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# Graduate Research Fair Program, 2012

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# GRADUATE



2012

14th Annual

# RESEARCH FAIR

March 26, 2012

**Program Schedule and Presenter Abstracts**

## Graduate Research Fair 2012

Welcome to our annual celebration of graduate student scholarly and creative work. Students share oral and poster presentations of theses, dissertations, capstone/final projects, unique internship experiences, and other scholarly course projects.

This year there are 217 presentations: 149 oral and 68 poster presentations. This involves 245 students and more than 90 faculty mentors. Presentations include all five colleges and 28 academic departments and schools.

As the event enters its 14<sup>th</sup> year, its reputation and faculty support has grown. The research and scholarly work has matured. Students feel comfortable presenting in multiple years. Team/collaborative projects are more readily shared. Many students use this as a stepping-stone to local, state, national, and international scholarly presentations, of which we are very proud.

Thank you for taking the time to view the posters, listen to oral presentations, and network with one another over these student achievements.

Thank you to the faculty judges who reviewed paper submissions for student presenter monetary awards.

Thank you to the faculty room moderators who introduced the oral presenters and kept them on track and on time.

Thank you to the individuals, departments/schools, offices and corporate or community partners who financially supported the event. We could not offer the event without your generosity.

At the end of the day, 6:30 p.m. in the Student Center Auditorium, we look forward to the 2012 George Liepa Sigma Xi speaker, Dr. Jeanette M. Hasse. Her talk is entitled *Nutrition Strategies to Improve Organ Transplant Outcomes*. Dr. Hasse is a renowned researcher and clinician specializing in transplant nutrition at Baylor University Medical Center. She is also a former graduate student of Dr. George Liepa, for whom this speaker series is now named.

EMU is proud of its graduate programs and the distinctive professional advantages they offer our graduate students with basic and applied scholarship. On behalf of the Graduate Council, the University committee that plans and helps implement this event, enjoy the day!

The Graduate School

Save the Date:

**GRF #15: Monday, March 18, 2013**

<p><b>Event Schedule: Student Center, floors 2 and 3</b> Oral Presentation Sessions: 12:30, 2:00, 3:30, 6:30 Poster Sessions: 1:15 and 3:00 Awards Reception: 5:00, Ballroom George Liepa Sigma Xi Speaker: 6:30, Auditorium</p>
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## College of Arts and Sciences

### Department of Art

#### **Morgan S. Barrie**

Professor Ellen C. Schwartz

#### **Francesca Woodman**

Since Francesca Woodman's death in 1981, her work has steadily grown in popularity. While when she died she was a relatively unknown twenty-two-year-old artist living in New York City, today she is commonly regarded as one of the most important photographers of the twentieth century. The body of work she created in her short life is impressive. Unfortunately Woodman's death was caused by suicide, and like many artists who died young (i.e. Jim Morrison or Kurt Cobain), her death has become a huge part of the dialogue surrounding her photographs. Often, her images are viewed only through the lens of tragedy. Through a re-examination of Woodman's work, this project aims at a richer understanding of the artist and person. Rather than looking at images as ominous portents of what was to come, photographs are examined more holistically, allowing for a more nuanced understanding of the work.

*Oral Presentation: Room 320, 1:10 p.m.*

#### **Christine M. Bruxvoort**

Professor Ryan Malloy

#### **Identifying the Butterfly: One Artist Explores the Transformation from Life into Death and What Comes Afterwards**

Butterflies have long been a source of myths and legends that tell a story of spiritual or physical metamorphosis. Throughout history, the transformation of egg to caterpillar, to chrysalis, and to the beautiful winged creature has inspired many cultures to attach special messages to this process. Themes of life, death, and spiritual renewal have been conveyed through imagery and stories passed down through centuries. My own fascination with butterfly lore first manifested as a malar rash that appeared on my mother's face. This "butterfly" shaped rash was the first physical sign of the autoimmune disease Lupus. Using the life cycle of the Monarch Butterfly as a metaphor, I have made work that examines the symbolic relationship of the butterfly to the transformative experience of a life altered by disease.

*Oral Presentation: Room 320, 12:50 p.m.*

#### **Virginia Davis**

Professor Ellen C. Schwartz

#### **The Rackham Graduate School Building**

Located at the north end of Ingalls Mall, the Horace H. Rackham School of Graduate Studies building is one of the most elegant and unusual structures on the University of Michigan's central campus. Designed in the sleek "stripped classicism" of the late Art Deco period, its smooth, modern limestone exterior features just a light touch of classical detailing, which is sometimes so subtle it is almost hidden. The inside of the building is much more ornate and colorful, yet many of the design elements on the exterior are carried through the interior to create a coherent and pleasant whole. Built after World War I, during the Great Depression and just before the start of World War II, Rackham reflects the unique style and values of its time. It

stands as a memorial to the life of Horace Rackham and represents the classical scholarship and forward-thinking research of the University.

*Poster Presentation: Room 310, 1:15 p.m.*

#### **Shelly J. Neitzel**

Professor Ellen C. Schwartz

#### **The William Anderson House: The Quintessential Greek Revival Temple Cottage**

The William Anderson House is a modestly scaled yet handsomely proportioned example of a temple front Greek Revival cottage. Built as a farmhouse more than 160 years ago, the house exhibits a sophisticated understanding of classical architecture. Although very similar to two other more prominent local examples of the Greek Revival temple cottage, the Anderson House demonstrates details not found on those other houses. Despite its diminutive size, the Anderson House is the quintessence of Greek Revival architecture.

