature of language acquisition.
Oral Presentation: Room 208, 2:45 p.m.

Sarah Primeau
Professor William Tucker
Promoting Transferability of Writing Strategies: Encouraging Students to Reflect on their own Processes
The National Council of Teachers of English's "Beliefs about the Teaching of Writing" includes the statement that "teachers should attend to the process that students might follow to produce texts." NCTE goes so far as to claim that, "[s]ometimes, evaluating the processes students follow –the decisions they make, the attempts along the way – can be as important as evaluating the final product." I argue that it is important not only for teachers to attend to and assess students' writing processes but also for students themselves to attend to and assess their own writing processes. Instructors of first-year writing can encourage students to describe and evaluate their own writing processes in reflective writing activities. It is important for students to reflect on their own writing processes because it helps students transfer or apply strategies learned in first-year writing to their writing for upper-level classes and for various genres and purposes outside of school.
Oral Presentation: Room 208, 3:25 p.m.

Joe R. Sacksteder
Professor Christine Hume
Fugitive Traces
Several of my classes at Eastern Michigan University have led to critical and creative confrontations with the controversial German filmmaker, Werner Herzog. Having become especially captivated by his DVD director's commentary, I took the chance during my Sound Poetry class to manipulate clips from his commentary to produce new audio creations. These sound poems give me the opportunity to use my cognate experience in music composition and allow me to simultaneously wallow in the musical poetry of his declarations while exploring the problematic contradictions at play in his aesthetic. Because of my cautious admiration of Herzog, the pieces balance between homage and satire but ideally exude an exuberant playfulness more than anything else.
Oral Presentation: Room 330, 5:15 p.m.

Jason Snow
Professor Sheila Most
The Mythology of Crisis on Infinite Earths
In the comic book publishing industry, the crossover event has become something of an annual norm: a cataclysmic occurrence announces itself as so perilous and threatening that all the heroes in a given continuity must pitch in to vanquish the common foe. This company-wide event, once a publishing taboo, has become the narrative fiction equivalent of the Hollywood summer blockbuster. After years of preparation, DC released *Crisis on Infinite Earths* as a twelve-issue limited series that not only celebrated its 50th anniversary in 1985 but also claimed to streamline its convoluted history. This crossover event was significantly different from Marvel's previous efforts for one major reason: the storyline dictated the future continuity of DC's remaining monthlies. *Crisis on Infinite Earths* became such an important part of comic book lore that events in DC are now labeled either pre-Crisis or post-Crisis.
Oral Presentation: Room 350, 5:15 p.m.

Danielle H. St. Jean
Professor Veronica Grondona
Nominal Tense, Aspect, and Mood Marking: A Case Study of Kayardild and Lardil
In most languages, the linguistic features of tense, aspect, and mood (TAM) are most commonly associated with verbal elements, but recent research has shown that some languages mark these features on nominal elements. Rachel Nordlinger and Louisa Sadler brought this to the attention of the wider linguistic community in 2004 with their article, "Nominal Tense in Crosslinguistic Perspective." Working within their framework, propositional nominal TAM marking will be examined in two closely related Australian languages: Kayardild and Lardil. While these languages arose from a proto-language with no such nominal tense marking, complex historical developments led to nominal TAM marking arising in both languages. Both Lardil and Kayardild can mark tense on nominal elements, and Kayardild gained the further ability to mark mood with its nominal TAM markers. I will discuss how these two systems differ and a possible direction for future research.
Oral Presentation: Room 208, 3:05 p.m.

Lindsay Stefanski
Professor Beverley Goodman
Productiv-ity vs. Productive-ness
This presentation focuses on the productivity of nominalizing suffixes –ness and –ity in American English. Scholars have attempted to define productivity by criteria such as output size, blocking, and semantic coherence. Evidence from these studies consistently suggests that -ness is more productive than –ity. This paper considers an aspect of productivity called "speaker acceptance," measured by how often respondents identify a preference for –ness or –ity when these suffixes attach to identical adjectival forms. The study is based on two surveys that elicited 131 responses from participants between the ages of 12 and 60, representing a variety of educational, socioeconomic, and ethnic backgrounds. The data indicate that -ity is accepted more often than -ness, a finding that contrasts with earlier investigations. These results raise questions about the implications of productivity criteria and also suggest that alternative methods for testing productivity may be useful in its measurement.
Oral Presentation: Room 208, 1:55 p.m.

Dibella Wdzenczny
Professor Beverley Goodman
Noun Incorporation in Koryak: Evidence for Lexical Morphology
One of the most important (and disputed) questions in morphological theory is "Where is morphology?" Where, in a generative grammar, does word formation take place? Some argue that some of it happens in the mental lexicon, and others say it is all a result of syntactic operations. In this presentation, I will present data from the Koryak language, a Chukotko-Kamchatkan language of Siberia that lends evidence to morphology processed in the mental lexicon. The phenomenon I examine is a combination of two opaque operations—noun incorporation and vowel harmony—that could not be processed simultaneously in the syntax. They must apply to Koryak words in the respective order, or else the application of vowel harmony would result in an incorrect, unobserved surface form. Taken together, noun incorporation and vowel harmony support the argument that a lexical level of word formation is necessary to account for the Koryak facts.
Oral Presentation: Room 208, 1:35 p.m.

Department of Geography and Geology

Lauren E. Carpenter and **Diana Armistead**
Professor Ted Ligibel
The Historic Preservation Collection at the Halle Library Archive
The Historic Preservation collection, housed at Eastern Michigan University's Halle Library, is home to a new compilation of material relating to the field of historic preservation. It contains information useful to those studying the history of the historic preservation movement internationally, across the country, and here in Michigan. This presentation will discuss the content of the collection and its importance to historical research and curriculum development. In reference to the Collection's development, the presentation will discuss specific steps to guide its

growth. These include the development of a "case statement," which incorporates the vision for the Historic Preservation Collection, and understanding the process for gaining outside funding and identifying potential funding opportunities. The project serves as an educational tool for researchers and for the community involved with the Collection, as a starting point for discussion and guideline for its growth.
Oral Presentation: Room 330, 2:45 p.m.

Sam T. Constantine
Professor Ted Ligibel
Adaptive Reuse: A History of Electricity, Wine, and Business
This presentation will examine the re-purposing of a landmark in the community of Farmington, Michigan, which is referred to as the Power House/Winery. It has stood in situ since 1890 and is a primary example of the many benefits of adaptively reusing historic structures. It first provided power to a light rail system that ran from Detroit into the suburbs and subsequently brought electricity to community. However, it is most widely known for its first re-purposing when it was transformed into Michigan's largest winery during the 1950s. Today it is currently being used to house office space, which is carved out of the old wine vats and other storage areas. Unfortunately, this structure is not designated with in the State or National Register of Historic Places, which would allow the current owners to access tax incentives and could help with the maintenance of the massive 194,000 sq ft structure.
Oral Presentation: Room 330, 3:05 p.m.

Janice Dana
Professor Sandra Rutherford
Ducks in the Flow: A Storybook Research Project
The purpose of the research was to measure the effectiveness of using the storybook *Ducks in the Flow – Where did they Go?* and its companion classroom activities to teach ocean literacy to 5th grade students. The study used formative assessment probes, pre- and post-assessments, student activity work samples, and oral interviews to gauge student learning. The key concepts explored were ocean/Great Lakes surface currents, ocean gyres, and the Coriolis effect. After teaching the content, using the formative assessment probes, and conducting the activities, the post-test analysis showed a 30% increase in learning. The qualitative analysis of the oral interviews showed that students unanimously understood that the activities they participated in were models of the Earth System. After the analysis it was shown that indeed the *Ducks in the Flow* storybook and learning activities were an effective tool for teaching ocean literacy.
Oral Presentation: Room 330, 4:35 p.m.

Sarah L. Hayes
Professors Ted Ligibel and Dan Bonenberger
Internship at Historic Charlton Park
My internship over the summer of 2010 was at the Historic Charlton Park and Village in Hastings, Michigan. At the park I tackled two large museum collection projects. My first project was to document, clean, research, catalog, and

relocate more than 150 clocks that dated as far back as the 16th century. I also had to design new storage space and order materials for the artifacts on a tight budget and strict deadline. My second project involved more than 300 pocket watches. I cleaned them, assigned numbers, and digitized them into the park's catalog system. I also gave educational tours to elementary school students. The tours were in full period costumes, which allowed students to truly engage during their field trip.
Poster Presentation: Room 310, 4:00 p.m.

Janis L. Jagielky and **James A. Miller**
Professors Ted Ligibel and Dan Bonenberger
The Section 106 Review Process and Urban Blight in the City of Detroit
The City of Detroit is combating its urban blight issue by demolishing thousands of structures. Funding for this demolition project comes from grants issued by the Federal government (Community Development Block Grants and the Neighborhood Stabilization Program). Because the funding is from the Federal government, a Section 106 review process must be completed before any demolition can take place. This presentation will evaluate the Section 106 review process used by the City of Detroit for the demolition program and will discuss how this relates to historic preservation as a whole. The presenters all completed recent internships with the City of Detroit, working with the Historical Preservation group in the Planning and Development Department.
Oral Presentation: Room 330, 1:35 p.m.

Zachary A. Jones
Professor William Welsh
Known Remediated Brownfield Sites on Social Trends and a Legal Analysis of the Access to Information for the Study
This paper looks at social variables in order to determine if known brownfield remediation has any causal effects in their trends. The poverty rate was the only significant social variable that was affected by the percentage of remediated brownfields. Nine OLS models are designed to study the relationship and should be used in conjunction by economic developers (EDs) when planning brownfield redevelopment. Many Michigan municipalities are not in accordance with the state Freedom of Information Act (FOIA) and the Enhanced Access to Public Records Act (EAPRA) when denying or charging a fee to researchers and academics from state universities for access to municipality owned GIS databases. The public is pulled between a public interest, a Right to Know and privacy. A closer understanding of the laws could encourage municipalities to update their policies and bring their actions in line with state regulations.
Oral Presentation: Room 330, 1:15 p.m.

Connie Locker
Professor Ted Ligibel
Preserving Harvard: A Site History and Preservation Assessment of Toledo's Landmark Elementary School
Harvard Elementary School, an imposing Gothic Revival structure constructed in 1926, is one of Toledo's most architecturally remarkable schools. Once on a long list of

possible demolitions within the Toledo Public School system, the 85-year-old building has so far been preserved, although steps are still needed to ensure it remains one of Toledo's educational landmarks. Presented research will cover a brief history of the site as an educational facility and a background on the neighborhood in which it is located. Emphasis will also be placed on the structure's unique architectural composition, the significant level of preserved original features, and existing conditions of the building and surrounding landscape. Through the analysis of each of these subtopics, site improvement suggestions and future avenues of research will be outlined.
Oral Presentation: Room 330, 1:55 p.m.

Belinda G. McGuire
Professor Ted Ligibel
St. Mary's Academy
The summer of 1932 brought the opening of the third St. Mary's Academy and Motherhouse, an exceptional Catholic all-girl educational facility. The St. Mary's Academy located on Elm Avenue in Monroe, Michigan, is a beautiful 280-plus-acre campus that contains the Motherhouse and the Academy. These magnificent Art Deco style buildings were supported by a campus-run powerhouse. In 1987, St. Mary's Academy closed their doors, citing low enrollment. In 2000, the IHM sisters decided to update and convert their Motherhouse into what became the largest green and sustainable project in the Midwest. Short on funds and saddled with a bad economy, the Academy remains empty and in peril of being torn down. This research focuses on the development of the St. Mary's Academy complexes, the green and sustainable conversion of the Motherhouse, and historic preservation recommendations as to how to save the Academy.
Oral Presentation: Room 330, 3:45 p.m.

Marcus P. Schwimmer
Professor Ted Ligibel
Restoration of the Ottawa Power Station Entrance
The Ottawa Power Station has been a shining example of Art Deco architecture in Downtown Lansing since its creation in 1939. The buildings have since been decommissioned and sold to Accident Fund Insurance Company of America, who will redevelop the site as a new corporate headquarters. This report will focus on the efforts to restore the entrance of the plant to its former glory. The meticulously restored room consists of a staircase and six stainless steel doors that show off the building's Art Deco influence. Moreover, the report will look at obstacles that the restoration team encountered and the solutions engineered to solve them. This building exemplifies the merit of adapting the nation's historic buildings; its contribution to the economy of Lansing will no doubt pave the way for future projects.
Oral Presentation: Room 330, 2:15 p.m.

Kari M. Smith
Professor Ted Ligibel
Detroit in a New Light
Detroit is often looked upon as a city of blight, poverty, demise, downfall, and ruin. The intent of my project is to show Detroit in an alternate light. My purpose is to outline

the positive initiatives that citizens, organizations, preservationists, and planners are currently bringing to the City of Detroit. I will briefly look at subjects such as the restoration and adaptive use of the GM Argonaut building, recently restored in 2009 to the A. Alfred Taubman Center for Design Education. I will also touch upon areas of eco-preservation and various successful urban gardening projects that are playing a positive role in the renewal of Detroit.
Oral Presentation: Room 330, 3:25 p.m.

Department of History and Philosophy

Lyudmila B. Austin
Professor Joseph Engwenyu
Pre- and Post-Colonial Social Evolution of Kenyan and Zimbabwean Women's Struggles
Women played a critical role in both Kenya and Zimbabwe's struggle for independence. In both African countries, the methods undertaken by women during the war for independence challenged established gender roles and created a moment of progression toward gender quality. Men and women united in fighting a common enemy: the colonial system. However, once independence was attained, the newly established free nations made minimal sincere reforms in order to sustain gender equality. Nevertheless, women in some instances were able to grasp brief loosening of patriarchic and colonial traditions in order to obtain more political and social liberation. In order to understand the current status of women's position in Kenya and Zimbabwe, I analyze the evolution of their stance in society from pre-colonial to post-colonial eras.
Oral Presentation: Room 301, 4:15 p.m.

Tamara R. Grit
Professor Ronald Delph
Witchcraft and the English Legal System
Europe in the early modern period was dominated by a witch craze that was characterized by large scale, systematic trials and executions of those found guilty of diabolical practices and pacts with the Devil himself. One notable exception to this hysteria was England. Rather than mass inquisitions, accusations of witchcraft and subsequent trials occurred on a sporadic and individual basis with relatively restrained execution rates. This paper examines the question: Why did the English legal system and its implementation result in a much smaller scale witch craze than was seen in continental Europe during the sixteenth and seventeenth centuries? This research will show that because of the trial process, an absence of legal torture, and extensive central authority over local courts, the era of the witch trials was remarkably limited in England.
Oral Presentation: Room 301, 1:35 p.m.

Kristina A. Lininger
Professors Kathleen Chamberlain and John McCurdy
The Native American Question
By the 1830s, the majority of Native Americans east of the Mississippi River had either settled into small reservations in their former homeland or moved west to reservation lands set up by the U.S. government. One of the last major tribes to thwart the U.S. government's westward push was

the Wyandot Indians. A band of Hurons that moved south and west into Michigan, Ohio, and Wisconsin, the largest Wyandot settlement in Ohio did not move west until 1843, where they settled in what is now known as Kansas City, Kansas. Fighting hunger, unfulfilled government promises, and homesickness, the Wyandots fought to carve a home out of a wild and unfamiliar land. Added to the stress of moving west, the Tribe had to fight off the "heathen" and uncivilized Indian tribes that surrounded them, southern Methodism, and Missouri slaveholders pushing to legalize slavery. How did the Wyandot Tribe adjust in a time of great upheaval and confusion in America?
Oral Presentation: Room 301, 1:15 p.m.

Danielle L. Marsh
Professor Ronald Delph
Holy Demoniacs: Demonic Possession in Sixteenth- and Seventeenth-Century European Convents
The sixteenth and seventeenth centuries in Europe were flooded with accusations of witchcraft. Blasphemous and unholy women and their liaisons with the devil were never uncommon in these cases—in fact, they were something of a prerequisite. However, the devil also made his way into the souls of the most holy women on earth through demonic possession. Many convents during this time found themselves with instances of mass possessions, where up to eleven women were possessed at a time by devils and spirits. But why were these convents, the homes of Christ's sacred brides, so engulfed by demonic activity? There are both temporary and modern explanations for the popularity of possession in convents, and through these, we can see why so many demoniacs were in fact holy.
Oral Presentation: Room 301, 1:55 p.m.

Ryan D. Masters
Professor Ronald Delph
Separating the Men from the Boys: The Office of the Night and Male Homosexuality in Florence, 1325-1502.
During the first half of the fifteenth century, Europeans perceived Florence as a haven for homosexuality. However, perceptions of a homosexual society would be challenged by the Florentine government, the Signoria, when in 1432, a special council known as the Ufficiali di Notte, or Office of the Night, was tasked to check the spread of homosexuality in Florence. Why, during the period from 1325-1502, was the city government unable to control sodomy in Florence? I utilized contemporary religious speeches and the works of modern Florentine social and gender historians to show that the pre-existing practice of sodomy and homosexuality in Renaissance Florence was a deeply ingrained cultural practice that reinforced gender roles, and those who engaged in such activity denied the severity of its crime against God and society.
Oral Presentation: Room 301, 3:45 p.m.

Kate E. Morland
Professor Ronald Delph
Ladies Elect: Women and the English Puritan Movement, 1559-1642
The Puritan movement began in England following the Elizabethan Religious Settlement in 1559. "The elect," or "the godly," as they called themselves, adhered to a strictly

Reformed theology that had significant social implications. The woman's role within the Puritan family has become common knowledge; she was to be subordinate to her husband in mind and body, a firm mother to her children, and a pious Christian example. This paper asks why, amidst this seeming oppression, Puritan women were able to gain a place of societal importance in late sixteenth and early seventeenth century England. I utilized contemporary examples of female conduct found in letters, a marriage tract, and John Foxe's *Book of Martyrs* as well as the works of literary and gender historians. Three important Puritan values were able to elevate women: emphasis on individual salvation, the ability of any Christian to interpret scripture, and the aggrandizement of the family unit.
Oral Presentation: Room 301, 3:25 p.m.