*Oral Presentation: Room 320, 2:00 p.m.*

#### **Melinda Ortiz**

Professor Ellen C. Schwartz

#### **The First Congregational United Church of Christ of Ypsilanti: Two Romanesque Revival Styles in One Church**

American architecture, much like the culture that created it, is full of ideas that led to the myriad of styles we see in our past and today. The First Congregational United Church of Christ of Ypsilanti embodies two of these styles from the late nineteenth century that seem very different and yet share the same general category, the Romanesque Revival. The church, demonstrating the rapid changes in style preferences in the United States, provides an example of the Romanesque Revival encouraged by the First Congregational Church in the 1883 structure and an example of the modification of this style through the influence of Henry Hobson Richardson in the 1899 fieldstone facade. Evaluating the architecture of the First Congregational Church through visual analysis, the history behind the styles, and comparisons with similar structures reveals its value for the community and makes a case for its preservation.

*Oral Presentation: Room 320, 1:30 p.m.*

#### **Adam Ostrowski**

Professor Michael Reedy

#### **Form**

This presentation focuses on my body of work in the MFA painting program. I will talk about the origin of my paintings, which include influences from feminist theory. I'll expand on how advertisements depict women in a negative way, referencing body image, the male gaze, and gender performance. After talking about how women's issues relate and influence my work, I'll give a brief visual history of the reclining female nude throughout western art. During this point in the presentation I'll identify key visual aspects of the female nude and relate them to the current direction of my studio work.

*Oral Presentation: Room 320, 12:30 p.m.*

## Department of Biology

### **Christina M. Casto**

Professor Katherine Greenwald

#### **Survivability Of Ploidy-Variable Unisexual Ambystoma Salamanders Between Stages of Development**

Unisexual Ambystoma salamanders reproduce in a unique mode known as kleptogenesis, where entirely female populations persist by “stealing” genetic material from males of compatible sexual Ambystoma species.

Kleptogenesis can result in both reduced and ploidy-elevated embryos within the same egg mass because the female may or may not incorporate the genome acquired from males. This research will assess the frequency of ploidy levels in four sample populations during four life-stages. These data will serve to identify trends in survivability of the unisexual individuals, provide insight into the significance of genome addition, and suggest ploidy level at which developmental complications hinder adaptability.

*Poster Presentation: Room 310, 3:00 p.m.*

### **Jason D. Collins**

Professor Allen Kurta

#### **Distribution of Reproductive Female Bats along an Elevational Gradient in the Monongahela National Forest**

Elevation likely plays a role in the distribution of bats, particularly reproductive females, which are presumably more constrained by thermoregulatory needs. The Monongahela National Forest has been conducting a long-term bat-monitoring project since 1997. More than 400 sites were monitored from 1997-2010, resulting in the capture of more than 10,000 individuals from 10 species. The distribution of these species was analyzed with logistic regression to determine the relationship between proportion of reproductive females captured and elevation. Results indicate an inverse correlation between the proportion of reproductive females and elevation for *E. fuscus*, *L. borealis*, and *M. lucifugus*, but not *M. septentrionalis*.

*Poster Presentation: Room 310, 3:00 p.m.*

### **Shawn T. Duke**

Professor Kristin Judd

#### **Influence of Dominant Vegetation Type and Whole Plant Leachates on *Phragmites Australis* and *Typha X Glauca* Decomposition in a Freshwater Marsh Ecosystem**

Invasive plants can increase nutrient and carbon retention by altering the physical and chemical environment. The invasive wetland grass *Phragmites australis* possesses morphological and physiological adaptations linked to decreased litter decomposition rates. *Phragmites* secretes gallotannin, a phytotoxic secondary metabolite that inhibits the development of competing plants. Soil samples from freshwater marshes were incubated with *Phragmites* and *Typha* whole plant leachates to determine rates of microbial CO<sub>2</sub> and CH<sub>4</sub> production. Stem and leaf litter were subjected to field conditions for one year in a reciprocal transfer experiment to determine mass loss. Invasive *Phragmites* could be impacting wetland function by suppressing microbial activity and increasing organic matter accumulation.

*Oral Presentation: Room 301, 12:30 p.m.*

### **William J. Fitzsimmons**

Professor Anne Casper

#### **Identification and Analysis of Breaks in Human Common Fragile Site FRA3B Using *Saccharomyces Cerevisiae***

It is important to understand the genetic changes causing uncontrolled cell proliferation leading to tumor formation. Common fragile sites can break under stressful conditions, resulting in inactivation of tumor suppressor genes. One such site is FRA3B, located within the fragile histidine triad protein (FHIT) tumor suppressor gene. We have a yeast artificial chromosome (YAC) inserted into *Saccharomyces cerevisiae* that contains a 500 Kb segment of FHIT, containing FRA3B. Under conditions of replication stress, the fragile site insert breaks exclusively within a small region located within intron 5 of the FHIT gene. We document the narrowing of break positioning within intron 5 using telomere PCR and sequencing.

*Poster Presentation: Room 310, 3:00 p.m.*

### **Jennifer K. Kirk**

Professors Kristin Judd and Daniel L. Clemans

#### **Effect of Control Measures for Invasive *Phragmites australis* on Microbial Community Composition and Abundance in a Freshwater Wetland**

Wetlands support a rich diversity of species but also perform important ecosystem services. Invasive species reduce diversity and alter plant-microbe interactions, yet the extent of the impact on microbial communities has not been well defined. I hypothesized that invasion of the common reed *Phragmites australis* would result in a shift in microbial community composition and abundance compared to wetlands with native-dominated vegetation, while removal efforts employing herbicide and/or prescribed burn treatments would produce greater shifts. This was tested by collecting soil samples from *Phragmites*-dominated wetlands treated with herbicide. A genetic fingerprinting technique known as T-RFLP was performed to identify the microbial species composition.

*Oral Presentation: Room 301, 12:50 p.m.*

### **Rachel C. Parent**

Professor Anne Casper

#### **Instability at Yeast FS2 in an SGS1 Mutant**

The ability of a cell to repair DNA is crucial for survival. A common form of DNA damage that can lead to mutations is double-strand DNA (dsDNA) breaks. Many of the translocations, amplifications, and deletions seen in cancer cells result from repeated dsDNA breaks in particular regions of the genome. Common fragile sites are one type of region with frequent dsDNA breaks and alterations in cancer cells. There are many proteins needed for the repair of dsDNA breaks, one of which is Sgs1p. Sgs1p is a non-replicative helicase that functions in unwinding secondary structure and in 5'-3' resection of a dsDNA break, leaving a 3' overhang to be used for repair. We have shown that the lack of SGS1 leads to an increase in instability at a fragile site in yeast, FS2, and it also alters the way in which breaks at FS2 are repaired.

*Poster Presentation: Room 310, 3:00 p.m.*

**Danielle M. Rosen**

Professor Anne Casper

**DNA Common Fragile Site FS2 Stimulates Mitotic Recombination in the Yeast *Saccharomyces cerevisiae***

Crossing over is the reciprocal exchange of DNA between two chromosomes that are usually homologous. While crossovers are required during meiosis, crossovers in somatic cells are typically suppressed because they cause exchange of genetic material that can be detrimental to the cell. Mitotic crossovers can result from repair of DNA double-strand breaks by homologous recombination. Certain parts of chromosomes are more susceptible to DNA breaks; these loci are called DNA fragile sites. This study will be the first to examine the relationship between DNA fragile sites and mitotic crossovers. Using the yeast *Saccharomyces cerevisiae*, we will construct a diploid strain that allows detection of crossovers and other DNA break repair events. By use of single nucleotide polymorphisms that differ between homologous chromosomes, we will map DNA repair events to determine whether they form at a known fragile site on yeast chromosome III.

*Poster Presentation: Room 310, 3:00 p.m.*

**Sarah Schrader**

Professor Cara Shillington

**Prey Sharing and Communal Living in Two Species of African Tarantula: *Heterothele villosella* and *Hysteroocrates gigas***

Sociality is a phenomenon well documented in many different animal taxa including spiders, but it has rarely been explored specifically in tarantulas. I examined sociality in two species of African tarantula: the Tanzanian Dwarf Chestnut Tarantula (*Heterothele villosella*) and the Cameroon Red Tarantula (*Hysteroocrates gigas*). These two species have a degree of maternal care for their young. Juveniles of both species have also been documented sharing prey items in captivity. Our goal was to observe the frequency of these occurrences as well as how long into maturity this behavior would persist. Tarantulas were housed in communal groups and fed varying prey densities to examine how food abundance would influence social feeding occurrences. We found that the Tanzanian Dwarf Chestnuts were overall quicker to feed and significantly more likely to share prey with each other.

*Oral Presentation: Room 301, 1:10 p.m.*

**Stephanie Simon**

Professor Daniel Clemans

**Coaggregation of Different Probiotic Bacteria**

Coaggregation is the adherence of genetically distinct bacterial species by means of adhesin and ligand molecules. Coaggregation assays are used to view the ability of probiotic bacterial interactions through the formation of biofilms. Defining the nature of certain receptor ligand interactions between microbiota primarily found in the mammalian gut is the basis for this study.

*Poster Presentation: Room 310, 3:00 p.m.*

**Mary E. Skinner**

Professors Marianne Laporte and Aaron H. Liepman

**Generation of a Gene Expression Atlas Documenting Cellulose Synthase-Like A (CSLA) Genes Throughout Arabidopsis Development**

Mannans are hemicellulosic polysaccharides within plant cell walls with cellular functions including structure, storage, and signaling. Understanding the patterning of mannan synthesis will enhance our understanding of the roles of these polysaccharides in plants. Numerous members of the CSLA gene family encode mannan synthase enzymes involved in the synthesis of the backbones of mannans. 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 and microscopy throughout much of the plant life cycle. This will be used to identify the contribution of each CSLA throughout development.

*Poster Presentation: Room 310, 3:00 p.m.*

**Department of Chemistry****Himabindu Anumala**

Professor Cory Emal

**Design, Synthesis, and Evaluation of Non-Symmetric Small Molecules for the Enhanced Inhibition of PAI-1**

Plasminogen activator inhibitor-1 (PAI-1), a primary inhibitor of both tissue-type and urokinase-type plasminogen activators in plasma, is a well-established risk factor in various disease conditions. Increased levels of active PAI-1 in plasma are correlated with the development of atherosclerosis, diabetes, stroke, and other maladies. In the present study, we describe the synthesis of new series of compounds that aim to reduce physiologically active PAI-1 levels. These molecules are related to a series of bis-arylsulfonimides and arylsulfonamides connected by short linking diamines. These studies resulted in the identification of small molecule inhibitors of PAI-1 that displayed in vitro IC<sub>50</sub> values in the low micromolar range.

*Poster Presentation: Room 310, 3:00 p.m.*

**Architha Ellenki**

Professor Deborah Heyl-Clegg

**The Effect of Incorporated Cholesterol on Disruption of Model Membranes by hIAPP**

Human Islet Amyloid Polypeptide (hIAPP) has been implicated in Type II Diabetes development. The extent of membrane disruption and the presence of amyloidal clusters on the surface of pancreatic  $\beta$ -cells reflect the severity of the disease. The development of Type II Diabetes increases with age, and age effects changes in cell membrane structure. Cholesterol is believed to inhibit hIAPP permeabilization of POPG model lipid membranes. Contrary to our hypothesis, liposome dye leakage experiments on DOPC/DOPS model liposomes in our study demonstrate that with elevated membrane-incorporated cholesterol levels and increased hIAPP concentrations, membrane disruption actually increases. These results will lead to further studies to attempt to correlate other membrane changes with a cell's susceptibility to hIAPP.