Charlye D. Morley
Professor Ronald Delph
Divine Destruction: Iconoclasm in the Protestant Reformation
From crucifix to crèche, baptismal to altar, paintings and sculptural representations of religious events, the use of imagery in the Medieval European church was not only commonplace but expected. However, in the sixteenth century, religious art came under attack by the rapidly expanding Reformation. Influenced by fiery sermons and charismatic preachers, multitudes of Reformers stormed churches across Europe, axing altars, smashing sculptures, whitewashing frescoes, and even opening crypts to destroy bones and relics of Saints. These iconoclasts reduced innumerable works of ecclesiastical art to nothing more than shards of broken glass, crushed stone, melted metal, and splintered wood. This paper examines why Christians turned against centuries of tradition to wage war on images and icons that were formerly so central to their faith.
Oral Presentation: Room 301, 3:05 p.m.

Cara W. Owen
Professor John McCurdy
Fact, Fiction, Familiarity: Women in the American Revolution
Women played an active role in the American Revolution. While some fought on the front lines, many more were left to manage households and run the family businesses as men went off to war. This paper explores the role of women in the Revolution by examining portrayals of women in history and fiction. It begins by examining the experience of women during the American Revolution, how they responded to the circumstances of war, and their involvement in the war efforts. It then looks at the characterizations of women in novels, in particular historical fiction geared to young adults, in order to understand the ramifications of using novels to make history more accessible to a wider audience.
Oral Presentation: Room 301, 6:20 p.m.

Anna F. Pierre
Professor Ronald Delph
Sacred or Profane? The Survival of Venus in Renaissance Florence
When Christianity took hold of the Italian peninsula, images of the pagan deities, along with their worship, were forbidden. How then can one explain the revival of certain gods and goddesses, such as Venus, in art and literature of the Italian Renaissance? Despite the views of the church on paganism, this goddess was not suppressed. Neoplatonist humanists wrote about Venus, which kept her in the minds of their contemporaries. Ancient statues and images, as well as new creations by masters like Botticelli, were openly placed in spaces where they could be admired. Using a topical approach, this essay explores the reasons behind the survival of the pagan goddess, Venus, in the Christian environment of 14th-17th century Renaissance Florence.
Oral Presentation: Room 301, 2:15 p.m.

Victor R. Randolph
Professor Joseph Engwenyu
Fighting Women of Zimbabwe 1960 - 1981
The women of Zimbabwe, who participated in the struggle for independence, fought a war on two fronts. They battled Rhodesia for the collective freedom of the indigenous population while simultaneously grappling with local African customs that restricted the personal liberties of women. Although the former was successfully achieved by obtaining independence in 1980, the latter conflict was not favorably resolved for women. Wartime liberties afforded to female combatants were both equivocal and short-lived. The politics of local culture and tradition superseded the promise of true equality for women. More concisely, the fundamental structure of traditional roles between men and women were not significantly or permanently improved. Issues related to marriage, lobola, sex, and birth control were dictated by a society steeped in male dominance. Consequently, female combatants returning from the war re-entered a society that did not embrace the liberties they had known or values they aspired to.
Oral Presentation: Room 301, 4:35 p.m.

Lorinda F. Rausch
Professor Ronald Delph
He's Cheating On God! Clerical Marriage in Reformation England
The marriage of priests was outlawed in the Catholic Church in 1123. During the Reformation in Europe, Martin Luther and other reformers refuted this law and took wives. In England, celibacy of clergy was debated thoroughly. As power changed hands, so did the right of clergy to marry. Despite many attempts between the 1530s to the 1560s to enforce clerical celibacy, why was clerical marriage desirable to the people in Reformation England? In professing their vows, clergy were presumed to be married to the church and God, yet reformers argued for legalization of clerical marriage because it was desirable. Marriage provided an alternative to fornication and would promote family life, legitimatize children born to priests, and please God.
Oral Presentation: Room 301, 2:45 p.m.

Emily Robertson
Professor Joseph Engwenyu
Mothers and Amazons: Powerful Women in Pre-Colonial Dahomey
Palace women in the pre-colonial West African kingdom of Dahomey exercised power in a variety of ways. In the royal administration, every male official, including the king himself, was complemented by a female official, resulting in two parallel structures within the government. Even more extraordinary was their military presence. The same parallel structure existed within the army, with female officers commanding troops of maiden warriors drawn from the akhosi, the lower-ranking wives of the king. Why were women in Dahomey so active in politics and warfare? This paper will show that their empowerment stemmed from three factors: the cultural principal of dualism, the militant nature of Dahomean society, and the state of emergency resulting from Dahomey's rivalry with Oyo, its larger and more powerful neighbor.
Oral Presentation: Room 301, 4:55 p.m.

Michael J. Stout
Professor Steven Ramold
The Effectiveness of Nazi Propaganda
One of Adolf Hitler's primary concerns when he came to power was how to maintain the support of the German populace. He accomplished this using a revolutionary propaganda program focused on mass media that could reach the majority of Germans and give them information and speeches from Hitler and the Nazi leaders. However, as the war began to turn against them, the German populace began to lose faith in their leaders. In an attempt to rally the people, Propaganda Minister Joseph Goebbels initiated a number of changes to the propaganda, including changing its message to harden the Germans against defeat. These efforts seem to be effective, but how much is difficult to gauge. This thesis explores why, though the Nazis were losing, they continued to put so much faith propaganda, and even though the German people and military were losing faith in their leaders, they continued to fight.
Oral Presentation: Room 301, 5:15 p.m.

Kari L. Vaughan
Professor JoEllen Vinyard
The Joy of Learning: Memories from the Rural Schools of Nankin Township, Michigan
More than simply being structures in which children learned reading, writing, and arithmetic, our nation's early rural schoolhouses were the settings of experiences often remembered fondly and in detail by their former students. It is by means of such recollections, both positive and negative, that the historian may answer that most crucial question: How did the ordinary citizens of a certain locality live, and what can we learn from them? In the context of education, memories of former students not only provide insight into core values and the everyday needs of our predecessors; they are also indicative of trends in learning on the national level at the time and may serve in the betterment of education today. The recollections of students from the former Nankin Township (presently Westland, MI) are invaluable in these respects.
Oral Presentation: Room 301, 6:00 p.m.

David A. Washington
Professor Carla Damiano
Overcoming the Past: The Struggle of Two Second-Generation Holocaust Survivors
This project analyzes the literary works of two second-generation Holocaust survivors who have chosen to work through the struggles of their inherited past by writing about it. Lev Raphael and Art Spiegelman share commonalities in terms of how they came to grips with this heritage. Spiegelman's two-volume publication, *Maus*, deals with his Father's experience in Nazi concentration camps, as he "bleeds" his personal history. Raphael's autobiographic travelogue, *My Germany*, describes how he overcame his lifelong fear of Germans by traveling to Germany and encountering them firsthand. Both works shed light on the fact that though World War II ended more than six decades ago, the aftermath, for some, is still very much a part of the present.
Oral Presentation: Room 301, 6:40 p.m.

Department of Mathematics

Tanima Banerjee
Professor Tanweer Shapla
Analysis of a Multivariate Set of Data Using a Logistic Regression Model
A logistic regression model is a widely used analytical tool that allows a person to determine the association between a dichotomous or polytomous response variable and a set of predictor variables. In this technique, the logit transformation of the outcomes is used. Model selection procedures will be used by identifying the small possible set of predictors of the model, which will provide the "good" prediction of the outcomes. For the logistic model, Akaike's information criteria, Schwarz Bayesian criterion, and stepwise model selection such as forward and backward with the decision rule based on the Wald statistic will be used. After comparing the effects of above selection models, we have developed a "good" model of the response variable.
Oral Presentation: Room 300, 4:55 p.m.

Jason A. Voss
Professor Paul Howard
The Banach-Tarski Paradox and Weak Forms of the Axiom of Choice
In 1924, Stefan Banach and Alfred Tarski, expanding on work by Hausdorff, proved the remarkable theorem that a solid ball can be partitioned into finitely many pieces and rearranged to form two solid balls, each identical to the original ball. Since the rigid motions used in the construction preserve Lebesgue measure, which is finitely additive, it follows that some of the sets used in this construction must not be Lebesgue measurable. The paradoxical decomposition relies on the Axiom of Choice and is often cited as an example of the counterintuitive results provable using the Axiom of Choice. After explaining the approach of the proof in elementary terms, this presentation will examine whether the result can be proved using various weak forms of the axiom of choice and whether the counterintuitive nature of the paradox is stronger than the existence of sets of real numbers that are not Lebesgue measurable.
Oral Presentation: Room 300, 4:35 p.m.

Department of Music and Dance

Samuel Joshua
Professor Garik Pedersen
Aaron Copland: Piano Sonata
Aaron Copland, a great American composer of the 20th century, once said, "A piano work, in my case, (is written) when I am stuck with ideas that have nowhere else to go." His Sonata for piano (1941) seems to be somewhat a foreshadowing of the then-imminent World War II, expressing certain characteristics of wartime. Written in a traditional sonata form, the piece embodies a feeling of anxiousness with its tragic opening, mournful melodies, open chords, and bell tolls.
Oral Presentation: Room 208, 4:55 p.m.

Department of Physics and Astronomy

Tiffany C. Thompson
Professor Ernest Behringer
The Design, Construction, and Testing of Optical Tweezers for Trapping Microscopic Particles
Optical tweezers (traps) use the forces generated by tightly focused laser light to manipulate microscopic particles. Optical traps have been used to characterize the elasticity of DNA, study the shape deformation and recovery of red blood cells, and measure the motility of sperm cells. Using the trap design of Smith et al. as a starting point, I designed, constructed, and tested an optical trap apparatus. I will describe the development of the apparatus and the results of trapping experiments involving microscopic polystyrene spheres. Finally, I will discuss how these experiments can be used to determine the strength of the trap.
Oral Presentation: Room 330, 4:15 p.m.

Department of Political Science

Suzanna J. Boyce
Professor Joseph Ohren
Community Living Supports: A Brief Analysis of the Clinical and Financial Outcomes and Risks to the Consumers within the Washtenaw Community Health Organization
Community Living Support (CLS) is a residential setting program within the Washtenaw Community Health Organization's (WCHO) service area. Its objective is to provide consumers with mental impairments and developmental disabilities living assistance to gain more independence over time. Licensed Residential Settings (LRS) generally provide 24-hour assistance in a licensed care setting. This study addresses the issue of which setting provides greater clinical and financial outcome and discusses the comparative risks to consumers. The results showed that a consumer's setting had statistical impact on the average results of the Outcome Tool and whether one improved or maintained scores. The majority of consumers of CLS demonstrated an increase in hours authorized. CLS appears to be a greater financial burden to the organization based upon the money budgeted for each consumer. Based upon the analysis of recipient rights data, LRS had a higher probability of drawing complaints.
Poster Presentation: Room 310, 4:00 p.m.

Wendy E. Chandler
Professor Megan Endres
Using Information Technology to Facilitate Knowledge Sharing between Local Government Units in Oakland County, Michigan
This study examines the use of technology to facilitate knowledge sharing in Oakland County, Michigan. The study examined the opportunities that may be available to use technology in promoting knowledge sharing between the County and the cities, villages, and townships (CVTs) within the County. A survey was developed to examine the collaborative enterprises the CVTs have been or currently were involved in, the use or potential use of knowledge sharing, and the access to and use of information technology within the organizations. The literature reflected that the use of knowledge sharing was prevalent in local government as was the increasing use of technology to facilitate that knowledge sharing. The increased emphasis on the use of enterprise business processes in information technology was discussed. Opportunities for future research included the impact of further development of enterprise based applications to facilitate knowledge sharing and its use in local government. One limitation of this study included the lack of specific demographic information for the respondents. In addition, the majority of the responses were by officials and managers, leaving information by clerical, technical, or other workers largely unavailable.
Oral Presentation: Room 204, 3:05 p.m.

Department of Psychology

Tiffany C. Abrego
Professor Carol Freedman-Doan
Sex Talk: The Effect of Parents' Previous Sexual Experiences on Communication with their Adolescent about Sex
Past research has shown that when adolescents have comfortable conversations with their parents about sex, they are more likely to delay sexual debut, use condoms more consistently, and have fewer sexual partners. It has also been shown that the communication about sex between parents and adolescents is influenced by the parents' own beliefs and experiences. To date, there has not been an investigation of how or it parents' own early sexual experiences influence the kind of information they communicate with their child about sex and their comfort level in communicating. Using a sample of parents in the community, I will examine how parents' self-reported previous sexual behavior affects their communication with their own adolescent about sexual topics.
Poster Presentation: Room 310, 2:15 p.m.

Sarah M. Ahlfs-Dunn
Professor Alissa Huth-Bocks
Maternal Risk Factors Associated with the Trajectory of Early Infant Social-Emotional Difficulties
The present study sought to investigate how different maternal risk factors influence the trajectory of infant social-emotional difficulties during the first year of life. A community sample of 111 primarily low-income women participated in interviews during their third trimester of pregnancy and at 3 months and 1 year postpartum as part of an ongoing study on parenting. Correlational analyses indicated a significant, positive relationship between infant social-emotional difficulties at 3 months and 1year of age. Regression analyses revealed that risk factors central to mothers' personal well-being (i.e., intimate partner violence and maternal mental health symptoms experienced during pregnancy and the infant's first year of life) exacerbated the trajectory of infant social-emotional difficulties during the first year of life, whereas risk factors associated with the mother-infant relationship (i.e., maternal self-efficacy at 3 months postpartum and maternal parenting stress at 1 year postpartum) accounted for the stability of infant social-emotional difficulties during the first year of life.
Poster Presentation: Room 310, 2:15 p.m.

Maegan Calvert, Angela Joerin, Alexandra Busuito, and **Ana Tindall**
Professor Alissa Huth-Bocks
The Association Between Maternal Sensitivity, Infant Attachment, and Infant Social-Emotional Development at 12 Months
Attachment is a biologically-driven process whereby an infant looks toward a caregiver to ensure that his/her needs are met. This creates a sense of security for the infant. Since the work of Ainsworth and colleagues, maternal sensitivity has been considered an important pathway to infant security. Recent research indicates that babies with avoidant attachment are likely to perform worse on

language assessments, are likely affectively dysregulated, and show greater externalizing behaviors and less peer social competence. These studies indicate that there is a relationship between infant attachment and later social-emotional development. The present study sought to identify an association between maternal sensitivity, infant attachment classification, and social-emotional development in a sample of 120 primarily low-income families from diverse backgrounds.
Oral Presentation: Room 204, 1:55 p.m.

Jillian B. Carey, Kevin N. Alschuler, Lauren Hart, Bethany Gourley, and **Courtney E. Sprague**
Professor Flora Hoodin
When Do Hematopoietic Cell Transplant (HCT) Patients Feel a Need for Mental Health Services (MHS), and Why?
Little is known about HCT survivors' perceived need (PN) for MHS. This cross-sectional, online study of determinants of HCT survivors' PN for MHS examined a preliminary subset of 360 predominantly female, well-educated, and middle-aged HCT survivors. Via hierarchical multiple regression analyses, PN was regressed onto demographic variables and graft source, psychiatric diagnosis pre-transplant and retrospectively-rated PN pre-transplant, and social support and social constraint relative to the primary caregiver. Our models accounted for 30-40% of PN variance (p < .001). PN pre-transplant accounted for most PN post-transplant variance, followed by low social support and high social constraint. These findings suggest a) an empirically-guided approach to follow-up resource allocation through identification of patients with PN for MHS pre-HCT may improve patient care; and b) as quality of caregiver-provided support declines over time, patient care plans should consider proactively addressing communication patterns that elicit social constraint within the caregiver-patient relationship.
Oral Presentation: Room 204, 2:45 p.m.

Kristine Cramer and **Melissa Swartzmiller**
Professor Alissa Huth-Bocks
Maternal Depression, Sensitivity, Child Abuse Potential, and Parenting Stress as Predictors of Perception of Infant Emotion
A mother's ability to interpret infant emotions is crucial for healthy infant development. Research indicates that mothers who are depressed or at high risk for child abuse display poorer emotion recognition skills than non-depressed and low-risk mothers. Limited research exists regarding parenting stress and the perception of infant emotion. Participants in this ongoing longitudinal study included 120 low-income women transitioning to motherhood. Data from the first three waves (pregnancy, 3 months postpartum, and 1 year postpartum) of the study were examined. Correlational analyses indicated that child abuse potential, depression, and parenting stress were related to the perception of infant emotion. Additionally, more positive perceptions of infant emotions were related to greater observed maternal sensitivity. These findings suggest that predictors of maternal perception of infant emotion can be identified prenatally and postpartum and

are associated with maternal sensitivity. Implications will be discussed regarding interventions with high-risk mothers.
Poster Presentation: Room 310, 2:15 p.m.

Amanda Fezzey
Professor Carol R. Freedman-Doan
The Effects of Parental Discipline Practices and Parent-Child Relationship Conflict on Later Adolescent Alcohol Use
This study examined the relationships between parenting practices and parent-child relationship conflict in childhood and later adolescent alcohol use. Using data from Childhood and Beyond, a longitudinal study of child self-perception and achievement in a largely white, middle class population (n= 551), analyses will be conducted using parent survey data regarding discipline practices and parent-child relationship conflict from early elementary school and adolescent survey data regarding frequency of alcohol use from high school. Correlational and regression analyses will determine if parent-child relationship conflict moderates the relationship between parental discipline practices in childhood and alcohol use in adolescence. In addition, separate analyses will be performed for boys and girls and for mothers and father to determine how these relationships may differ by child and parent sex. Results and their clinical implications will be discussed.
Poster Presentation: Room 310, 2:15 p.m.