*Poster Presentation: Room 310, 3:00 p.m.*

**SaiDeepthi Illendula**

Professor Lynn Shetron

**Short-Chain Fatty Acid Production by Microbial Organisms in a Bioreactor**

Short-chain fatty acids (SCFA) such as butyrate and lactate are the products of colonic bacterial degradation of starch and other carbon sources important in human health. Prior work has indicated that SCFA production in the microbiota is markedly affected by interaction of the organisms in the microbial community. The time courses of butyrate and lactate production during growth of the organisms in a bioreactor are being investigated to permit a meaningful analysis of microbial biochemistry. The goal of the research is to investigate the extent to which physical contact of microorganisms and/or shared biochemical pathways for production of SCFA are responsible for the dramatic changes in lactate or butyrate concentrations in media that occur when they are co-cultured in vitro.

*Oral Presentation: Room 301, 2:00 p.m.*

**Anupama Jasthi**

Professors Deborah Heyl-Clegg and Hedeel Evans

**Using Peptides to Examine an Interface Between Two Pyrimidine Pathway Enzymes in Aquifex Aeolicus**

Pyrimidine nucleotides play a critical role in cellular metabolism by serving as activated precursors of RNA and DNA. *Aquifex aeolicus* encodes pyrimidine pathway proteins homologous to those found in mesophilic organisms. The aspartate carbamoylase (ATC) domain catalyzes the second step in the pathway forming carbamoyl aspartate that is then converted by the dihydroorotase domain (DHO) to dihydroorotate. The DHO and ATC domains from *A. aeolicus* were overexpressed in *Escherichia coli* and purified by affinity chromatography. The X-ray structure shows that E193 and G194 on the DHO domain are residues that might be critical for interaction with the ATC. I used enzyme kinetics to test the functional significance of this region in the presence of a peptide synthesized to mimic a loop on the DHO.

*Oral Presentation: Room 301, 2:20 p.m.*

**Theodora Katsika, Santita Campbell, Jacinda Lisi, and Ebaa Saad**

Professors Ellene Tratras Contis and Jose Vites

**The CSIE Program at EMU: Positive Impact in Recruitment and Retention of STEM Students**

The Creative Scientific Inquiry Experience (CSIE) program uses an innovative approach to address the decreasing success rates of undergraduate students in STEM (Science, Technology, Engineering, and Mathematics) fields. In this study, we evaluate the impact of CSIE strategies on retention and graduation rates of STEM students. We identified 71 CSIE students enrolled in STEM classes in the fall of 2006 and compared them to 882 non-CSIE students enrolled in the same classes. The CSIE cohort had higher chances of remaining as a STEM major and higher graduation rates. Interestingly, CSIE students were more likely to convert to a STEM major by graduation time. Qualitative and quantitative results will be presented to support the success of the CSIE program in improving recruitment and success rates for EMU STEM students.

*Poster Presentation: Room 310, 3:00 p.m.*

**Nirosha D. Perera**

Professor Hedeel Evans

**Purification of FAM129B, a Currently Identified Protein that Is Important for Cell Invasion, in E. Coli**

Metastasis is the result of the disruption of the precise balance between proliferation and apoptosis. It has been estimated that up to 90% of metastatic tumor cells are lost by apoptosis. Thus, approaches that can tip the balance in favor of apoptosis would be expected to be effective in combating proliferative disorders. FAM129B is a currently identified protein that is important for cell invasion. It has a pleckstrin homology domain near the amino end and a proline-rich region near the carboxyl end. One crucial facet of the mechanism through which FAM129B promotes cancer cell invasion is likely to be the suppression of apoptosis. We have purified the FAM129B protein in *E. coli* by affinity chromatography and are characterizing its properties by gel filtration chromatography and its ability to interact with key proteins.

*Oral Presentation: Room 301, 2:40 p.m.*

**Steve R. Spaulding**

Professor Maria Milletti

**Computational Study of PAI-1 and Some of its Inhibitors**

Plasminogen Activator Inhibitor-1 (PAI-1) plays a key role in the inhibition of fibrinolysis, the process by which blood clots are broken down. In many cases it becomes necessary to increase the rate of fibrinolysis. One way that this can be accomplished is by inhibiting PAI-1. Previous research has shown that polyphenolic compounds can be effective inhibitors of PAI-1. In this work, Density Functional Theory was used to model several inhibitors in the PAI-1 binding site in order to better understand the interaction between inhibitor and protein. A Natural Bond Orbital (NBO) analysis is used to analyze the strength of the interaction within the binding site.

*Poster Presentation: Room 310, 3:00 p.m.*

**Christina A. Varney**

Professor Ruth Ann Armitage

**Characterizing Organic Colorants in a 15th Century Iranian Timurid Qur'an by Direct Analysis in Real Time Time-of-Flight Mass Spectrometry**

The Islamic Department at the Detroit Institute of Art has in its possession a 15<sup>th</sup>-century Iranian Timurid Qur'an. This manuscript is the subject of a multidisciplinary study that includes identifying the materials used in the construction as well as its cultural and historical significance. EMU is utilizing direct analysis in real time mass spectrometry to identify the dyes, binders, pigments, and inks of the Qur'an. Mock samples were made using materials from the period and region of the manuscript. The manuscript itself is Middle Eastern in origin but with Chinese artistic influences, so materials from both regions are being used. The mock samples contain a combination of dyes, binders, and lead white. The different combinations will end up as a database of spectra that can be compared to the real sample spectra when it is run.