Bethany Gourley, **Jillian B. Carey**, **Kevin N. Alschuler**, **Lauren Hart**, and **Courtney E. Sprague**
Professor Flora Hoodin
How Can We Move Forward if We Don't Know Where We Are in Providing Mental Health Services (MHS) to Hematopoietic Stem Cell Transplant (HCT) Patients?
Despite many studies documenting psychological distress among HCT survivors, little is known about actual MHS utilization. Our online, cross-sectional study aimed to provide this information. Study participants (n= 478) were predominantly female, white, middle-aged, and well educated. MHS utilization was reported by 39.5% before, during, after or long-after HCT: 26.6% sought help before HCT, 11.9% during, 24.8% after, and 36.7% long after. MHS recipients received most services from social workers before (19.2%) and during HCT (20.3%), from support groups (13.2%) after HCT, and from both support groups (8.6%) and psychologists (8.6%) long-after HCT. Among MHS recipients, 57.7% reported using multiple professionals; psychologists were rated most helpful by 43%, followed by social workers (24%), psychiatrists (20%) or other providers ($\leq$7%). Our findings suggest MHS delivery may be enhanced by targeting service types to the unique needs of each stage in the HCT trajectory.
Poster Presentation: Room 310, 2:15 p.m.

Katherine L. Guyon and **Erin Gallagher**
Professor Alissa Huth-Bocks
The Influence of Maternal Well-being on Later Infant Affective Expression
Maternal well-being in the early years of a child's life may adversely affect the development of infant affective expression. The goal of the present study is to examine the effects of maternal well-being on later infant affective expression. Data for the current study were collected as part of a larger longitudinal study on women's transition to motherhood. Participants included a community sample of 120 primarily low-income pregnant women. Maternal depression was measured at 3 months postpartum (T2) and 1 year postpartum (T3). Maternal self-esteem was measured at T2, and social support was measured at T3. Infant affective expressions were assessed using coded observations from a free-play interaction with mothers at T3. Results are expected to increase knowledge for interventions designed to provide more adequate support for mothers who present with depression and low maternal self-esteem before and after pregnancy.
Poster Presentation: Room 310, 2:15 p.m.

Valentina Ivezaj
Professor Karen K. Saules
Medical and Psychological Predictors of Bariatric Surgery Completion
A psychological evaluation is required before Bariatric Surgery (BS) approval, but standardized BS evaluations are lacking. Thus, the PsyBari, a psychological test constructed for BS candidates, was developed. A sample of 480 bariatric candidates (predominantly White females) completed the PsyBari-II. Sixty-nine percent followed through with BS. Medical/weight history items and PsyBari-II items were analyzed separately. Obesity onset and number of different weight loss programs were significantly associated with BS follow-through. Both childhood obesity onset and increased number of attempted weight loss programs significantly increased the likelihood of BS follow-through. Psychiatric history decreased the likelihood of BS follow-through, while more extensive weight concerns and confidence in medical care increased the likelihood of BS completion. Findings suggest that relatively few questions in circumscribed domains predict BS follow-through. PsyBari-II data may shed light on which factors best predict post-surgical outcomes.
Poster Presentation: Room 310, 2:15 p.m.

Angela R. Joerin and **Maegan Calvert**
Professor Alissa Huth-Bocks
Maternal Prenatal Relationship Experiences and Post-Traumatic Stress Symptoms as Predictors of Postnatal Infant Classification
The quality of attachment experienced between an infant and his/her caregiver plays a crucial role in shaping that infant's attachment patterns in adulthood, including relationships with romantic partners and his or her own children. The association between a mother's experiences in close relationships and her own infant's attachment quality has been suggested. For example, negative maternal representations expressed through insensitive and problematic mother-infant interactions may be influenced by mothers' experiences during childhood or with romantic partners, as well as experiences with trauma. This presentation will examine the association between maternal prenatal romantic and non-romantic relationships experiences, post-traumatic stress symptoms, and infant quality in a primarily high-risk sample of 120 mothers and their one-year-old infants.
Oral Presentation: Room 204, 1:35 p.m.

Emily Kavanagh and **Amy Drayton**
Professor Michelle Byrd
Disciplinary and General Parenting Practices of Fathers
Time-out is an empirically established disciplinary procedure for reducing disruptive behavior among children; however, anecdotal data indicates that parents with no formal training in time-out often perceive it as being ineffective. This suggests a chasm between the commonly used and empirically established procedures that are both referred to as time-out. The goal of the current study is to expand the available knowledge regarding common use of time-out in order to identify ways in which it differs from the empirical procedure. Since the majority of the extant literature regarding parent-child interactions focuses on maternal reports, and an investigation of time-out knowledge has already been conducted with mothers, the current study focuses exclusively on paternal behaviors and beliefs. As a result, a secondary goal of the study is to provide descriptive data regarding typical parenting practices among fathers. As recruitment is ongoing, hypotheses and preliminary data will be presented and discussed.
Poster Presentation: Room 310, 2:15 p.m.

Kendra Kehl-Fie
Professor Dean Lauterbach
Health Care Utilization among Persons with a Lifetime History of PTSD
Research on naturalistic treatment utilization among people with post-traumatic stress disorder (PTSD) is limited. There is little research on the reasons that individuals with PTSD delay seeking treatment. Data from the National Comorbidity Survey-Replication (NCS-R) conducted in 2001-2003 were used to identify the reasons individuals with PTSD reported delaying treatment more commonly than individuals without PTSD. Results indicate that many people with PTSD delay treatment because they worry about what others would think, dislike the service options available, and found that previous treatment did not work. Reasons for delaying treatment among this group of people needs to be addressed both at the system and individual levels, as these individuals report poorer physical and mental health than those without PTSD.
Poster Presentation: Room 310, 4:00 p.m.

Andrea B. Kiss
Professor Steven Huprich
Object Relations Partially Mediates the Relationship between Emotional Dysregulation, Impulsivity, Negative Affect, and Borderline Personality Disorder
Research on the association of Borderline Personality Disorder (BPD) and poorly developed object relations (OR) is primarily correlational, and the relationship of object relations with other known predictor variables like negative affect (NA), emotional dysregulation (ED), and impulsivity (IMP) has not been assessed simultaneously so as to understand the interactive effect of these variables on the prediction of BPD symptoms. In a previous study we evaluated the sequential predictive strength of each of these variables in a nonclinical sample, and we found that the OR dimensions of Insecure Attachment (IA) and Social Incompetence (SI) fully mediated the relationship of NA,

ED, and IMP with BPD. In the current study we evaluated the sequential predictive strength of each of these variables in a clinical sample and the preliminary results suggest that object relations are partially mediating (β =.05, $p < .05$) the relationship between BPD symptoms and more biologically determined markers like ED, IMP, and NA.
Poster Presentation: Room 310, 2:15 p.m.

Kylene M. Krause, **Syreeta Scott**, and **Angela R. Joerin**
Professor Alissa Huth-Bocks
Multiple Predictors of Maternal Sensitivity across the Transition to Parenthood and Infant Social-Emotional Outcomes
A community sample of 120 women were recruited from public locations, primarily serving low-income families, to explore whether child abuse potential, knowledge of infant development, and self-reported frequency and intensity of parenting hassles predict observed sensitive maternal parenting behaviors. Results from Pearson correlations revealed a significant negative correlation between child abuse potential and later maternal sensitivity, r (104) = -.28, $p < .01$. Knowledge of infant development was positively correlated with maternal sensitivity, r (104) = .23, p < .05. In addition, the intensity of parenting hassles, but not the frequency of hassles, was negatively correlated with maternal sensitivity, r (99) = -.20, p < .05. Finally, maternal sensitivity was significantly negatively correlated with infant social and emotional problems, r (104) = -.25, p < .05. Regression analyses suggested that knowledge of infant development, child abuse potential, and intensity of parenting hassles are independent predictors of infant social emotional problems.
Poster Presentation: Room 310, 2:15 p.m.

Joni D. Krueger, **Julia Barta**, **Jessica Marsh**, and **Loni McQueen**
Professor Jin Bo
Strokes and Loops in Early Handwriting Development
The purpose of this study was to examine relationships between the ability to form strokes (letter "l") and loops (letter "o") in handwriting samples of children ages 5-12. Twenty-eight children were screened with the Movement Assessment Battery for Children and the Beery–Buktenica Developmental Test of Visual-Motor Integration. Data from 19 typically developing children were included for the current data analysis. Paired-t tests revealed significant differences (all P <.05) on movement time, travel distance, and spatial variability (CV on travel distance). The temporal variability (CV on movement time) was approaching to significance (P = .08). Correlation analyses suggested age-related differences on variability measures but not absolute movement time and travel distance. These findings suggest differential limb control development for writing strokes versus loops.
Poster Presentation: Room 310, 4:00 p.m.

Kelly E. Luce, **Natalie Morris**, and **Kristin Davenport**
Professor Renee Lajiness-O'Neill
Emotional and Behavioral Trends in Children across the Autism Spectrum
The purpose of this study is to explore the relationship between various measures, the Social Communication Questionnaire (SCQ), the Social Responsiveness Scale (SRS), and the Behavioral Assessment System for Children-Second Edition (BASC-2), in a community referred sample of children with autism (N = 85). A more specific aim of this study is to assess how autism severity, as measured by the SRS and SCQ, relates to other characteristics. Previous literature suggests that individuals with autism spectrum disorders (ASD) are more likely to experience comorbid emotional and behavioral difficulties than individuals without ASD. However, possible differences within the ASD population have not been explored. Therefore, this project will attempt to expand on the literature and explore whether statistically significant differences exist among individuals with varying severities of ASD. Similarities within this sample of children with ASD will also be identified.
Poster Presentation: Room 310, 2:15 p.m.

Natalie Morris, **Kelly Luce**, and **Kristin Davenport**
Professor Renee Lajiness-O'Neill
Demographic Patterns in a Community Sample of Children Diagnosed with an Autism Spectrum Disorder
The primary goal of this project is to examine the descriptive properties of a community sample of individuals diagnosed with an Autism Spectrum Disorder (ASD), referred to the Autism Collaborative Center. This study will further explore relationships among the Social Communication Questionnaire (SCQ), Social Responsiveness Scale (SRS), and the Behavioral Assessment System for Children-Second Edition (BASC-2). More specifically, the goal of this project will be to identify specific patterns of parent responses when compared to demographic variables such as gender, ethnicity, and socioeconomic status. Continuing to develop and identify certain profiles of individuals with ASD is important given the complexity and severity of this disorder, especially since it is becoming ever more common throughout the United States and other parts of the world. The goal is to expand our understanding of the characteristics of this local population so as to guide decisions about the development of treatment options.
Poster Presentation: Room 310, 2:15 p.m.

Amy Olszewski
Professor Renee Lajiness-O'Neill
Differences in Neural Activation During Magnetoencephalography (MEG) and Psychometric Measures of Social Cognition in Autism Spectrum Disorder (ASD)
This study examined psychometric measures of social cognition and areas of neural activation in individuals with Autistic Spectrum Disorder (ASD) compared to neurotypicals. Sixteen participants with ASD, ages 11-20, were examined and compared to age- and gender-matched controls. Social cognition was measured using standardized tests, including the NEPSY-II Affect Recognition and the Social Responsiveness Scale, a parent-report questionnaire. Neural activation was measured while participants completed joint attention (JA) tasks during magnetoencephalography (MEG). Consistent with the extant literature on JA and MEG, individuals with ASD had greater left hemisphere activation during joint attention gaze cues to faces, particularly in the occipital and orbitofrontal regions. Their performance on measures of social cognition will be reported. Correlations between specific psychometric tasks and brain region activation will also be explored, and significant findings will be explained.
Poster Presentation: Room 310, 2:15 p.m.

Melissa E. Pulcini, **Valentina Ivezaj**, and **Ashley A. Wiedemann**
Professor Karen Saules
Is Substance Use Disorder Subsequent to Bariatric Surgery Related to Weight Loss Outcome?
Recent findings suggest bariatric surgery patients may be at an increased risk for postoperative substance use disorders, but it is unknown how this condition may impact weight loss outcome. Data from 39 newly admitted inpatients at a midwestern substance abuse treatment facility with a history of Roux-en-Y gastric bypass (RYGB) surgery were analyzed. Participants had a mean age of 45.9 ± 9.2 years and an average excess weight loss (EWL) of $75.3 \pm 23.8\%$ at 6.4 ± 3.2 years post-surgery, a rate comparable to the 69-77% EWL reported in the general RYGB literature. There was a trend toward less EWL in participants with only alcohol diagnoses than those with drug or mixed substance use diagnoses ($68.4 \pm 22.1\%$ vs. $83.1 \pm 24.5\%$, $p < 0.07$). Substance use disorder subsequent to RYGB surgery does not seem to negatively impact weight loss outcome, but prospective or matched-controlled studies are needed to clarify this relationship.
Poster Presentation: Room 310, 2:15 p.m.

Summar Reslan and **Lauren Skilton**
Professor Karen K. Saules
College Students' Definitions of an "Eating Binge" Differ as a Function of Gender and Binge Eating Disorder Status
Binge eating disorder (BED) prevalence differs by gender. We investigated differences in "eating binge" definitions as a function of gender and BED status utilizing data from one university who participated in the 2010 Healthy Minds Study. The sample of undergraduate college students (n=969) was 64.0% female and 73.3% Caucasian and ranged in age from 18 to over 40. Relative to males with BED, females with BED more often mentioned loss of control when defining an eating binge. Among those without BED, females mentioned mood significantly more than males. Results suggest that the diagnostic emphasis on binge eating as involving "loss of control" may lead to heightened diagnosis of BED among females. In terms of public health consequences, however, it is overeating, not necessarily BED, leading to adverse consequences. Public health messages that convey binge eating as involving loss of control may not resonate with certain populations and, therefore, may be ineffective.
Poster Presentation: Room 310, 2:15 p.m.

Annette Richard, **Jillian Carey**, **Bethany Gourley**,
Kevin Alschuler, **Lauren Hart**, and **Courtney Sprague**
Professor Flora Hoodin
**Mental Health Services (MHS) for Hematopoietic Cell
Transplant (HCT) Survivors: Provider and System
Delivery Characteristics that Influence Satisfaction with
Care**
Little is known about the most effective format for MHS
delivery for HCT survivors despite professional
recommendations for vigilance and treatment of
psychological distress. This study aimed to inform effective
care by determining types of MHS with which survivors
are most satisfied. Participants were 153 survivors who
completed our online survey and reported seeking MHS
during or after transplant, in the hospital, the community, or
both. Of those who had multiple service providers,
significantly more indicated that their most helpful
therapist was community- rather than hospital-based (p
< .001). Satisfaction with MHS was significantly correlated
with ratings of how knowledgeable about HCT the therapist
was in hospital-based but not community-based MHS
(p<.001). Ratings of therapist knowledge were generally
more favorable in hospital- than community-based MHS.
These findings imply that consideration of setting and
therapist HCT knowledge would be important in
development of MHS systems of care for HCT survivors.
Poster Presentation: Room 310, 2:15 p.m.

Christopher R. D. Roberts
Professor Steven K. Huprich
**The Accepted or Rejected Friend Request: Social
Criticism and its Relationship to Pathological
Narcissism**
Narcissism is perpetuated by our desire to feel good about
ourselves; however, these needs can be significantly
affected by negative responses from others. Social criticism
or "narcissistic injuries" can provoke responses ranging
from rage and defiance to shame and humiliation. The type
of behavioral and affective response an individual
experiences when faced with criticism may be
conceptualized as a keystone differentiation between a
healthy and pathological level of narcissism. The present
study was a two-phase design, where non-clinical
participants from a large midwestern university were asked
to complete the Pathological Narcissism Inventory among
other measures online. Participants were then invited to
participate in the second, experimental phase of the study in
which they were introduced to a confederate and asked to
write a story about a memory when they felt proud of
themselves and something they accomplished. Participants
were randomly assigned to receive either extremely
positive or negative feedback from the confederate.
Following the feedback, participants were asked to
complete the State-Trait Anger Expression Inventory-2 and
the State-Trait Anxiety Inventory for Adults to record
scores of anger and anxiety respectively. Early results of
linear regression analyses demonstrated that the Grandiose
subscale of the PNI had a trend to predict increases in state
anger more efficiently than the Vulnerable subscale when
receiving negative feedback. However, the Grandiose
subscale was also better predictive of increases in state
anxiety than the Vulnerable subscale when receiving

negative feedback. Theoretical and clinical implications of
these findings are explored.
Oral Presentation: Room 204, 1:15 p.m.

Rachel M. Sienko
Professor Karen Saules
**The Relationships among Interpersonal Sensitivity,
Identity Impairment, and Binge Eating Disorder in
College Women**
Binge Eating Disorder (BED) is associated with adverse
consequences such as gastrointestinal problems and obesity.
BED shares some features with bulimia nervosa, but BED
does not involve compensatory behaviors such as purging.
Interpersonal sensitivity (IPS) and identity impairment have
been linked to bulimia, though little is known about how
these constructs relate to BED or binge eating in general. A
total of 297 female undergraduates completed an online
survey assessing weight, eating habits, depression, identity,
and IPS. Only three percent met full criteria for BED, but
eleven percent engaged in binge eating (consuming large
amounts of food accompanied by a sense of loss of control).
Binge eating was associated with high levels of both
identity impairment and IPS. The interaction of identity
impairment and IPS conferred additional risk for binge
eating. Results suggest that IPS and identity impairments
may play a role in the development of and treatments for
binge eating.
Poster Presentation: Room 310, 2:15 p.m.

Melissa D. Swartzmiller and **Kristine Cramer**
Professor Alissa C. Huth-Bocks
**Maternal Appraisal of Childhood Relationships,
Current Relationships, and Childhood Trauma as
Predictors of Maternal Sensitivity**
Several risk factors have been identified that predict
insensitive parenting behaviors, including a mother's
remembered relationship with her parents, child
maltreatment, and current adult relationship experiences.
Included are 120 primarily low-income mothers from
southeast Michigan in an ongoing four-panel longitudinal
study examining the transition to parenthood and the
evolving mother-child relationship. Results of Pearson
correlation analyses indicated that positive relationships
with parents in the mother's family of origin were related to
greater maternal sensitivity toward her infant. Regression
analyses indicated that avoidance in current close
relationships moderated the relationship between childhood
maltreatment and maternal sensitivity, suggesting that
discomfort being close to another individual exacerbates
the impact of childhood maltreatment on insensitive
parenting. Results of this study further exemplify the
importance of past and current relationship experiences on
parenting behavior and the mother-infant relationship.
Poster Presentation: Room 310, 2:15 p.m.

Anatol Tolchinsky
Professor Stephen Jefferson
**Problematic Video Game Play in a College Population
and its Relationship to Time Management Skills,
Motivation for Playing, and Game Preferences**
Research suggests that excessive video game playing
behaviors are associated with negative psychological and

social outcomes. To begin to clarify this relationship, I investigated a few potential mediators and moderators of this phenomenon. Specifically, using a cross-sectional, questionnaire approach, I assessed how player motivations for playing, impulsivity, time management skills, ADHD symptoms, and game preferences might be associated with problematic play symptoms. The results revealed that among 216 undergraduate participants, problematic video game play behaviors were correlated with reporting that one uses video games for stress relief (r=.61, p < .001), endorsing a preference for playing video games instead of real-life socialization (r=.56, p < .001), and being impulsive (r=.26, p < .001). As predicted, time management skills were found to moderate the relationship between the number of hours participants reported playing video games and problematic video game behaviors, but only for men. Finally, future treatment implications are discussed.
Oral Presentation: Room 204, 2:15 p.m.

Ashley A. Wiedemann
Professor Karen Saules
An Examination of Post-Bariatric Patients who Develop Problematic Substance Use after Surgery: New Onset Users Compared to Controls
Our laboratory has documented that post-bariatric surgery patients are overrepresented in substance abuse treatment programs. Notably, about half of such patients first develop onset of heavy substance use after surgery. We refer to these patients as New Onset Users (NOU's); this report will examine how NOU's differ from non-bariatric substance abuse patients (Controls, N=42). Despite no differences in current age, NOU's first used alcohol (33.37±13.47 vs. 18.18±6.66, *p* <.001), drugs (32.25±13.24 vs. 19.03±9.77, *p* <.01), became concerned about their substance use (41.94±10.97 vs. 27.45±13.50, *p* <.001, and entered treatment (44.18±10.38 vs. 34.19±14.95, *p* <.05) at significantly later ages than controls. NOU's also experienced a shorter latency from age of concern to age of treatment (1.71±1.99 vs. 6.74±9.16, *p* <.05). Results yield unexpectedly high rates of new onset substance abuse among post-bariatric surgery patients. Bariatric patients who experience new onset post-surgical substance use may differ from "typical" substance abuse patients and may have unique treatment needs.
Poster Presentation: Room 310, 2:15 p.m.

Department of Sociology, Anthropology, and Criminology

Nour Fakhoury
Professor Solange Simoes
Women in Jordan
Jordan has faced many obstacles when it comes to gender equality. Little or no participation of women in government, small number of women in the workforce, and violence against women are some of the issues that need to be addressed. The question remains: Why is Jordan, a country that has relatively made great strides at advancing and modernizing, still lagging behind some of its neighboring nation-states when it comes to the equality of women? An in-depth examination of Islam in Jordan as well as the prevalent tribal culture in Jordanian society has shed some

light on why women haven't been able to advance and why they continue to face much discrimination and violence. The existing governmental programs and non-governmental organization at the local and global level that have been making progress are discussed, as is further action that could be taken in order to promote gender equality in Jordan.
Oral Presentation: Room 304, 3:25 p.m.

Katie A. Martin
Professor Paul Leighton
Violence, Sexual Assault, and the Commodity of Women and Girls: A Content Analysis of Domestic Abuse, Rape, and Sex Trafficking in the Media
The media is a means of communication that has a powerful influence over how our social world is shaped. There are many depictions of violence against women within the media; the purpose of this research is to view and analyze a few of these depictions using content analysis techniques. Each of the three phenomena will be analyzed, with connections being drawn between them. Themes and dominant attitudes will be examined and discussed, including an analysis of their possible impact. With one in three women being abused in their lifetimes and the seemingly limitless increase in the sex trafficking industry, we need to discuss possible solutions along with an analysis of current steps that are being taken to curb the problem.
Oral Presentation: Room 304, 3:05 p.m.

Seyed R. Mirmajlessi
Professor Marilyn Corsianos
The Social Network and Police
While the social network has allowed for the continuity of social relationships in a global world, it has prompted fundamental changes in our criminal justice system. As social networks have experienced exponential membership growth rates over the last decade or so, the police have taken notice. Recently this has translated into law enforcement authorities employing social media sites such as Facebook, Myspace, and Twitter as another tool to combat, deter, and inform the public about crime. While the advantages of police using these social networking sites have proven to be plentiful, the fairly new, uncharted, and informal implementation process of this "new tool" has raised pertinent questions in the expansive field of criminology. I will explore this phenomenon, along with the potential abuses of power that could follow.
Oral Presentation: Room 304, 2:15 p.m.

Jessica Lynn Morgan
Professor Marilyn Corsianos
Wrongful Convictions: Analyzing the Police Role and Suggestions for Change
Wrongful convictions are a growing concern as the number of exonerees increases every year. As these numbers continue to grow, it is important to recognize the factors that lead to this miscarriage of justice. The police play a significant role and are responsible for multiple factors that can result in a wrongful conviction. Two case studies and the components that led to these wrongful convictions are discussed. Suggestions for change are encouraged to

prevent these miscarriages of justice. By showing that they are concerned and proactively taking action, police have the potential to remarkably lower the chances of wrongful convictions from occurring in the future.
Oral Presentation: Room 304, 1:55 p.m.

Crystal J. Muthleb
Professor Marilyn Corsianos
Racial Profiling
This research presentation will address how the practice of racial profiling creates mistrust and hostility toward the police among different ethnic groups within the community. The research defines racial profiling, the difference between racial profiling and criminal profiling, the experience of different ethnic groups, the public's perception, and efforts to end racial profiling, a discriminatory practice. Due to the frequency and consistency of racial profiling done to different ethnic groups, the police do not have credibility with the community at large.
Oral Presentation: Room 304, 1:35 p.m.

Stephanie M. Sherson
Professor Gregg Barak
Drug Policies in the European Union: How Prohibition and Decriminalization Affects Consumption, Trafficking, and Drug Related Crime
This presentation explores whether prohibition and decriminalization of illegal substances can make an impact on consumption, trafficking, and drug-related crime in the European Union. Throughout the decades, the EU has participated in several global drug conferences, voiced varying opinions, and signed several treaties. At the same time, each individual state has passed and modified their own drug laws resulting in very differentiating stances on the best form of control. With the increased usage and tolerance of soft drugs, marijuana, and decreased usage and intolerance of hard drugs, Ecstasy and Amphetamines, the drug trends are changing rapidly and, with them, so are the countries' opinions. Would a unified stance decrease crime and consumption? Or do the varying laws only work individually for their states and their population's beliefs?
Poster Presentation: Room 310, 2:15 p.m.

Robert John Zaremba
Professor Gregg Barak
The Conflict in Darfur: Calculation and Inadequate International Response
This paper begins with a historical overview of the tension in Darfur building up to the current genocidal conflict. After explaining the source of conflict in Darfur, the different methods of calculating the death toll are examined, primarily exploring the differences between the World Health Organization's Population Health Survey and the U.S. State Department's Atrocities Documentation Survey. The divergence between these methods is discussed, as is their effectiveness in calculating an accurate death toll. Next, the different approaches by the global community to intervene in the conflict in Darfur is discussed, citing specifically the inadequate international response. Finally, I will provide an overview as to the overall approach to the Darfur conflict, both in calculation and intervention, as well

as provide suggestions so that the global community can better supply an integrated response to future conflicts.
Oral Presentation: Room 304, 2:45 p.m.

Department of Women's and Gender Studies

Erika M. Behrmann
Professor Carol Haddad
Gender Queering the Video Game Player: An Analysis of Life Simulation Games in Terms of Gender and Queer Theory
Virtual gaming has drastically increased within the past decade, especially among the life simulation genre. A possible reason for the increase in sales of life simulation games is that players can virtually try on various gender identities. These games permit players to queer, or unorthodoxly mix, their avatar's gender because many of these games do not limit gender to a dichotomy. This presentation will start with an overview of the ideology of current queer theories in terms of gaming. Next, an analysis of how gender stratifications influence virtual gaming will be presented, followed by a discussion on how queer and gender theories can pertain to the life simulation game. The Sims 3 will finally conclude the presentation. The goal of this presentation is to allow readers to fully understand how the application of queer and gender theory to virtual gaming can have positive outcomes for both the player and society itself.
Oral Presentation: Room 304, 5:15 p.m.

Anna B. Brogan-Knight
Professor Deanna Mihaly
Pretty Ribbons and Black Eyes
In this paper I explore the history of two very successful awareness campaigns, the AIDS red ribbon campaign and the pink ribbon campaign for breast cancer awareness and how these campaigns differ from campaigns that attempt to bring awareness to violence against women. I briefly discus several violence-against-women awareness campaigns and highlight the various reasons they fail to garner the popular support and momentum that is characteristic of other campaigns, especially breast cancer and AIDS. Discussion of the attitudes, expectations, and proscribed gender roles in our culture will enhance understanding of the inability of the movements to break into mainstream popularity and efficacy. I conclude with possible strategies for success and a call to action.
Oral Presentation: Room 304, 4:15 p.m.

MaryAnn Kozlowski
Professor Beth Currans
Trauma in Virtual Spaces
Feminist theorists are known for exploring the implications of harassment in public spaces, such as the workplace and the street. However, there is less commentary on gendered harassment on the Internet. This particular type of harassment can be laden with death threats, vulgar language, and threat of bodily injury, yet it is not "in real life" so this harassment is often perceived to be less of a threat than other types of harassment. This paper explores cyber harassment in feminist Internet communities as a

source for experiencing trauma as well as reconciling trauma, as many feminists who publish on the Internet speak frankly about their experiences with sexism, harassment, and sexual assault. I utilize Ann Cvetkovich's theories about trauma in order to provide a framework for this discourse and contextualize these experiences. I explore particular feminist Internet communities and the interactions and harassment that take place therein.
Oral Presentation: Room 304, 4:55 p.m.

Rachel E. McCready-Flora
Professor Deanna Mihaly
Breaking Binaries of Sex Categorization: Implications for Sexuality and Gender
In analysis of sexuality and gender formation, feminist research relies upon a binary sex categorization of female/male. I argue that this dualistic understanding of sex is based on socially constructed criteria for categorizing human beings. Stepping outside this binary understanding of sex categorization is difficult for current theories of gender construction; gender construction typically corresponds to sex categorization, whether through traditional conceptions of female/male and feminine/masculine, or when discussing transgendered individuals' perspectives of the self through a binary of femininity/masculinity. Drawing from Anne Fausto-Sterling and other authors, I argue for a more intersectional approach to gender and sexuality. Such an approach gives us the tools to articulate a theory of gender and sexuality that dissolves reductive male/female categories that govern how we gather knowledge and create feminist theory. Breaking away from binary sexual categories will alter the way feminist research is conducted.
Oral Presentation: Room 304, 4:35 p.m.

Lisa J. Wharton
Professor Solange Simoes
Mexican Women of the Border/La Frontera: Experiencing a Grave and Globalized Contemporary Culture
The Mexican border region is an idiosyncratic place that can prove perilous for the women of metropolises such as Tijuana and Ciudad Juarez. Alternately demonized and romanticized, the reality of post-NAFTA border life for Mexican women entails remaining resilient within a hybrid culture replete with corruption and extreme examples of poverty, violence, and "male backlash." Globalization has rapidly created, as well as destroyed, several components of Mexican border culture. In its wake, the people who attempt to substitute economic misery with gross profiteering, and who misdirect their frustrations about an unjust economic system, inflict great harm upon the women of the border. While Mexican women have been somewhat empowered through the feminization of labor, other societal changes have proven detrimental. Given the binational economic, geographic, and political nature of the border, it would behoove Mexico and the United States to address the myriad problems with which Mexican women must contend.
Oral Presentation: Room 304, 3:45 p.m.

Department of World Languages

Nguyen T. K. Bui
Professor Wendy Wang
Language Learning Strategies: Choices and Perceptions of East Asian Students
This research proposal aims to identify the language learning strategies (LLSs) used by East Asian students of two different levels of oral English proficiency and to investigate the participants' perceptions on the LLSs useful for improving their English speaking skills in English as a Second Language (ESL) setting. Using a questionnaire adapted from Rebecca Oxford's (1989) Strategy Inventory for Language Learning (SILL) version 7.0 and a focused interview as the research instruments, this proposed study will collect data from East Asian students of beginning and advanced ESL speaking classes in the ESL program at Eastern Michigan University (EMU). The findings of this study will clarify if speaking proficiency and culture have any effects on the participants' choices and perceptions of LLSs and will give pedagogical implications for situated learning strategy instruction to help enhance the East Asian students' speaking proficiency in the ESL program.
Poster Presentation: Room 310, 2:15 p.m.

Katherine Coleman and **Aya Morihara**
Professor James Perren
Culture, Confidence, Community—Learning English while Volunteering
What opportunities does volunteering in a predominantly English-speaking community offer English language learners in terms of developing language skills and confidence in communication abilities, as well as raising cultural awareness? In this study, we explored the impact of participating in "real-world" experiences afforded by community service on a group of international student volunteers at Eastern Michigan University. Drawing on relevant literature and data collected from surveys and follow-up interviews, we examined the relationships between the students' volunteer experiences and their perceptions of their linguistic development, confidence in oral communication skills, and change in cultural awareness. Our findings and their implications for international students and teachers of English language learners will be discussed.
Oral Presentation: Room 352, 2:15 p.m.

Michael D. Collins
Professor Wendy Wang
Students' Perceptions of Video Feedback Using YouTube
YouTube found its way into the mainstream by showing clips of sneezing pandas, waterskiing squirrels, and pleas to leave Brittney alone, but increasingly, students have been finding its use creeping into their classrooms because of its educational benefits. Instructors teaching presentation skills have found YouTube to be a place where students have easy access to view their recorded presentations. Though research has shown video feedback to be an effective tool in fostering presentation skills, little research has been conducted which looks at how students feel about using it. This presentation will examine English language learners'

perceptions of video feedback on YouTube to improve their presentation skills in an ESL academic communications class.
Oral Presentation: Room 352, 2:45 p.m.

Nozomi H. Craft
Professor Hitomi Oketani
The Paths to Language Proficiency
This presentation analyzes the discourse of a non-native Japanese speaker in phonological, morphological, syntactical, semantic, and other perspectives. I will discuss what kind of distinctive features there are, how to assess a speaker's proficiency level, and how to bring him or her to the next level.
Oral Presentation: Room 352, 1: 55 p.m.

Kumiko Endo
Professor Hitomi Oketani
Discourse Analysis Using Modality of Non-native Japanese Speakers
This research aims to demonstrate contrastive differences in a procedure that Japanese and English native speakers undergo when they recognize events and express that using modality. Sasaki (1994) reports that learners studying Japanese as a second language use less modality in their speaking than native Japanese speakers do. Linguistic systems of Japanese and English consider events from different perspectives. While English tends to focus on subjects as an agent in events, Japanese emphasizes the situation itself in which the speaker is involved. Modality for judging facts—"youda" and "-rashii," for example— show up less in the speaking of novice students and these are modalities standing for the speaker's mental status, which are chosen by following the procedures of each speaker's native languages. This research would illustrate that shift of quantity of using modality in a discourse as learners proceed to more advanced level.
Oral Presentation: Room 352, 1:35 p.m.

Veronica S. Konglim
Professor Wendy Wang
Examining Cross-cultural Refusal in the Learning Environment: A Sociolinguistic Perspective
Language is often said to be not just a means of communication but also a means of building and maintaining relationships and harmony in the society. In cross-cultural encounters, native and non-native speakers of English often find themselves to be perceived as rude and impolite. In this session, the presenter reports on a case study investigating how two native English speakers of North American English and four non-native speakers of English from other parts of the world made refusals and how they were perceived by their interlocutors. It was worth noting that the two native speakers of English made refusal more directly and tended to mollify their refusals by suggesting an alternative. In contrast, the four non-native speakers of English tended to be indirect and indecisive, and when they did make direct refusals (which was rare), they hardly suggested any alternative. Findings of this study have implications for ESL curriculum development and instruction.
Oral Presentation: Room 352, 3:05 p.m.