*Poster Presentation: Room 310, 3:00 p.m.*

**Department of Communication, Media, and Theatre Arts**

**Amanda Grazioli**

Professors Jessica Alexander and Anita Rich

**Moving Forward by Playing Back: Using Drama to Unpack the Experience of Joblessness**

This presentation and interactive demonstration will share the work done in fall 2011 in partnership with Ypsilanti's Michigan Works! office. The presenter devised and facilitated a workshop that sought to provide participants with an opportunity to reflect on experiences relating to job loss and joblessness, while building their confidence and soft skills. Using a blend of interactive theatre and creative drama exercises, the workshop focused on the questions of "who am I?" "where have I been?" and "what do I have to offer?" The presenter will discuss both the experience of creating and leading the workshop and the evaluation methods developed to measure the difficult to quantify impact and results of this endeavor.

*Oral Presentation: Auditorium, 4:10 p.m.*

**Callie S. McKee**

Professor Jessica Alexander

**Stories, Grandmothers, and Giant Turtles: Using Personal Stories to Frame the Performance of Folktale**

We define our existence by telling stories. Storytelling can help us not only make sense of our own lives but also discover connections to the larger narratives of human history. How then do we approach the stories from other times, other cultures? How can these stories help us imagine a world where all of our narratives are connected in some way? In this presentation, I will discuss the process of interpreting, staging and performing a Native American Folktale: the creation story of Sky Woman and Grandmother Turtle. I will discuss how framing this story in the personal stories of the females in my own family helped me to make meaning of both the original tale and the narrative of my family her-story.

*Oral Presentation: Auditorium, 3:30 p.m.*

**Victoria A. Tomalia**

Professor Jessica Alexander

**Improving Communication Skills For Medical School Students Through Improvisational Theater Exercises**

While medical school training arms students with a wide array of technical skills, a physician also needs the ability to communicate clearly with and understand the viewpoint of the patient. Previous research has demonstrated that role-playing techniques can serve as effective tools for teaching these skills, but the methods have varying degrees of success. I have designed a series of lessons based on improvisational theater exercises, tailored to meet the specific needs of aspiring physicians. This paper focuses on three key areas: nonverbal communication, an understanding of status, and the impact of risk and trust on the patient/physician relationship. Implementing this program will help to develop physicians with stronger communication skills, leading to better patient compliance and ultimately improving health outcomes.

*Oral Presentation: Auditorium, 3:50 p.m.*

**Courtney Wright**

Professor Ray Quiel

**EAC: Extemporaneous Speaking Across the Curriculum**

Extemporaneous Speaking, a type of limited preparation speaking commonly found in forensics, has long provided the foundations for sound communication and education pedagogy. This presentation uses constitutive and social justice education theories to provide an understanding of the history and utility of Extemporaneous Speaking as pedagogy. Ultimately, based on the theoretical, historical, and applicable foundations, I proffer Extemporaneous Speaking Across the Curriculum.

*Oral Presentation: Auditorium, 4:30 p.m.*

**Virginia C. Zimmerman**

Professor Jeannette Kindred

**Explaining and Measuring Communication, Job, and Feedback Satisfaction in a Team Environment within a Sports Organization**

There are many factors that go into a traditional organizational audit when using the Communication Satisfaction Questionnaire. However, when analyzing highly competitive environments, some factors are more important than others. I argue that feedback is the most important and explain this in relation to job and communication satisfaction in a competitive environment such as a collegiate sports setting. In this study, participants from the EMU's Varsity Rowing Team were administered two different questionnaires: one a pared-down version of the Communication Satisfaction Questionnaire and the other an extension of the first based on responses given. Interviews followed, providing validation for the results of the questionnaires. Analysis of data revealed that in this highly competitive environment, feedback satisfaction is a highly valued and important factor in conjunction with job and communication satisfaction.

*Poster Presentation: Room 310, 1:15 p.m.*

**Department of Economics**

**Abdulla Ali**

Professor David Crary

**Impact of Economic Variables on Monthly Tourist Arrivals to the Maldives from Selected Source Countries**

The Maldives depends heavily on the income generated from tourism; therefore, it is crucial for the government and tourism industry as a whole to understand the uncertainty in monthly tourist arrivals due to changes in the economic outlook of the source countries, especially the major ones. The aim of this presentation is to understand the impact of major economic variables on monthly tourist arrivals from five major source countries to the Maldives: the UK, Italy, Germany, France, and Japan. Monthly tourist arrival data for the selected countries have been used along with some macroeconomic variables to estimate their impact on tourist arrivals. The result indicates that some economic variables have significant impact on tourist arrivals, and tourist arrival is highly seasonal from these countries.

*Oral Presentation: Room 302, 7:10 p.m.*

**Michael J. Barna**

Professor David Crary

**The Predicted Costs of Meeting Performance Standards in Wisconsin: A District-Level Analysis**

One large criticism of the No Child Left Behind Act of 2001 (NCLB) has focused on the additional costs of implementing the law and meeting accountability standards. For the state of Wisconsin, prior studies show that a relatively modest increase of funds would be needed to bring student proficiencies to an adequate level.

However, these studies were performed prior to the passage of NCLB and its stricter requirements. This study aims to use data on Wisconsin districts between the 2002-03 and 2007-08 school years in order to calculate the additional costs to bring students to the required proficiency levels. However, because the estimated results could not show significant and positive relationships between per-pupil spending and student outcomes, the costs could not be calculated. Several factors may help to explain this unexpected result, and further research is needed.

*Oral Presentation: Room 302, 6:50 p.m.*

**Lance Vought**

Professor David Crary

**Applicant Characteristics as Predictors of Individual Enrollment at Eastern Michigan University**

Numerous studies have been published in peer-reviewed journals on factors affecting college choice. However, most of these are based solely on descriptive statistics or anecdotal evidence. This model takes a specific college, EMU, and determines prospective students' likelihood of attending based on data acquired from their applications. Using probit models, I have determined that distance, African American ethnicity, and high school GPA have a negative impact on enrollment at EMU; Michigan or Ohio residency, need-based financial aid, scholarship aid, and education as an intended major have a positive effect. ACT scores, gender, non-education major intent, international student status, and Hispanic ethnicity had no statistically significant effect on individual enrollment.