Kimberly A. Kulhanek
Professors Carla Damiano and Margrit Zinggeler
Mastering the Past: Using Humor to Overcome Tragedy during and after World War II
Black humor, or gallows humor, is designed to cut to the core of the truth, however painful it might be. But when are victims, spectators, and perpetrators granted permission to make light of terrible situations that have occurred in the past? Joking about the Holocaust, arguably one of the greatest tragedies of the twentieth century, could understandably upset some people. Toeing the line between tragedy and comedy can be a dangerous thing. Can one find comedy in tragedy? This paper will examine collective German guilt and compare Jewish humor used as a coping mechanism during the Holocaust to recent German articles, books, and movies depicting Hitler and events of WWII in a humorous manner. Current generations of Germans reframe the war on their own terms and take possession of it in ways their ancestors could not by joking about Hitler and other taboo subjects.
Oral Presentation: Room 352, 1:15 p.m.

Sara E. Okello
Professor Wendy Wang
Motivational Factors Evident in Adult ELLS
What factors are most salient in motivating adult English language learners (ELLs) to succeed? Is there a correlation between the length of time the students study at the school and their motivational factors? This study seeks to answer these questions by analyzing the results of a survey performed on adult ELLs at a private language school in Michigan and by drawing on research related to this field. While Gardner (2004), Dörnyei (2008), and Wright and McGrory (2005) conducted studies on motivation in Canada, Hungary, and Northern Ireland, this study is unique because it focuses on international students learning English in the United States. The five motivational factors presented in this study include Instrumental Motivation, Social Interaction, Interest, Confidence, and Anxiety. This study yielded some surprising results that differed from the previous research, and the results and analysis of this study will be presented utilizing power point and handouts.
Oral Presentation: Room 352, 3:25 p.m.

Peter A. Stern
Professor Wendy Wang
Accent Recognition among Adult Chinese Listeners
This study addresses standard American English as a representative "World English" and focuses on perceptions of accent as an important component in pronunciation learning. Twenty-five Chinese listeners and ten American controls were asked to listen to a short English passage read by four English-fluent speakers: two Chinese and two American. The subjects were instructed to choose whether each speaker was Chinese or American, and to indicate why they thought so. Results indicate that Chinese listeners have some difficulty in discerning between accents in their L2 and that they attribute their distinctions between accents to a wide variety of phonological phenomena: primarily, to pronunciation of vowels and to word stress or intonation. This is in keeping with previous research. Students wishing to adjust pronunciation need to be taught what to listen for

in terms of both segmental and suprasegmental aspects of accent.
Poster Presentation: Room 310, 2:15 p.m.

College of Business
Department of Accounting and Finance

Melissa K. Zochowski
Professor Howard Bunsis
The Baboon (Papio anubis) as a Novel Model of Chlamydia trachomatis Pelvic Inflammatory Disease for Testing Intrauterine Contraception
Objectives: Pelvic inflammatory disease (PID) is a major source of morbidity and infertility. The influence of intrauterine contraception (IUC) on the pathogenesis of PID is unknown. To better understand the biology of PID and study its relationship to IUC use, we sought to develop a baboon PID model.
Methods: A prospective, randomized, dual-arm, controlled trial was conducted in baboons (papio Anubis), comparing single versus multiple cervical inoculations with a human serovar E, Chlamydia trachomatis.
Results: In both single and multiple inoculation groups, controls showed no evidence of clinical infection. In the single-inoculation group, all challenged animals showed clinical evidence of infection and 25% showed upper tract disease. In the multiple-inoculation group, all showed lower tract disease and 66% showed upper tract disease.
Conclusions: Baboons challenged with Chlamydia trachomatis demonstrate clinical and laparoscopic evidence of upper and lower tract disease. This model will facilitate future testing of IUC and PID development.
Oral Presentation: Room 330, 6:20 p.m.

Department of Computer Information Systems

Ivan Njunjic
Professor Stevan Mrdalj
Modernizing Database Management Classes with Microsoft SQL Azure
Database Management classes play a significant part in building up the foundation of Information Systems programs. Implementing the newest trends in lecturing methods can help to bring the "real world" business environment into classroom, but it can present challenging issues. Besides the software and hardware installation, other problems potentially come from provisioning, monitoring, or updating processes. Students are also limited to using resources only within classrooms and labs. The solution to these issues could arise from utilizing cloud computing services. Cloud computing provides highly scalable and unlimited resources, managed by an outside vendor, which are accessible to anyone using Internet. In this research, I am focusing on SQL Azure, which is Microsoft's cloud relational data service based on SQL Server. I will discuss how cloud computing can contribute to creating more successful up-to-date teaching methods, while reflecting on possible implementation issues and financial aspect of its utilization.
Oral Presentation: Room 300, 2:45 p.m.

Harshal R. Pujari
Professor Stevan Mrdalj
Dissemination of Business Intelligence Using SQL Server Reporting Services
Business Intelligence is an integral part of all successful businesses today. An important part of business intelligence solution is its dissemination to the end-users. This paper will explore use of the Microsoft SQL Server Reporting Services (SSRS), a complete enterprise-wide report management and distribution service, in the light of push versus pull dissemination strategy. SQL Server Reporting Services bridges the gap between static paper reports and interactive business intelligence tools. Reporting Services allows users to interact with reports, thus enabling them to find the exact information they want and generate the report suited to their needs. I also analyze various components of SSRS such as Report Manager, Report Catalog, Report Server, and Report Builder.
Oral Presentation: Room 300, 3:05 p.m.

Lawrence J. Van Wasshenova, Jr.
Professor David Chou
Knowledge Management Practices in a Virtual Social Network
As many organizations shift from manual labor workforces to knowledge workers, the management focus must shift as well to accommodate this change. This paper studies the creation of successful knowledge management practices by utilizing social network services and Nonaka's spiral of knowledge model. After addressing key knowledge management theories and Nonaka's knowledge creating scenarios, I examine various levels of knowledge spiral, essential organizational steps to foster knowledge creativity, and different organizational knowledge processes. The form of social networking is essential to this exploration, as are the steps to build a successful learning organization, including managing factors and activities an organization can use to enhance a learning environment. These factors will establish a positive environment where organizations can foster and encourage knowledge creation.
Oral Presentation: Room 300, 3:25 p.m.

Department of Management

Deborah L. LaLonde, Maria Farris, Aniseh Issa, Carla Perez and **Misty Sanchez**
Professor Megan Endres
Group Experience Effect on Emotional Intelligence
We conducted a survey of 38 EMU MBA students to identify whether more group project experiences in business classes led to a higher level of emotional intelligence (EQ), the ability to perceive, control, and evaluate emotions. Surprisingly, we found that students who participated in more groups, either at the undergraduate or graduate level, did not score higher on a test of EQ. In addition, gender and work experience did not relate to the EQ score. Although no relationships were found between group project experience and EQ, we suggest that future research should address other potential benefits.
Oral Presentation: Room 330, 7:00 p.m.

Lauri Young
Professor Christine Day
Detroit Region Aerotropolis
This session will describe in-depth the strategy used to develop the Detroit Region Aerotropolis. The structure involves two airports (Detroit Metropolitan and Willow Run) forming an interim structure called the Detroit Region Aerotropolis. The strategy is to form collaborative working relationships with the airport authorities, local cities, townships, and counties. The vision is to create a non-profit entity that will revive the economy of Southeastern Michigan. The goal of DRA is to leverage the assets of the Detroit region to create a world-class environment for business and people. This session will review the status and timeline.
Oral Presentation: Room 330, 6:00 p.m.

Department of Marketing

Alicia N. Anderson
Professor Matt Sauber
Domino's Pizza: Growing Sales with Technology
This case study examines the history and current state of Domino's Pizza in the competitive landscape in which they operate. Strengths and weaknesses are assessed along with restaurant industry opportunities and threats. A strong emphasis is placed on Domino's competitive edge in technological leadership with the Pulse Point-Of-Sale System. The foundation is laid for students reading the case to decide on what strategic direction Domino's should pursue.
Oral Presentation: Room 330, 6:40 p.m.

College of Education
Department of Leadership and Counseling

Thyagarajan V. Ammachathram
Professor David Anderson
Preliminary Findings about Student Life in Elite Public Higher Educational Institutions in India
This study identifies various institutional support services offered to quota-based students in the Indian system of higher education. I also look at socialization behaviors that affect the quota-based students' educational endeavors and examine the impact of institutional practices on these students. Bank's key concepts examined the background of quota students based on their performance at public institutions in India. Schein's organizational culture model helped the researcher understand various cultural variances of the quota and non-quota based students. Finally Fisher's three-stage model was adopted to analyze various socialization strategies by the students in the institution. The preliminary findings of this study on the faculty interactions with the student, fraternity atmosphere within the institution, recognized hazing process among students, hostel life, and various institutional facilities have provided a better understanding about elite public institutions in India. The study also recommends successful strategies to develop meaningful programs, to ensure improved graduation rates and help to gain better educational equity among students in the higher educational system of India.
Oral Presentation: Room 222, 3:25 p.m.

Amanda Bell
Professor Eboni Zamani-Gallaher
Patterns of Enrollment, Campus Climate Concerns, Access Services, and the Accommodation Process for Students with Disabilities within the Community College Context
The largest minority group in the United States is persons with disabilities. Increasingly, students with disabilities are attending higher education institutions. According to the U.S. Department of Education National Center for Education Statistics, in 2003, 11% of collegians identified themselves as disabled. There has been a 20 percent increase over the last 15 years, with 46% attending college by 2005. However, there is stratification in college attendance rates among persons with disabilities. Over the last two decades, more than half of students with disabilities attended community colleges, but much of the research related to this population has focused on four-year institutions. There is a dearth of literature on students with disabilities, and it primarily examines attitudes of non-disabled students and/or faculty regarding perceptions of students' disabilities as well as accommodations they receive at the post-secondary level. The aim of this presentation is to highlight patterns of enrollment, campus climate concerns, access services, and the accommodation process for students with disabilities within the community college context. Additionally, this presentation will endeavor to frame recommendations for policy, practice, and future research in addressing the segmentation of students with disabilities in post-secondary education.
Oral Presentation: Room 222, 4:35 p.m.

Chris J. Bonapace
Professors Eboni Zamani-Gallaher and Ramona Meraz-Lewis
Elder Learners in Community College
The U.S. Census Bureau reports that by 2030, twenty percent of the U.S. population, more than 70 million people, will be aged 65 and over. Current literature suggests that the aging baby boomer population will be exploring greater educational, social, and leisure opportunities than past generations and will be seeking these opportunities on college campuses, specifically community college campuses. Older adults participating in college have a variety of needs and interests including, but not limited to, training for encore careers, skill development, and leisure. This poster presentation will explore the elder learner, or "third age" student. First, the presentation will illustrate the current programmatic offerings for elder learners in the community college setting. Then, it will highlight key agencies that support learning ventures for older adults. Finally, the presentation will conclude with suggestions for future programmatic offerings for older adults at community colleges.
Poster Presentation: Room 310, 4:00 p.m.

Emily A. Compton
Professors Sue Stickel and Yvonne Callaway
Impact of Therapeutic Riding on the Well-Being of Older Adults
Successfully aging or maintaining high quality of life as a person ages means that the individual feels better, functions better, and lives as independently as possible. Older adults are facing challenging life transitions such as menopause, retirement, and caring for ailing parents. Greater self-efficacy and increase in positive affect can be protective factors that minimize negative impact of stressful experiences. Horseback riding has been widely used as a therapeutic tool and has been shown to reduce stress and feelings of anxiety as well as increase feelings of happiness in certain populations. The current study proposes to investigate the impact that therapeutic riding can have on older adults using the psychological well-being scales (PWB), general self-efficacy scale (GSE), and positive and negative affect schedule (PANAS) to measure psychosocial factors that contribute to well-being, as well as an interview to better understand the subjects' experience in the program.
Poster Presentation: Room 310, 4:00 p.m.

Amy D. Deitrickson
Professor Ella Burton
Michigan's Response to the Post 9-11 GI Bill: Supporting the Education of Veterans
The new Post 9-11 GI Bill offers unprecedented benefits to today's veterans. As a result, the number of student veterans on campuses across the nation is expected to increase significantly. To help this population fully take advantage of these funds, colleges and universities need to be prepared by recognizing and providing the specialized academic and social support needed by many student veterans. Numerous state governments, universities, and colleges are making robust efforts to provide programs that attract and support student veterans. This presentation focuses on the importance of providing these resources and what Michigan and its institutions of higher education are doing to address the needs of this growing population.
Oral Presentation: Room 222, 3:05 p.m.

Jimmy L. Dolson
Professor David Anderson
Organizational Fidelity: A Variable to Balance Efficiency and Effectiveness in Schools
All schools must operate within an economic reality while remaining legitimate in their communities. In operational terms, schools must be efficient with their resources while accomplishing the community's purposes for the school. Balancing multiple organizational variables is not easy. Organizational theorists maintain that rationalization of variables such as efficiency and effectiveness is a constant tension that all organizations struggle through. This research engages organizational fidelity as a means to help K12 religious schools balance this tension. For this research, fidelity of school employees is a measurement of loyalty and commitment to the school's purpose. This research suggests that high fidelity by employees to the school's purpose will create the proper balance between efficiency and effectiveness.
Oral Presentation: Room 222, 3:45 p.m.

Michele Doughty
Professor Jaclynn Tracy
Multiracial Students in Higher Education: Data Analysis & Student Support
Multiracial Americans are among the country's fastest growing demographic groups. The 2000 Census, for the first time in U.S. history, allowed Americans to check multiple boxes. Approximately 6.8 million people identified with more than one race; 42% of them were under age 18. Given this trend, institutions of higher education should collect, report, and analyze data to monitor academic success and retention of multiracial students. Since college is a time of self-exploration and identity formation, it is essential that postsecondary institutions also provide a supportive environment to multiracial students. I will examine whether colleges and universities that consistently collect and analyze the number of multiracial students are more likely to have multiracial student organizations to determine if there is a connection between institutional awareness and student support.
Poster Presentation: Room 310, 4:00 p.m.

Stacey M. Fenton
Professor Eboni Zamani-Gallaher
Towards Understanding: Why Graduate Students' Perceptions of Affirmative Action Matter
As graduate students contribute to the academe through research activities and undergraduate teaching experiences, the need for cultural competency and Affirmative Action awareness becomes apparent as students prepare for work in a multicultural environment. The current presentation is based on preliminary research primarily focused on the connections between income level, self-identified race, and gender on self-perceived and expressed cultural competency levels. To this end, the presenter will highlight literature on student perceptions of Affirmative Action policies, cultural diversity curriculum impact on graduate student competency, and how educators can enrich graduate level coursework to prepare students for engagement in a pluralistic society.
Oral Presentation: Room 222, 4:55 p.m.

Inna Gorlova
Professor David Anderson
Impact of Globalization on Higher Education
This presentation exploits different concepts related to the transformation of higher educational institutions to business-like organizations on the global scale. The researcher considers globalization as economical, political, cultural, and technological/informational trends that impact higher education and create causes for educational institutions to compete in the market and seek ways to survive. The McDonaldization concept developed by George Ritzer (1999) is tested to explain the rationalization of the transformational processes that occur in higher educational institutions. This presentation is one of the steps for the researcher to better understand the threat of the dehumanization of education through the transformation of educational institutions to business-like organizations. No empirical data were collected for this study.
Poster Presentation: Room 310, 4:00 p.m.

Heather Gray
Professor Irene Ametrano
Effective Counseling Interventions for At-Risk Adolescents
The term "at-risk adolescents" most often refers to adolescents who are at risk for school failure and, more specifically, low grades, poor attendance, and frequent discipline problems. In community settings the definition is expanded to include environmental factors such as low socioeconomic status, single parent homes that lack support for developmental needs, dangerous neighborhoods, and dysfunctional families. This poster session focuses on factors that must be considered in developing effective counseling interventions for at risk youth. Two types of effective interventions, mentoring and group counseling, were examined in the literature review. Within mentoring, this review looks at community and school mentoring programs, highlighting the characteristics of successful programs. With regard to group therapy, this review will look at school-based group counseling and what impacts its effectiveness.
Poster Presentation: Room 310, 4:00 p.m.

Leslie Homier
Professor Dibya Choudhuri
Does Age Really Matter?
The relationship between age and age perception is explored through the use of survey data. Survey data that were gathered from participants of varying ages are discussed, which includes a look at answers to such questions as what is the perfect age and what is the worst age to be. The data are then related to the field of counseling as the relationship between client developmental stage and common concerns brought to counseling is discussed using client case studies.
Poster Presentation: Room 310, 4:00 p.m.

Saroya Jamal
Professor Dibya Choudhuri
Military and Veteran Student School Choice
This study examined military and veteran students' reasons for choosing to attend Eastern Michigan University (EMU) as well as their financial support and return. The top three reasons for attendance were location, cost, and faculty/staff at EMU. The overwhelming majority of participants indicated using GI Benefits to pay for attendance and indicated they would be returning to EMU for the next school year. A majority of those who responded they would not be returning indicated that they were graduating. One reason for selecting EMU was the acceptance of transfer credits, so keeping this policy may continue to attract military and student veterans as well as other transfer students. The findings confirm that military and veteran students enroll at EMU because tuition is reasonable, proving EMU should continue to offer competitive tuition rates.
Oral Presentation: Room 222, 6:40 p.m.

Stephen Laatsch
Professor Ella Burton
Response to Intervention: Literacy in the Early Grades
This field-based research study was developed as a tool to help schools implement a Response to Intervention (RTI) Model. Based on the research that has been conducted, the material in this study should help districts understand how and why an RTI model should be administered at the early elementary levels. This study will help school districts understand the appropriate steps that should be taken in order to effectively begin using an RTI model to benefit students in the area of literacy.
Oral Presentation: Room 222, 2:45 p.m.