*Oral Presentation: Room 302, 6:30 p.m.*

**Department of English Language and Literature**

**Haley E. Atkinson**

Professor Amanda Allen

**Harry Potter and the Power of the Creative Imagination in the Wizarding World**

It is human nature to wonder about what we do not know, and with the use of imagination, we are able to dream about possibilities that do not exist. Whether we believe what we imagine affects only ourselves and our own happiness, but, where the witches and wizards of Hogwarts are concerned, it is a different story. What they imagine, they are able to give the solidity of a physical reality. Intent, expectation, and belief all play a part in what reality exists for each individual. In the case of Muggles, it blinds them from the reality of the magic that surrounds them, but for witches and wizards, belief and expectation gives them the power to twist the world into what they want it to be.

*Oral Presentation: Room 222, 12:30 p.m.*

**Antonio A. Barroso**

Professor Christine Neufeld

**"The Unnamable" and "The Fissure within the Symbolic Order"**

Twentieth-century horror author H. P. Lovecraft often wrote his tales about entities that were beyond the scope of human language. His tendency to label these creatures as "indescribable" led to much criticism and his response in the form of the short story "The Unnamable." Justifying his claim about the limits of human language, the text serves not only as a clever jab at his critics but also as a clear statement of his beliefs regarding the inadequacy of language. Reading this through the lens of Lacanian psycholinguistics, Lovecraft's abandoning of language represents the inadequacy of the Symbolic to fully grasp and maintain encounters with the Real. This leads to a more devastating realization from both the Lovecraftian protagonist as well as the reader, as exposure to the Real and the subsequent failure of Symbolic systems calls into question the stability of Symbolic structures, most notably, concepts of reality itself.

*Oral Presentation: Room 222, 4:10 p.m.*

**Andrea Boog**

Professor Amanda Allen

**The Many Reflections of Jin Wang: Lacan, the Mirror Stage, and Racial Shadows in Gene Luen Yang's *American Born Chinese***

The theme of exclusion and discrimination is prevalent throughout the story of Yang's *American Born Chinese*. Each of the three main characters has his or her own story. We learn over the course of the three stories how these characters are connected. These fragmented parts, or reflections, of the main character(s) are fascinating, particularly when viewed through a Lacanian lens. My intent is to use Lacanian theory (especially involving the Mirror Stage of development) to examine Yang's main characters, identify their stages of development in regard to Lacan's Mirror Stage, and, finally, explore the idea that the racial shadows these characters fear are simply alternate reflections of themselves.

*Oral Presentation: Room 222, 1:10 p.m.*

**Doug Crandall**

Professor Elisabeth Daeumer

**“A Dance for People who Don’t Know How to Dance”:  
The Process of Identity Construction in *Melymbrosia***

One of Virginia Woolf’s earliest attempts at fiction, *Melymbrosia* puts its own immaturity in sharp focus by closely tracing the evolution of a technique that comes to define the author’s style. For while in Woolf’s later work the inner minds of her characters are used as narrative lenses, they are here mostly left blank and inscrutable. Therefore, *Melymbrosia* might function as a means of sketching out the mind’s features and borders. This elucidation of identity’s components and composition is a parallel project to the plot’s primary action: a voyage in which a young woman attempts to define who she is and how she fits into the world as she perceives it. Using the tools of Lacanian psychoanalytic theory, I argue that in *Melymbrosia* Woolf proposes a model of identity in which one is defined by one’s emptiness, silenced in one’s attempted signification, and ultimately isolated and alone.  
*Oral Presentation: Room 222, 2:40 p.m.*

**Carly Francescut**

Professor Amanda Allen

**Adolescence and the Abject in Garth Nix's *Sabriel***

Roberta Seelinger Trites argues that one of the common features of adolescent literature is that the text focuses on the struggles of the teenaged protagonists to learn their place within the power structures that they are surrounded by, rather than on the central character's growth over the course of the novel. While Garth Nix's *Sabriel* does not entirely fit into the paradigm that Trites describes, much of the text focuses on Sabriel and Touchstone's realization of their own mortality through their battle against the Dead creature Kerrigor. Although *Sabriel* is primarily a work of high fantasy, Nix uses abjections and ideas of the abject to highlight Sabriel and Touchstone's growing awareness as Beings-towards-death while simultaneously complicating how the boundary between life and death functions within the novel.

*Oral Presentation: Room 222, 12:50 p.m.*

**Sean Kilpatrick**

Professor Christine Hume

**The Buff Ruins**

“The Buff Ruins” is a lyric essay that compares the recent economic downfall of Detroit with the diseased memoirs of an author who has endured several failed personal relationships. Mixing social commentary with the violence of language, it means to explore the fragmented nature of memory through aphorisms and stream of consciousness.

*Oral Presentation: Room 222, 3:30 p.m.*

**Ahmed Saeed Manati**

Professor T. Daniel Seely

**The Ezafat Suffix in Farsi: A Morphosyntactic Analysis**

The Ezafat suffix ‘-e/ye’ is an important part of Farsi noun phrases, adjective phrases, and prepositional phrases. More importantly, a noun phrase cannot form a constituent without the Ezafat Suffix. Its occurrence is syntactically motivated by the presence of a following right-branching modifier or complement within the phrase, and it significantly contributes to the semantics of the phrases in which it is used. I provide an introduction to the underlying

structure of the suffix and an analysis of its behavior, and I attempt to determine its precise role in the mapping from underlying form to surface form, within generative syntax. This provides insights about an aspect of Farsi syntax in particular, and about syntactic theory more generally.

*Oral Presentation: Room 222, 6:30 p.m.*

**Molly McCord**

Professor Doug Baker

**Written Feedback in the ESL Composition Classroom:  
Issues and Analysis**

As an instructor of English as a Second Language composition classes, I spend countless hours providing written feedback on my L2 students’ essays. This is an exhausting process, and I have begun questioning the effectiveness of this feedback and whether the time I spend offering comments is helping the students become more proficient writers. This project allowed me to examine the initial thought process that leads me to make the feedback decisions that I do. I examined the rationale behind my feedback provision (the decisions I make about which errors to address, and the way in which I choose to address the error[s]) in the context of a student essay on which I provided written feedback comments. This project resulted in the development of a “Pre-Feedback Questionnaire” that I will use with future ESL composition classes.

*Oral Presentation: Room 222, 4:30 p.m.*

**Brent A. Miller**

Professor Veronica Grondona

**Gender Distinctions in English Manner-of-speaking  
Verbs**

This paper explores gender distinctions in English manner-of-speaking verbs and describes the results of a study conducted to gauge the extent to which each verb connotes inherent gender, if such inherent gender exists. The results of the study show that the inherent stereotypical gender of a subject greatly influences respondents' choice of which verb best completes a sentence. Participants' responses also indicate that certain manner-of-speaking verbs are exclusively female and that stereotypically male verbs of this type may not exist.

*Oral Presentation: Room 222, 7:10 p.m.*

**Melissa R. Pompili**

Professor Robin Lucy

**A Literary Cosmogram: The Influence of Western  
Narrative Tradition and African Oral Tradition in  
Michelle Cliff's *Free Enterprise***

*Free Enterprise* gives voice to historically marginalized African American and Afro-Caribbean characters. Two prominent features of the novel are allusions to icons and narrative structures from the Western literary canon and motifs associated with the cultures of the Kongo. I argue that Cliff's text uses narrative form to destabilize the idea that there can be any official record at all. This paper addresses the function of the Ki-Kongo cosmogram as a structural element of the novel that disrupts and resists the Western literary and historical narrative put in place by the culture of the colonizer. I argue that the cosmogram not only contributes to the narrative construction of time but also helps the characters to (re)construct identities that were deconstructed through colonialism.

*Oral Presentation: Room 222, 2:20 p.m.*

**Edward G. Randolph III**

Professor Christine Hume

**Seen from Space**

“Seen from Space” is a lyrical essay about a walk through the University of Michigan campus whose landscape activates imagined, remembered, and virtual journeys through the receding flood waters of New Orleans and the rising tide of China’s Three Gorges Dam, while skirting the slippery fulcrum of hereditary dementia that insinuates itself into the narrator’s ever-revising sense of self. The experience creates a polymorphous narration that parallels the walk itself, informed and complicated by personal memories, readings, and the film “Moon,” in which the protagonist finds himself unable to communicate directly with his wife and family and caught in a cycle of longing and alienation.

*Oral Presentation: Room 222, 3:50 p.m.***Jana Rosinski**

Professor Derek Mueller

**Page Tectonics: Rhetoric in Fluxus**

Plate tectonics is a scientific theory describing the large scale movements of the Earth’s lithosphere; activity occurs between plates as a kinetic phenomenon. Page tectonics is a borrowing of scientific theory as *structural metaphor*, conceptualizing the nonphysical (composition) in terms of the physical (plate tectonics). Defining composition metaphorically is useful practically, pedagogically, and inventively by illuminating possibilities, for metaphorical definition allows us to understand abstract concepts (ideas) in terms of clearer concepts (spatial orientations/objects). Page tectonics disturbs settled composition from static art to composition as a plastic everyday art, one that shifts from page to *happening space*. The Writing Process becomes explorations in interactivity of mediums/medias, shifting focus from replication to invention.

*Poster Presentation: Room 310, 1:15 p.m.***Aquila Sams**

Professor Martin Shichtman

**The Tale of Two Taverns: Alcohol Consumption in The Pardoner’s Prologue and Tale**

Throughout *The Canterbury Tales*, there are multiple instances in which the characters engage in the consumption of alcohol. The Pardoner’s Prologue and Tale both begin with the Canterbury pilgrims and the Pardoner’s characters drinking alcohol, yet as he speaks, the Pardoner delivers a sermon on the dangers of drinking alcohol. Some critics have described the Pardoner as a mindless alcoholic, similar to the drunkards he preaches against. By exploring the history of alcohol consumption during the Middle Ages and the use of religious sermons to discourage peasants from drinking, readers are able to see that the Pardoner is not an alcoholic. The Pardoner is simply using his speech to make the pilgrims feel guilty about their sins, so he can make a profit pardoning them.

*Oral Presentation: Room 222, 2:00 p.m.***Tabetha K. Violet**

Professor Elisabeth Daeumer

**Gendered Utopia and Desire**

This study seeks to interrogate the intersection of feminist thought and Utopia by exploring two texts that differ radically in their era and presentation but share common iterations of a woman’s powerful space. By drawing on feminist scholarship, the paper will deconstruct “Sultana’s Dream,” a protofeminist Indian short story written in 1905 along with the “Take Back the Night” march (which started in the 1970s and continues today), using the guidebook for the march as well as editorial commentary surrounding individual marches. The purpose of bringing these two texts into conversation is to demonstrate a continued condition within the discourse of gendered Utopia, in which gaining exposure is privileged over effecting change.