Ramona B. Meraz-Lewis
Professors Eboni Zamani-Gallaher and Valerie Polakow
A Community of "Interested, Interesting People": Exploring the Culture of University-Linked Retirement Communities
This presentation highlights findings of a dissertation study that explored the culture of university-linked retirement communities (ULRC). One of the innovative ways that learning in retirement is being addressed is through the practice of ULRCs. ULRCs are designed and built for retirees who want to enjoy living near or on a college campus. Offering a retirement living experience focused on the scholarly and the social, the concept is one that can meet the needs of both retirees and the university community. This qualitative study utilized an interpretive, ethnographic approach with site visit observations conducted at three distinct ULRCs located in the Midwest, Northeast, and Southern regions of the United States. Thematic findings were synthesized through thematic analysis of 55 in-depth resident interviews, shadowing residents in their communities, and attending ULRC activities. The presentation uses narrative from one particular community to highlight the distinctive and sometimes selective culture of academically-oriented retirement communities.
Oral Presentation: Room 222, 4:15 p.m.

Charles L. Muwonge
Professor James E. Barott
Ecclesiastical Governance: A Case Study of an American Catholic Seminary
This research examined ecclesiastical governance and mechanism of control in the seminary. The study was historical in nature and had a longitudinal scope focused on events and circumstances leading to the institution of Tridentine seminary decree, evolution of the seminary in the United States, and adaptations, changes, and the persistence of the U.S. seminary in changing times. Findings show that governance and control mechanisms in the seminary are situational, differentiated, and dependent on the environment. Tridentine norms and structures pertaining to governance in the seminary have been negotiated depending on prevailing environmental circumstances.
Oral Presentation: Room 222, 6:00 p.m.

Jeffrey Porter
Professor Elizabeth Broughton
The Concept of a "Team": Examining the Subcultures and the Use of Artifacts to Define Behavior among Intercollegiate Athletes
This study explores how various subgroups, peer groups, and culturally marginalized groups act and interact with one another on the University of Michigan's Women's Track & Field team. While conducting a qualitative study, I uncovered cultural artifacts that define this team. Within each of the cultural categories lies a complex network of smaller subsystems, in which members of this team divide themselves based on common interest, like, or dislike of another subsystem. I explain how this cybernetic system of groups functions, acts, and interacts with one another to create a single Division 1-A women's intercollegiate athletic team. Finally, I describe how the espoused values of this team have transformed from basic assumptions that now go unchallenged by its members.
Poster Presentation: Room 310, 4:00 p.m.

Marie M. Rosemond
Professor Eboni Zamani-Gallaher
Subjective Well-Being and Recent College Graduates
As recent college graduates emerge into adulthood, many experience the phase of post-graduate status as daunting. This may be particularly true for the millennial/Generation Y age cohort as they are often portrayed as brash, smart, unconventional, and tech savvy. The current economic climate has adversely altered career advancement across many age groups. However, arguably the young, novice professionals presently hitting the job market face unique challenges in navigating the waters that will remove employment stalemates and springboard their career trajectories. The purpose of this presentation is to call attention to the barriers of recent Gen Y college graduates. More specifically, the proposed study will highlight issues of subjective well-being (i.e., job and life satisfaction) of recent college graduates competing during an economic era influenced by the recession 2007-present. Finally, the presenter will explore how millennial graduates are making sense of life after college, job search strategies, and transition into full-fledged adulthood in the ever-competitive global knowledge economy.
Oral Presentation: Room 222, 2:15 p.m.

Chelsea E. Smith, Teresa Anne Stapleton, Lauren T. Fields, and **Johnnetta Bell**
Professor Eboni Zamani-Gallaher
Community College Programming For Adult Students
A team of student researchers at Eastern Michigan University, interested in learning about programming available to the growing population of adult learners on community college campuses nationwide, conducted a multidimensional research project combining literature research with data that they gathered via qualitative interviews at community colleges located in Southeastern Michigan. Common themes emerging from the literature suggest that programming for adult learners should address barriers such as the demands of personal roles, the stress of unemployment, their changing metacognitve processes, and often their need for remediation. The field research

conducted by the students found that most do provide various supportive resources for the adult learner, but some colleges are more effective than others. The team of researchers provides a short synopsis of observations made at local community colleges and offers recommendations for the improvement of programming to better support adult students.
Poster Presentation: Room 310, 4:00 p.m.

Teresa Anne Stapleton, Jennifer Janicek, Sharon Morelli, Kelsey Alexandra Boyer, and **Astrid Soria**
Professor Marlena Bravender
Higher Education in Finland
While Finland's system of comprehensive public education is world renowned, the successes of its higher education system are not meeting the caliber of this precedent. Contributing factors to this deviation in performance include the lack of international focus by institutions of higher education, public conflict on the purpose and expectations of higher education, and the inability of students to be mobile throughout their educational experience. The Finnish Ministry of Education and Culture has become aware of this gap in achievement and, as such, has outlined an extensive policy emphasizing the internationalization of Finland's institutions of higher education and the privatization of institutions, all in the name of promoting global competitiveness. The evolving Finnish system of higher education aims to become relevant on a global scale, enabling Finland to improve the education of their citizens and to advance the status of their current economy.
Poster Presentation: Room 310, 4:00 p.m.

Ana K. Tindall
Professor Suzanne Dugger
Attachment with Institutionalized Children in South Africa
In this presentation, preliminary work with Institutionalized children in South Africa will be explored through an attachment lens. The work conducted in South Africa involved direct interactions with children living in orphanages and involved specific attention to the relevance of attachment theory. Research has shown that children who are securely attached to a caregiver develop into adults who are better able to handle emotions, build loving relationships, and work productively as a member of society. Children who do not experience a relationship with a secure attachment figure often find themselves, as adults, unable to handle difficult situations and have unstable and unhealthy relationships. Zeanah and colleagues (2005) found that children who live in institutions and are able to have a strong and secure relationship with a caregiver are similar to children who are raised by a biological parent.
Oral Presentation: Room 222, 7:00 p.m.

Elizabeth Zollweg
Professor Ron Flowers
Politics in Higher Education: Understanding the Political Frameworks of Decision Making in a University Setting
The purpose of this paper was to analyze and understand the organizational change and decision-making process demonstrated by the transition of the Department of Recreational Sports from the Division of Athletics to the Division of Student Affairs at the University of Michigan. The importance of understanding this change was to assist in the navigation and development of professional and leadership capabilities in the department in which the researcher works. A qualitative approach was utilized based on the conceptual and political frameworks of organization theory, specifically the Rational Choice Model. The Rational Choice is based on the assumptions there is a unified purpose characterizing the entity to take action. The tentative findings from this study suggest the transitional change was suitable based on a number of factors, including direction and purpose of mission statements and the services offered for targeted audiences. The study also revealed the challenges and benefits of organizational change within the university setting.
Oral Presentation: Room 222, 6:20 p.m.

Department of Special Education

Michele R. Alvarez
Professor Karen Carney
Students With Disabilities: Can Canines Make a Difference in Academic Achievement?
Students with disabilities often benefit from unique strategies that support them in their school success. Evidence shows that pet therapy programs such as Reading Educational Assistance Dogs can be very effective in increasing students' reading scores and helping to build confidence while reading. This presentation shares the highlights of research on pet therapy, the benefits of such a program with students with disabilities, and how to develop guidelines for establishing such a program.
Oral Presentation: Room 222, 1:55 p.m.

Julie K. Bennett
Professor Sarah Ginsberg
The Perceived Credibility of Graduate Students in First-Semester Clinical Roles as Seen by Parents of Clients with Speech and Language Disorders
This study will explore the perceived credibility of graduate students in their first semester of clinical experience. The perceptions will be obtained from the parents of the children who are receiving services in a university clinic setting. The data will be collected via semi-structured interviews of the parents. The information that emerges from the interviews will be collected and analyzed for content and themes. Implications of this research include understanding the personal and perceived credibility of graduate students in their first experience with clients, the training that might lead to further skill development, and qualities in clinicians that produce more perceived credibility from a parental perspective.
Poster Presentation: Room 310, 2:15 p.m.

Casey Harhold
Professor Phil Smith
Understanding Perspectives of Inclusion Through Photovoice
This project examined the varying viewpoints of inclusion for students with disabilities in general education classrooms, through the creation of narrative photographs produced by professionals in a special education student's life, including general educator, special educator, related service providers, and principal. Participants took photographs that represented their perspective of inclusion in public school settings, answering the question, "What does inclusion mean to you?" In addition, they wrote narrative descriptions of their perspectives. Photographs and narratives were analyzed, using photovoice and narrative analysis techniques, with an eye toward understanding the differences and similarities between the roles assumed by different educators. The impact of positive and negative attitudes on the effective implementation of inclusive classrooms was explored. Dual general and special education systems represented through photos and narratives were noted. The use of photovoice techniques as a way to understand meanings of inclusion and disability for educators was also examined. Implications for classroom teachers, school change initiatives, and teacher education are discussed, along with the utility of alternative research representation.
Oral Presentation: Room 208, 5:15 p.m.

Ruth P. Salles
Professor Phil Smith
***Purple Martin*: A Collection of Short Stories and Poems**
All humans are alike in that typically we are atypical: even identical twins are separate and unique individuals. If no two people are identically similar, then who is there to compare ability against disability? *Purple Martin* is a collection of short stories and poems intended to illustrate disability as a concept that cannot define anyone. All writing within this compilation is original, though inspired by a number of outside sources having some relationship to people with disabilities and their families. The book also contains original photographs, each one carefully chosen from hundreds of images to best suit the writing. In producing this work, it was found that disability is nothing more than perception, which differs greatly from person to person. Self-perception has a huge effect on how we are viewed and treated by others, but ultimately we must be comfortable with ourselves to obtain fulfillment.
Oral Presentation: Room 222, 1:15 p.m.

Kenneth D. Schuman
Professors Sally Burton-Hoyle and Phil Smith
The Effectiveness of Objective Third Parties to Advocate for the Full Benefits of Special Education on Behalf of Children with Disabilities
IDEA's procedural safeguards emphasize parental advocacy and parents and teachers working together to advocate for the full benefits of special education for a child with a disability. However, this emphasis is flawed. IDEA mistakenly presumes parents have the same knowledge and resources as schools to be able to effectively advocate on behalf of their child. Also, schools

must consider financial and resource constraints when determining necessary and appropriate services for a child with a disability. One way to address these procedural safeguard flaws is to provide an objective third party with expertise about special education and public school systems. The purpose of this project is to provide qualitative and/or quantitative research on the effectiveness of objective third advocacy services.
Oral Presentation: Room 222, 1:35 p.m.

Department of Teacher Education

Jennifer N. Conrad-Quedado
Professor Patricia Pokay
Motivation and Goals Towards Mathematics
Motivation is an extremely important determinant in our behavior. The purpose of this review of research was to explore the relationship between motivation, achievement goals and their effect on performance in mathematics. Higher achievement motivation is more likely to support all types of achievement goals -- goal orientations, in turn, help to explain how students approach, engage in, and respond to different achievement situations. In addition, math anxiety is often used to explain math avoidance and poor performance within a classroom. This presentation will review the research tying these concepts together.
Oral Presentation: Room 352, 6:20 p.m.

Marguerite C. DeBello
Professors Robert Carpenter and D. Marty Raymond
A Pilot Study: RN BSN Students' Health Literacy Knowledge and Application to Practice
In the last decade, health literacy research has demonstrated a strong link between health outcomes and educational interventions. Nursing is the primary source of health education for adults. Despite health literacy issues being identified as a priority in Healthy People 2010, there is little information on knowledge levels and awareness of health literacy among nurses. A descriptive study was conducted with 29 RN to BSN students in a southeastern Michigan university nursing program. The research questions are 1) What is the health literacy knowledge of RN to BSN completion students? and 2) Do RN to BSN students apply their knowledge in practice? Preliminary results indicate the majority of the participants have not received health literacy education at either school or work, and more than 80% do not assess patients for health literacy. The major implication of the study is that if nurses do not understand health literacy, they cannot teach patients appropriately.
Oral Presentation: Room 352, 6:40 p.m.

Regina M. George
Professor Valerie Polakow
Factors of College Success for Urban Students
College students encounter many adjustments during their first year or two of attendance. Those who graduated from urban high schools may have some unique challenges. How do these young people experience the environment of a university? What contributes to the success of those who persist and continue beyond their first or second year? Second- and third-year students who graduated from urban

high schools and have persisted at a university are interviewed one-on-one. The attributes, characteristics, and influences contributing to their success are considered.
Oral Presentation: Room 352, 4:55 p.m.

Clayton W. Hall
Professor Valerie Polakow
Exploring Participants' Meanings of Confirmation and Disconfirmation within the Educational Encounter: A Pilot Study
Using the philosophical writings of Martin Buber as a launching point, this pilot study presents a phenomenologically-oriented exploration of the relational terrain that permeates the educational environment. Sstudent experiences of confirmation and disconfirmation were considered in an attempt to establish the significance of such encounters to the meanings students constructed about school. The results of the study, coupled with the dearth of qualitative research on confirmation in the educational setting, suggest it is a phenomenon of consequence for student perceptions of learning and is thus deserving of the additional qualitative inquiry.
Oral Presentation: Room 352, 5:15 p.m.

Theresa M. Haskins
Professor Patricia Pokay
Supporting Motivation to Learn for Students with Autism
The reported increase in children diagnosed with an autism spectrum disorder (ASD) has led to the growing number of ASD students now in the general educator's classroom. This paper presents recent motivation to learn research in relation to children with high functioning autism (HFA) in the general classroom. It synthesizes studies on teaching techniques designed to help children with autism learn academics. General education teachers can overcome the social and behavior impairments inherent in students with HFA if they effectively structure their classroom and delivery of instruction in ways that encourage the HFA students' participation and support their motivation to learn. Modifications and strategies for teachers to integrate as part of the permanent structure of the general classroom are presented, including new forms of classroom management, instructional supports, and motivational strategies.
Poster Presentation: Room 310, 2:15 p.m.

Stephanie A. Hawkes
Professor Patricia Pokay
Student Perceptions of Discussion Threads and Interaction in Online Courses
As the number of students who opt for online courses increases, so does the number of issues that accompany this new form of learning: the prevalence of cheating, best practices, the value of an online degree, and the pros and cons of various online environment platforms. While these are all areas of concern, it is important not to lose sight of how students perceive the level and quality of instruction they receive. Through the use of online surveys distributed to Eastern Michigan University students, the researcher investigated student perceptions of discussion threads in online courses while simultaneously soliciting suggestions for improving student-to-student and student-to-professor

interactions. It is hoped that the results of this study will spark additional research exploring how online learning can be more interactive and interesting for students.
Oral Presentation: Room 352, 6:00 p.m.

Kaitlyn E. Hill
Professor Toni Stokes Jones
Digital Whiteboards and Third Grade Math Achievement
The purpose of this research study was to determine whether interactive whiteboards have an effect on student achievement in the area of third grade mathematics within one specific school district. This study took a quantitative experimental approach, utilizing a pre-test, lesson, and post-test on the same mathematical topic. The control group of third graders was taught a lesson using traditional means, while the experimental group experienced the same lesson using an interactive whiteboard. Results showed essentially no measurable difference between the two groups.
Poster Presentation: Room 310, 2:15 p.m.

Dawn M. Izzi
Professor Douglas Baker
"De-Centering" the Teacher: Preparing At-Risk Students as Writers
At-risk students are afraid of failing yet often lack confidence and supportive environments to succeed academically. These students are typically unmotivated by grades or behavioral expectations, grow bored and restless easily, are not prone to respect authority, and do not master social practices of school. Consequently, they are unable to take academic risks and grow as readers and writers. This paper examines how English teachers can create literacy communities that encourage at-risk writers to engage in the writing process, and how teachers can also respond to the emotional needs of this population while maintaining academic integrity. A case study is used to explore how one teacher examined her unconscious and underlying beliefs that fueled her pedagogy. A process of "de-centering the teacher" is described, and the case study demonstrates how the teacher designed an atmosphere that invites even the most reluctant writers into a supportive community.
Oral Presentation: Room 352, 3:45 p.m.

Bethany J. Lawson
Professor Patricia Pokay
Goal Theory and Transition to Middle School
This presentation looks at goal theory as a factor of motivation for adolescents who are transitioning to middle school. Literature that revealed the effects of different goal orientations on the motivation of students in elementary and middle school was examined. Analysis of previous research revealed that when the school, teachers, and students adopt a mastery goal orientation, a positive effect is likely to impact students' motivation. Findings for performance goal orientations were less consistent, indicating no effect, positive effect, and negative effect. The recommendation is that teachers and parents adopt mastery goal orientations to promote the positive effects they have on adolescents' motivation.
Poster Presentation: Room 310, 2:15 p.m.

Johnnetta S. C. Ricks and **Imandeep Kaur Grewal**
Professor Valerie Polakow
Undergraduate Ethnic Minority Students' Experiences at Predominantly White Universities
This study aims to explore how ethnic minority students experience and negotiate their differences in the process of developing ethnic/racial identities. It is an attempt to broaden and challenge current understanding of minority students' experiences at predominantly white universities. By collecting individual stories from undergraduate ethnic minority students attending these institutions, we aim to understand how they experience and negotiate their differences both as individuals and as members of larger ethnic/racial communities. The study also seeks to explore the commonalities and differences in the experiences of members within and across the selected (African American, Hispanic, Asian, and Muslim) minority groups.
Oral Presentation: Room 352, 4:35 p.m.

James N. Skufis
Professor Anne Bednar
Reported Use of Audience Response System Answers by Instructors
One enduring question in education is how to best foster student engagement and participation in lessons. Many instructors have discovered an Audience Response System, or ARS, to address this issue. Numerous studies have been conducted to demonstrate the effectiveness of ARSs at engaging students; however, little research has been conducted concerning teacher behavior relative to their use of ARS responses from students. The purpose of this study was to examine how having these student responses affects teacher behaviors in relation to how teachers use this information. A survey tool addressing this question was derived from prior research concerning the use of an ARS for assessment and ARS "best practices" and was distributed to instructors at a community college. Results indicate that instructors used responses most frequently to modify the direction of a current lecture, to write better clicker questions, and as a clue to give students further explanation/diagnose student misconceptions, with other uses cited less frequently.
Oral Presentation: Room 352, 7:00 p.m.

Carmen A. Stokes
Professor Valerie Polakow
The Experience of Successful African American Nursing Students in Baccalaureate Programs at Predominantly White Institutions
Only 4.2% of all registered ethnic minority nurses are African American. One factor that remains persistent is the high rate of attrition in nursing programs, as high as 85% for minority students. The purpose of this pilot phenomenological study is to gain an informed and critical view of the unique lived experiences of eight female African American nursing students or graduates. Half of the research participants are current students whose success is evidenced by enrollment in the senior semester of their nursing program. The remainder of the participants has successfully graduated from nursing programs; their experiences will be used to compare and contrast with those of the current students. A thematic analysis was

conducted to determine key converging and diverging perspectives of interviewees and to determine to what extent the key themes are represented in the current literature. The key themes identified were isolation and discrimination, racism, and resilience. The findings from this study can inform retention strategies for nursing programs.
Oral Presentation: Room 352, 4:15 p.m.

College of Health and Human Services
School of Health Promotion and Human Performance

Emily J. Irvine, Neha Agrawal, Rachel Putnam, Jenna Sopkowiak, and **Megan Flanagan**
Professor Frank Fedel
Muscular Anatomy Study Guide For Upper And Lower Extremities
The field of prosthetics requires that practitioners be well acquainted with the anatomical structures of the upper and lower limbs. This is a well-organized study guide designed to help the student visualize the information rather than memorize it. It is uniquely organized in such a way that each motion at each joint has a dedicated page of information; the student can isolate and understand how groups of muscles function together for a specific movement. For each action, students see the location, origin, insertion, and innervation of the involved muscles; the average range of motion for that action; and palpable bony landmarks in the area. It uses easy-to-follow diagrams and tables as well as color-coded images for maximum clarity. The guide is produced in a way that can be used on multiple platforms: either printed as a flip-chart or book, or the electronic document can be used on digital devices.
Poster Presentation: Room 310, 2:15 p.m.

Stephanie Keteyian
Professor Kay Woodiel
Project "E" Power: A Focus Groups' Impression of the Bystander Effect as it Relates to College Life at EMU
PURPOSE: A bystander is an individual who observes a potentially dangerous situation yet does not act. This project identified the rationale and contributing factors associated with bystander behavior, with the intent of developing future skills and strategies aimed at creating an "active" bystander on EMU's campus. METHODS: Four focus groups of six to eight students were carried out on four separate domains: residence advisors, student-athletes, Greeks, and Student Organizations. Eight questions were discussed regarding knowledge of the term *bystander*, bystander effect, situations specific to EMU, and additional ideas for student training. RESULTS: Two common reasons for intentionally overlooking a potentially dangerous situation included fear of peer judgment and responsibility. RA's and student organizations better understood the term *bystander*. Issues more common to Greeks and Students Organizations were sexual/domestic abuse and substance abuse, whereas student athletes cited the interaction between athlete and coach, rape, cyber bullying, and cheating. All participants reported an interest in additional training. CONCLUSION: Preliminary findings indicate the need for domain specific interventions aimed at empowering EMU students to assist others confronted with a potentially dangerous situation. Data supported the need for bystander training for college students at EMU.
Poster Presentation: Room 310, 2:15 p.m.

Jeffrey M. Olson II
Professor Frank Fedel
Integrating Multimedia Technologies in Research Laboratories and Healthcare Curriculum
Eastern Michigan University recently acquired a Vicon™ Nexus motion capture system that uses infrared cameras and reflective markers to acquire, record, organize, and report kinetic and kinematic data. In order to maximize inter-trial and inter-researcher reliability as well as data accuracy, Professor Fedel and I are creating a series of multimedia learning modules to instruct researchers regarding the location and proper placement of the markers on various anatomical sites. Using Panopto presentation software to integrate video, audio, enhanced digital images, and text, we are creating simple yet effective instructional resources with benefits beyond research laboratories. Not only can these modules be used to help instruct researchers and students about the principles of bony landmark palpation, they also illustrate the potential for integrating multiple technologies into the healthcare curriculum.
Oral Presentation: Room 300, 6:00 p.m.

School of Health Sciences

Manmeet K. Batra
Professor Anahita Mistry
Recent Advances in the Biology of Obesity
Obesity is linked with a number of chronic diseases, and approximately 300,000 deaths every year in the United States can be linked to obesity, indicating a serious health problem. The biology of obesity consists of multifaceted factors located predominantly in the brain and gastrointestinal tract that stimulate or inhibit appetite. The body produces a number of hormones, neuropeptides, and neurotransmitters that alter appetite primarily by effects on the central nervous system. These hormones, neuropeptides, and neurotransmitters can either be anorexegenic (appetite inhibiting) or orexigenic (appetite stimulating). Leptin is an anorexigenic hormone that mediates appetite and plays a central role in fat metabolism. The following paper will review and summarize the newest information regarding the complex circuitry by which leptin and other peptides like neuropeptide Y, agouti-related protein, galanin-like peptide, ghrelin, melanocortins, neurotensin, corticotropin-releasing hormone, and so on regulate appetite and thus control body weight.
Poster Presentation: Room 310, 2:15 p.m.

Samantha M. Nall, Andrea Hahn, Teresa Trout, Natalie Tucker, Michelle Nilson, and Todd O'Brien
Professor Gretchen Reeves
The Use of the Integrated Playgroup Model to Improve Play Skills in Children with Autism
Autism causes significant delays in social interaction and communication, initiating play and pretend-play, leading to further hindrances in the development of language, cognition, emotion, socialization, self-awareness, and relationships. The Integrated Playgroup Model (IPG) uses adult-facilitated play sessions with children with autism (novices) paired with typically developing peers (experts) to help develop play skills and elicit self-initiated play. Recent research suggests the IPG model improves communication, flexibility in play, shared attention, symbolic play, and verbalization, and increases play interests in children with autism. In this study, adult-guided play sessions were held weekly over a fifteen-week period. Four novices and twelve experts participated in the study. Preliminary findings suggest gains in sustaining play interactions and initiating play behaviors in the novices; benefits for the experts include increased awareness, understanding, and acceptance of children with autism.
Poster Presentation: Room 310, 2:15 p.m.

Kaitlyn J. Trace, Angela Natschke, and Abigail B. Zukausky
Professors Andrea Gossett Zakrajsek and Elizabeth Schuster
Coming Home to a Rural Community: Transitions of Older Adults from Hospital to Home
The aim of this study is to explore the experiences of older adults during the transitional process from hospital to home in a rural community through the perspectives of health care professionals and older adults who have undergone a transition home. The study will identify supports that are further needed to facilitate community integration and barriers to transitioning. Data will be gathered through qualitative research methods with older adults and health care professionals in a rural southeast Michigan community in the form of in-depth interviews and observations. A participatory action research approach will be used to guide this project, and grounded theory methods will be used to analyze the data. Preliminary findings from the study will be presented. Further research is needed in order to determine the supports that are required for successful integration and independence.
Poster Presentation: Room 310, 2:15 p.m.

School of Nursing

Nelva J. Homan
Professor Mary Sue Marz
STD and HIV Knowledge Level among Incoming Freshmen College Students
The purpose of this research was to examine the knowledge level regarding sexually transmitted diseases and human immunodeficiency virus (STD/HIV) infections in the incoming freshmen college population. The consequences of some STD/HIV infections can mean lifelong challenges and health risks for young adults that can be prevented and avoided. Students in three college classes were offered an

opportunity to voluntarily participate in a research study. Twenty-eight freshman college students were given self-administered questionnaires to complete. The participants completed the questionnaire in the classroom or on line at Survey Monkey®. The questionnaires included demographic information as well as the STD-KQ 27 item questionnaire. The mean score of the STD-KQ questionnaire was 15.14 (SD=5.71) correct answers out of 27 questions, or 56% of the questions answered correctly. Students are entering the college experience with an inadequate knowledge of STD/HIV and therefore are at risk for exposure to an STD or HIV. The field study generates an educational diagnosis of the knowledge of STD/HIV in freshmen college students.
Poster Presentation: Room 310, 4:00 p.m.

School of Social Work

Heather Asher
Professor Betty Brown-Chappell
Mental Health Care and the Patient Protection and Affordable Care Act: A Policy Analysis from a Social Work Perspective
The issue of inadequate mental health care has been a problem in the United States for decades, dating back to the early twentieth century when Dorthea Dix and Jane Addams advocated for the humane treatment of mentally ill and impoverished persons. Currently the Patient Protection and Affordable Care Act (PPACA), which was signed into law in March 2010 by President Obama, attempts to address this issue. Two sections, Title II, Subtitle L, Section 2952 and Title X, Section 101410, of the PPACA specifically address treatment and research on mental illness. These two sections are a great step in addressing the disparity of mental health treatment, but a federal mental health mandate is needed in order to ensure equitable, affordable, and unlimited mental health treatment to those diagnosed with mental illness. The presentation includes an analysis of the PPACA with special interest to mental health care from a social work perspective.
Oral Presentation: Room 304, 1:15 p.m.

College of Technology

College of Technology Doctorate

Judy L. Weaver
Professor Sock Chung
Moving Academic Advising into the 21st Century: A Prototype of an Online Advising Tool
In the increasingly digitized environment of higher education, student advising has lagged behind the infusion of technology. In line with a growing population of working students, more students utilizing online educational materials, and limited student service resources, academic advisers are looking to technology to improve communication. This project will create a prototype of an online shell for academic advising of students in a special education teacher prep program for a large university. The purpose of this tool is to facilitate communication with all

advisees. Advisors can send out mass emails keeping students updated on critical issues. Students will watch for these updates, schedule appointments, and navigate through the shell as they progress through their program of study. The information housed in this shell will be equivalent to an online file with the students' documents available 24/7. Improving communication will ultimately aid in the retention and success rate of students.
Oral Presentation: Room 300, 6:40 p.m.

School of Engineering Technology

Jennifer Benson
Professor Shinming Shyu
Sustainable Furniture
The goal of sustainability is to create products that have very little impact on the earth. Sustainable furniture can achieve this not only by the materials used but also in the way it is manufactured. This project will look at both of these aspects as well as some of the innovative ideas designers have developed to create sustainable furniture.
Oral Presentation: Room 320, 3:25 p.m.

Na Han
Professor Shinming Shyu
A Study of Sustainable Design through Recycled or Reclaimed Materials
In response to the drastic climate changes, ever-increasing human population, and the potential depletion of natural resources, interior designers have started to practice in compliance with sustainable design principles, as buildings collectively generate one of the biggest impacts on Earth. Sustainable design is concerned with protecting environment and preserving natural resources for future generations. Therefore, it is imperative for designers to adopt green design concepts by using recycled or reclaimed materials, which can be separated, categorized, and transformed into new products such as wall treatments, flooring materials, and furniture. Moreover, using recycled or reclaimed materials not only helps to sustain our environment, but also has economic benefits including saving money, creating new jobs, and reducing construction waste. The study plans to examine recycled or reclaimed materials such as wood, metal, glass, and steel and to find new green design methods to use recycled resources effectively.
Oral Presentation: Room 320, 3:05 p.m.

Erika Hunter
Professor Shinming Shyu
Volatile Organic Compounds and How to Reduce their Impact in Interior Spaces
This research addresses the sources and existence of volatile organic compounds (VOCs) in interior spaces. VOCs are carbon-based compounds released as gases into the atmosphere. The impact of the mostly man-made chemicals to our environment and health are mostly negative. This research will also explore the ways in which VOCs can be reduced.
Oral Presentation: Room 320, 2:45 p.m.

Lesley D. Lauwers
Professor Shinming Shyu
LED: The Future of Lighting
The future of LED lighting is a bright one. Light Emitting Diodes, or LED, is a newer technology that has been introduced into the world of illumination. Although in its infancy, this technology is being touted as the next great advancement in lighting. This energy-efficient light source is currently used mostly for decorative, accent, and task lighting, but current research shows that LED has the capacity to become a main source for ambient lighting of environments as well. Based on the criteria of energy consumption, durability, product cost, and environmental impact, the present study aims to conduct a comparative study among incandescent, fluorescent, LED, and other types of illumination.
Oral Presentation: Room 320, 4:15 p.m.

Linda Montgomery
Professor Shinming Shyu
Sustainable Lighting Design Strategies
Lighting design is one of the key elements of sustainable design that can easily be integrated into any design project in both residential and commercial buildings. Whether big or small, the collaboration of daylighting, energy efficient lighting, and lighting control systems can contribute to lowering energy use and the environmental impact, increasing occupant comfort, and reducing operation costs for the building owner. This study aims to explain the definition of different sustainable lighting strategies while offering different ways designers can implement these strategies into their designs. Additionally, this study will explore the benefits of sustainable lighting design's impact, not only on the environment but on the bottom line of the building owner as well.
Oral Presentation: Room 320, 5:15 p.m.

Amber Resig
Professor Shinming Shyu
Indoor Environment Quality
Indoor environmental quality refers to the quality of air in an indoor environment. Many factors in the environment contribute to air quality. Mold, ventilation, chemicals, and odors all contribute to air quality. Materials in the space, such as furniture and carpet, release contaminants that decrease the quality of the air. Poor indoor environmental quality can cause serious illness. By controlling the temperature, humidity, and ventilation of the indoor space, you can prevent these illnesses. Choosing environmentally safe furniture and carpets also helps reduce the toxins in the air. I will discuss methods to use to control the temperature, humidity, and ventilation as well as provide a guide for choosing the right materials and furnishings for the indoor space.
Oral Presentation: Room 320, 3:45 p.m.

Aesha Shah
Professor Vijay Mannari
Characterization of Anti-corrosion Properties of Nano-composite Coatings Produced by UV Initiated Sol-gel Process
The sol-gel process is becoming widely applicable and a viable alternative to other available systems in coating industries due to its low temperature route to make thin films, easy application on metallic substrates, and potential for barrier protection. In this system, the sol-gel process was initiated by ultraviolet light. A photo acid generator catalyzes the sol-gel reaction upon UV exposure. This results in a nano-composite coating with potentially excellent barrier properties. Dry film thickness, cure condition, and inhibitor concentration were varied. The anti-corrosion properties of the resulting coating will be characterized by the ASTM B117 salt-spray test and DC potentiodynamic polarization.
Poster Presentation: Room 310, 2:15 p.m.

Tara Weaver-Hawley
Professor Shinming Shyu
Effectiveness of Solar Energy Systems by Geographic Location: An Evidence-Based Approach
Utilizing and controlling solar energy, whether passively or actively, is a key element when designing a sustainable building. The research will look into various systems and materials that harvest and/or manage solar energy. Systems and materials will be analyzed using evidence-based research to determine which are most efficient based on geographic location, with emphasis on systems that are most efficient for use in Michigan.
Oral Presentation: Room 320, 4:55 p.m.

Anne Wilkinson
Professor Shinming Shyu
Exploring Exemplary Interior Design Education Programs: A Study of Curricula and their Objectives for the 21st Century
Are interior design undergraduate programs addressing the skill sets necessary for students to compete and work in the 21st century job market? This study researched and analyzed six exemplary interior design programs at the University level and reviewed what general subjects are being taught, as well as specific subjects that are pertinent to the interior design profession. A comparison was done between each university's program, as well as a comparison between courses taught. From this research, I have a number of ideas and conclusions as to what the next steps should be to design my interior design curriculum in order to prepare interior design students for the 21st century job market. This study is significant because it examines current, highly rated interior design programs in the United States, analyzes each curriculum's focus, and assesses where their prospective students are headed.
Oral Presentation: Room 320, 4:35 p.m.

School of Technology Studies

Carlton J. Braun
Professor Denise Pilato
From the Safe Sky
The Ford Motor Company created novel aircraft designs in the early history of commercial aviation. These new designs and clever marketing changed public perceptions about the safety of flying and air travel. The marketing of these developments in aviation laid the groundwork for the successful expansion of the U.S. commercial airline industry. The advertisements that Ford Motor Company used to market the Tri-Motor aircraft were a unique medium of communication. They sought not only to change the way that people perceived aircraft at that time, but also to normalize public attitudes towards traveling by air. The task of selling the American public about this new mode of transportation was a difficult one, fraught with preconceived attitudes and fear about this new technology. As with the implementation of any new technology, encouraging the public to adopt it and others to assist in infrastructure development is an overriding goal.
Oral Presentation: Room 320, 1:35 p.m.

Mohammad Esmaeili, Santosh Mutnuru, and **Tiffanee K. Carr**
Professor Samir Tout
Risk of Intrusion and Honeypots
In today's life we are using online technologies more than we ever did before, and we are faced with new threats. These threats can be costly and dangerous for all online users. Providing security for different types of networks and avoiding information breaches is a daily challenge for most specialists in the field of information security. For this reason, it is critical to reduce the risks of intrusions and hackers. One of the technologies that have been used to assess the risk of intrusion is honeypots. Using honeypots as well as other Intrusion Detection and Intrusion Preventions Systems provide multiple layers of security for an IT system. This research analyzes different types of honeypots and their impact on organizations. Moreover, this study will introduce a honeypot architecture that can reduce the risks of intrusion in organizations.
Oral Presentation: Room 300, 3:45 p.m.

Dorothy K. McAllen
Professor Denise Pilato
Unintended Consequence: The Relationship between National Security Policy and Technology Innovation
National security and intellectual property are thought to go hand in hand because war traditionally generates people's creativity to protect their nation. While this notion took seed in America during World War I, the bombing of Pearl Harbor in 1941 was considered the major catalyst to focus attention on national security. After World War II, America enacted numerous policies intended to further protect the American people, including the Invention Secrecy Act of 1951. This Act intended to prevent the disclosure of new inventions and technologies deemed detrimental to national security. Currently, there are 5,081 secrecy orders in effect on various technologies, which some scientists argue unwittingly creates a deterrent effect on scientific and

technological innovation. I will examine the relationship between national security policy, specifically the Invention Secrecy Act, and technology innovation in America.
Oral Presentation: Room 320, 1:55 p.m.

Natalie R. Reynolds
Professor Subhas Ghosh
Embedding Aromatherapy Essential Oils into Various Textiles Using B-cyclodextrin Inclusion Complex
Aromatherapy essential oils are applied to textile fabrics. Three types of oils were used: eucalyptus, lemon, and lavender. Three types of fabric were used: cotton, silk, and cotton/polyester blend. The aromatherapy essential oils are held to the fabric inside of the inclusion complexes formed by B-cyclodextrin, and the B-cyclodextrin is held to the textile fabric by sol-gel. The fabrics were washed over a period of time and smelled by examiners to determine the durability of the scent treatment on the textile fabric. The scent treatment was found to be durable through washing. Textile performance properties for comfort and durability were also tested through thermal resistance, evaporative resistance, abrasion resistance, and tensile.
Oral Presentation: Room 320, 1:15 p.m.

David L. Sieradski and **Melinda D. Shoemaker**
Professor A. R. Bellamy
Perceptions and Acceptance of Genetically Modified Foods
This study examines the influences of health consciousness on perceptions and acceptance of genetically modified (GM) food, and whether or not religiosity has a moderating effect. Religiosity was measured with a single question, and health consciousness and perceptions of GM foods were measured with seven questions. Acceptance of GM food products was divided into three categories: plant food products, fish food products, and animal food products. The results show the more people are concerned with their health, the less favorable their perceptions of GM foods. Also, the more people are concerned with their health, the less accepting they are of GM foods. Religiosity had no moderating effect on the relationship between health consciousness and acceptance of GM fish or GM animals but had a strong moderating effect between health consciousness and acceptance of GM plants.
Poster Presentation: Room 310, 2:15 p.m.

Graduate Research Fair 2011

Oral Presenters by Location and Time

Session I: 1:15-2:30 p.m.

Room 204

1. **Christopher Roberts**
Psychology
2. **Megan Calvert & Angela Joerin**
Psychology
3. **Alexandra Busuito, M. Calvert, A. Joerin, & A.Tindall**
Psychology
4. **Anatol Tolchinsky**
Psychology

Room 208

1. **Brent Miller**
English Language & Literature
2. **Dibella Wdzenczny**
English Language & Literature
3. **Lindsay Stefanski**
English Language & Literature
4. **Absalam Al-Ahmari**
English Language & Literature

Room 222

1. **Ruth Salles**
Special Education
2. **Kenneth Schuman**
Special Education
3. **Michele Alvarez**
Special Education
4. **Marie Rosemond**
Leadership & Counseling

Room 300

1. **Priyanka Tumuluru**
Chemistry

2. **Elli Spitery**
Chemistry
3. **Vaghela Chirag**
Chemistry
4. **Mahalakshmi Kotichukkalla**
Chemistry

Room 301

1. **Kristinia Lininger**
History & Philosophy
2. **Tamara Grit**
History & Philosophy
3. **Danielle Marsh**
History & Philosophy
4. **Anna Pierre**
History & Philosophy

Room 304

1. **Asher Heather**
Social Work
2. **Crystal Muthleb**
Sociology, Anthropology, & Criminology
3. **Jessica Morgan**
Sociology, Anthropology, & Criminology
4. **Seyed Mirmajlessi**
Sociology, Anthropology, & Criminology

Room 320

1. **Natalie Reynolds**
Technology Studies

2. **Carlton Braun**
Technology Studies
3. **Dorothy McAllen**
Technology Studies

Room 330

1. **Zachary Jones**
Geography & Geology
2. **Janis Jagielky & James Miller**
Geography & Geology
3. **Connie Locker**
Geography & Geology
4. **Marcus Schwimmer**
Geography & Geology

Room 350

1. **Brian Golden**
Communication, Media, & Theatre Arts
2. **Lisa Storc**
Communication, Media, & Theatre Arts
3. **Kristala Pouncy**
Communication, Media, & Theatre Arts
4. **Aleesa Searcy**
Communication, Media, & Theatre Arts

Room 352

1. **Kimberly Kulhanek**
World Languages
2. **Kumiko Endo**
World Languages
3. **Nozomi Craft**
World Languages
4. **Katherine Coleman & Aya Morihara**
World Languages

Session II: 2:45-4:00 p.m.

Room 204

1. **Kevin Alschuler, Jillian Carey, Bethany Gourley, Lauren Hart, & Courtney Sprague**
Psychology
2. **Wendy Chandler**
Political Science
3. **Chi-Mei Liu**
Economics

Room 208

1. **Justin Petro**
English Language & Literature

2. **Danielle St. Jean**
English Language & Literature
3. **Sarah Primeau**
English Language & Literature
4. **Tara Keezer**
English Language & Literature

Room 222

1. **Stephen Laatsch**
Leadership & Counseling
2. **Amy Deitrickson**
Leadership & Counseling

3. **Thyagarajan Ammachathram**
Leadership & Counseling
4. **Jimmy Dolson**
Leadership & Counseling

Room 300

1. **Ivan Njunjic**
Computer Information Systems
2. **Harshal Pujari**
Computer Information Systems
3. **Lawrence Van Wasshenova**
Computer Information Systems
4. **M. Esmaeili, S. Mutnuru**, and **T. Carr**
School of Technology Studies

Graduate Research Fair 2011

Room 301

1. Lorinda Rausch
History & Philosophy
2. Charlye Morley
History & Philosophy
3. Kate Morland
History & Philosophy
4. Ryan Masters
History & Philosophy

Room 304

1. Robert Zaremba
Sociology, Anthropology,
& Criminology
2. Katie Martin
Sociology, Anthropology,
& Criminology

3. Nour Fakhoury
Sociology, Anthropology,
& Criminology
4. Lisa Wharton
Women's & Gender Studies

Room 320

1. Erika Hunter
Engineering Technology
2. Na Han
Engineering Technology
3. Jennifer Benson
Engineering Technology
4. Amber Resig
Engineering Technology

Room 330

1. Diana Armistead & Lauren Carpenter
Geography & Geology
2. Sam Constantine
Geography & Geology

3. Kari Smith
Geography & Geology
4. Brenda McGuire
Geography & Geology

Room 350

1. Kenton Jones
Communication, Media, & Theatre Arts
2. Laura Tanner
Communication, Media, & Theatre Arts

Room 352

1. Michael Collins
World Languages
2. Veronica Konglim
World Languages
3. Sara Okello
World Languages
4. Dawn Izzi
Teacher Education

Session III: 4:15-5:30 p.m.

Room 204

1. Dan Colligan
Economics
2. Christopher Smith
Economics
3. Gaber Burnik
Economics

Room 208

1. Traci Shipley
Art
2. Matthew O'Brien
Art
3. Samuel Joshua
Music and Dance
4. Casey Harhold
Special Education

Room 222

1. Ramona Meraz-Lewis
Leadership & Counseling
2. Amanda Bell
Leadership & Counseling
3. Stacey Fenton
Leadership & Counseling

Room 300

1. Jaikrishna Swaminathan
Computer Science
2. Jason Voss
Mathematics
3. Tanima Banerjee
Mathematics

Room 301

1. Lyudmila Austin
History & Philosophy
2. Victor Randolph
History & Philosophy

3. Emily Robertson
History & Philosophy
4. Michael Stout
History & Philosophy

Room 304

1. Anna Brogan-Knight
Women's & Gender Studies
2. Rachel McCready-Flora
Women's & Gender Studies
3. Mary Ann Kozlowski
Women's & Gender Studies
4. Erika Behrmann
Women's & Gender Studies

Room 320

1. Lesley Lauwers
Engineering Technology
2. Anne Wilkinson
Engineering Technology
3. Tara Weaver-Hawley
Engineering Technology
4. Linda Montgomery
Engineering Technology

Room 330

1. **Tiffany Thompson**
Physics & Astronomy
2. **Janice Dana**
Geography & Geology
3. **Martin Goffeney**
English Language & Literature
4. **Joe Sacksteder**
English Language & Literature

Room 350

1. **Carly Francescut**
English Language & Literature
2. **Daniel Earle**
English Language & Literature
3. **Andrea Boog**
English Language & Literature
4. **Jason Snow**
English Language & Literature

Room 352

1. **Carmen Stokes**
Teacher Education
2. **Imandeep Grewal & Johnetta Ricks**
Teacher Education
3. **Regina George**
Teacher Education
4. **Clayton Hall**
Teacher Education

Session IV: 6:00-7:15 p.m.

Room 208

1. **Kelli Massa**
English Language & Literature
2. **Lindsey Macdonald**
English Language & Literature
3. **Kyle Janke**
English Language & Literature
4. **Ruth Haller**
English Language & Literature

Room 222

1. **Charles Muwonge**
Leadership & Counseling
2. **Elizabeth Zollweg**
Leadership & Counseling
3. **Saroya Jamal**
Leadership & Counseling
4. **Ana Tindall**
Leadership & Counseling

Room 300

1. **Jeffrey Olson**
Health Promotion & Human Performance
2. **Aaron Adams & Lisa Larkin**
Biology
3. **Judy Weaver**
College of Technology

Room 301

1. **Kari Vaughan**
History & Philosophy
2. **Cara Owen**
History & Philosophy
3. **David Washington**
History & Philosophy
4. **El-Ra Radney**
African American Studies

Room 330

1. **Lauri Young**
Business Administration
2. **Melissa Zochowski**
Accounting/Finance
3. **Alicia Anderson**
Marketing
4. **Maria Farris, A. Issa, D. LaLonde, C. Perez, & M. Sanchez**
Management

Room 352

1. **Stephanie Hawkes**
Teacher Education
2. **Jennifer Conrad-Quedado**
Teacher Education
3. **Marguerite DeBello**
Teacher Education
4. **James Skufis**
Teacher Education

Poster Presenters in Room 310 by Time

Session I: 2:15-3:30 p.m.

Tiffany Abrego
Psychology

Sarah Ahlfs-Dunn
Psychology

Manmeet Batra
Health Sciences

Julie Bennett
Special Education

Nguyen Bui
World Languages

Caitlin Conn
English Language & Literature

Kristine Cramer & M. Swartzmiller
Psychology

Amanda Fezzey
Psychology

Bethany Gourley, K. Alschuler, J. Carey, & L. Hart
Psychology

Katherine Guyon & Erin Gallagher
Psychology

Theresa Haskins
Teacher Education

Kaitlyn Hill
Teacher Education

Melissa Pulcini, V. Ivezaj, & A. Wiedemann
Psychology

Emily Irvine, N. Agrawal, M. Flanagan, R. Putnam, & J. Sopkowiak
Health Promotion & Human Performance

Valentina Ivezaj
Psychology

Emily Kavanagh & Amy Drayton
Psychology

Stephanie Keteyian
Health Promotion & Human Performance

Andrea Kiss
Psychology

Kylene Krause, A. Joerin, & S. Scott
Psychology

Bethany Lawson
Teacher Education

Kelly Luce, Natalie Morris, & Kristin Davenport
Psychology

Natalie Morris, K. Luce, & K. Davenport
Psychology

Samantha Nall, A. Hahn, M. Nilson, T. O'Brien, T. Trout, & N. Tucker
Health Sciences

Amy Olszewski
Psychology

Summar Reslan & Lauren Skilton
Psychology

Annette Richard, K. Alschuler, J. Carey, B. Gourley, L.Hart, & C. Sprague
Psychology

Aesha Shah
Engineering Technology

Stephanie Sherson
Sociology, Anthropology, & Criminology

David Sieradski & Melanie Shoemaker
Technology Studies

Rachel Sienko
Psychology

Peter Stern
World Languages

Melissa Swartzmiller & K. Cramer
Psychology

Kaitlyn Trace, Angela Natschke, and **Abigail Zukausky**
Health Sciences/Social Work

Ashley Wiedemann
Psychology

Session II: 4:00-5:15 p.m.

Greg Abernathy
Chemistry

David Arnold & Kevin Kawchak
Chemistry

Chris Bonapace
Leadership & Counseling

Suzanna Boyce
Political Science

Sunisha Chalasani
Chemistry

Emily Compton
Leadership & Counseling

Badrinath Dhakal
Chemistry

Michele Doughty
Leadership & Counseling

Shawn Duke
Biology

Tracey Frazier
Communication, Media, & Theatre Arts

Michelle Giedt, D.Attilli, Y. Johannsdottir, A. Kawou, K. Kotturu, D. Lenkala, R. Matti, R. B. Merugumala, B. Neel, K. Nowak, M. Schaecher, & S. Shelake
Biology

Inna Gorlova
Leadership & Counseling

Heather Gray
Leadership & Counseling

Sarah Hayes
Geography & Geology

Nelva Homan
Nursing

Leslie Homier
Leadership & Counseling

Reshma Kankanala
Chemistry

Kevin Kawchak & David Arnold
Chemistry

Kendra Kehl-Fie
Psychology

Jennifer Kirk
Biology

Joni Krueger, J. Barta, J. Marsh, & L. McQueen
Psychology

Jacinda Lisi
Chemistry

Srikanth Maddali
Chemistry

Greg Norwood
Biology

Jeffrey Porter
Leadership & Counseling

Kaveridevi Rajula
Biology

Danielle Rosen
Biology

Hasina Saraha
Chemistry

Prannda Sharma & Christine Mella
Biology

Stephanie Simon
Biology

Mary E. Skinner, E. VanDenBosch, P. Sharma, A. Syed, D. Rosen, Y. Kang, A. Stein, & C. Mella
Biology

Jamie Slater
Biology

Chelsea Smith, Johnetta Bell, Lauren Fields, & Teresa Stapleton
Leadership & Counseling

Teresa Stapleton, K. Boyer, J. Janicek, S. Morell, & A. Soria
Leadership & Counseling

Anila Waris
Chemistry

THANK YOU!

The Graduate School would like to thank the many individuals, organizations, and departments whose efforts have made this event a success!

Special appreciation goes to the Student Affairs Subcommittee of Graduate Council.

Graduate School:
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Lisa Storc

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Faculty Judges:

JoAnn Abersold	World Languages
Muhammad Ahmed	Engineering Technology
Jeff Bernstein	Political Science
Joe Bishop	Teacher Education
Timothy Brewer	Chemistry
Robert Carpenter	Teacher Education
Anne Casper	Biology
Daniel Clemans	Biology
David Crary	Economics
Bill Cupples	Special Education
John Curran	Mathematics
Elisabeth Daeumer	English Language and Literature
Matt Evett	Computer Science
Janet Fisher	Special Education
Derrick Fries	Special Education
Subhas Ghosh	Technology Studies
Carol Haddad	Technology Studies
Ana Harten	Special Education
Linda Isenhour	Management
Amy Johnson	Chemistry
John Knight	History and Philosophy
Beth Kubitskey	Physics and Astronomy

Jon Margerum-Leys	Teacher Education
Nelson Maylone	Teacher Education
Michael McVey	Teacher Education
Theresa Merrill	Music
Deanna Mihaly	World Languages
Anahita Mistry	Health Sciences
Joe Ohren	Political Science
Loreena Parks	Special Education
Claudia Petrescu	Political Science
Jeff Popko	World Languages
Paul Ramsey	Teacher Education
Robert Rhodes	Health Promotion and Human Performance
Sam Shem	Communication, Media, and Theatre Arts
Wendy Wang	World Languages
Mehmet Yaya	Economics

Room Moderators:

Jessica Alexander	Communication, Media, and Theatre Arts
Douglas Baker	Teacher Education
James Barott	Leadership and Counseling
Ella Burton	Leadership and Counseling
Kathleen Chamberlain	History and Philosophy
Marilyn Corsianos	Sociology, Anthropology, and Criminology
David Crary	Economics
Colleen Croxall	Political Science
Ronald Delph	History and Philosophy
Craig Dionne	English Language and Literature
Megan Endres	Management
Joseph Engwenyu	History and Philosophy
Hedeel Evans	Chemistry
Frank Fedel	Health Promotion and Human Performance
Beverley Goodman	English Language and Literature
Alissa Huth-Bocks	Psychology
Ted Ligibel	Geography and Geology
Deanna Mihaly	Women's and Gender Studies
Stevan Mrdalj	Computer Information Systems
Hitomi Oketani	World Languages
Garik Pedersen	Music and Dance
Denise Pilato	Technology Studies
Patricia Pokay	Teacher Education
Valerie Polakow	Teacher Education
Ray Quiel	Communication, Media, and Theatre Arts
T. Daniel Seely	English Language and Literature
Tanweer Shapla	Mathematics
Martin Shichtman	English Language and Literature
Shinming Shyu	Engineering Technology
Solange Simoes	Sociology, Anthropology, and Criminology
Phil Smith	Special Education
JoEllen Vinyard	History and Philosophy
William Welsh	Geography and Geology
Ian Wojcik-Andrews	English Language and Literature
Eboni Zamani-Gallaher	Leadership and Counseling

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Index to Presenter Abstracts

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