*Oral Presentation: Room 222, 3:00 p.m.***Brent Woo**

Professor Veronica Grondona

**Cyrillic Graphization of Dungan**

The Dungans have been investigated thoroughly from geographical, sociological, anthropological, and even biological perspectives. But there has not yet been a detailed analysis with a sociolinguistic focus. This study aims to fill that gap. The Dungan people speak a Sino-Tibetan language that resembles northwestern Mandarin dialects of the Chinese macrolanguage, but in sociolinguistic terms the language, and consequently the people, are not regarded as, nor do they self-identify as, Chinese. This study discusses why language is so important to the Dungans, with particular emphasis on the Cyrillic writing system. Presented here is an analysis based on Haarman’s (2008) idea of Graphization, the process of adoption of a writing system for a given language. Despite heavy influence from language contact on all sides—the surrounding Central Asian languages and the Russian language—the Dungans maintain the independent identity of their language.

*Oral Presentation: Room 222, 6:50 p.m.***Department of Geography and Geology****Barbara A. Barber**

Professor Dan Bonenberger

**Historic American Building Survey of the Paint Creek Cider Mill Building**

The Paint Creek Cider Mill Building is located in the heart of Goodison, central to the Charter Township of Oakland. The original building began its history on this site in 1835. The mill building contained a water wheel and flume, which harnessed early water-powered electricity. A gristmill was established, which provided early settlers with food and grain to aid in the development of Goodison. The Historic American Building Survey documents archival photographs and current condition assessment portraying changes in patterns and history.

*Oral Presentation: Room 320, 6:30 p.m.*

**Lauren E. Carpenter**

Professor Ted Ligibel

**The Restoration of Ornamental Elements on Plaster Ceilings, Two Case Studies**

Case Study #1: Meadowbrook Hall, Rochester Hills, Michigan: the Corrado Parducci ceiling in the Christopher Wren dining room (c. 1926). Case Study #2: Henry Ford Estate - Fair Lane, Dearborn, Michigan: a ceiling medallion in the living room (c. 1915). Plaster elements had degraded due to age, water damage, indoor air pollution, and earlier repairs. This presentation will explain the causes and processes of the degradation of the ornamental plaster elements and will provide an overview of the principles of the methodology of ornamental plaster conservation and restoration. The process by which architectural conservators and conservation technicians clean and repair this type of damage will be explained, with descriptions of the materials and methods used.

*Oral Presentation: Room 320, 2:20 p.m.*

**Sam Constantine**

Professor Ted Ligibel

**Investigating Ann Arbor Through Dow's Mid-Century Modern Design**

The Mid-Century Modern design of Alden B. Dow known as the Hoobler-Lindenauer House offers a glimpse into the Ann Arbor of yesteryear. Through extensive research using outlets such as the Washtenaw County Records of Deeds, architectural drawings, plat maps and archival material, the property that this home sits upon can be accurately dated to the Potawatomi Indians. The presentation will describe the property, including its location, legal description, and owners. A historic context of the region will be discussed in detail and provide a basis for the property history, which will delineate ownership since the original patent deed of 1826. Various periods of significant occupancy of property will be exemplified. Finally, the architectural features of this modern home will be incorporated into overall history that encompasses the property.

*Oral Presentation: Room 320, 2:40 p.m.*

**Judith Davis**

Professor Ted Ligibel

**Documenting Ann Arbor Modern: 2638 Bedford Road, Ann Arbor, MI 48104**

American mid-century modern architecture is one of simplicity. It contains geometric shapes, wide-open floor plans, and large windows that expand the indoor living space. Decorative embellishments are less ornate and include elements that are more textural and contrasting. Residential styles include such designs as minimal traditional, ranch, split-level, and shed modern. These styles popularized elements such as the attached or sunken garage, half-story wings, wide eave overhangs, and flat or low-pitched roofs. This is the study of one mid-century modern contemporary house in the Ann Arbor area. The house was designed by noted architect James Livingston and built by Eugene Kurtz in 1961. This study also shows how the land was used and developed from the beginning of its recorded history.

*Oral Presentation: Room 320, 3:00 p.m.*

**Amara J. Frontczak**

Professor Dan Bonenberger

**Preserving Context through Good Metadata**

Metadata affects the ability to access archival materials, no matter what generation, digital or analog. Good metadata can be used to create easily searchable finding aids but can also link data to other materials that are relevant or contemporary. These links create "Linked Data," or networks of interrelation among objects. "Linked Data" is an outgrowth of best practices from the web and is currently being applied in new ways to integrate scientific, medical, and civic databases. Within the field of Historic Preservation, high quality linked metadata can create greater access among archived materials, historic sites, and original historical research. In the future, linked metadata may be able to preserve objects during migrations to future states, especially cloud storage. Metadata is a largely underestimated opportunity to exercise best practices and preserve cultural heritage in the long-term digital future.

*Oral Presentation: Room 320, 6:50 p.m.*

**Kelly A. Johnston**

Professor Ted Ligibel

**Preservation at the Edsel and Eleanor Ford House**

A discussion of the curatorial history and conservation of 16th century English furnishings at the Edsel and Eleanor Ford House in St. Clair Shores, MI.

*Oral Presentation: Room 320, 3:30 p.m.*

**Belinda G. McGuire**

Professor Ted Ligibel

**The "Power House" Documentary**

On November 15, 1931, the Sister Servants of the Immaculate Heart of Mary powered up their new Power House. The Power House was the first building built for the new St. Mary's College and Academy complex. It reflects in both architectural style and efficiency the power and might of the 20th century for Monroe County, Michigan. A concrete and steel building, the Power House is multi-functional and is still used today in a limited capacity. An excellent adaptive use study and an exquisite example of Art Deco architecture, the Power House is in need of further study and detailed documentation of its structure, style, and systems.

*Oral Presentation: Room 320, 3:50 p.m.*

**Marcus P. Schwimmer**

Professor Dan Bonenberger

**A Case for Intangible Heritage Documentation in the United States**

Currently the United Nations Educational, Scientific, and Cultural Organization (UNESCO) designates more than 230 documented Intangible Heritage Elements across the world. None of these is from the United States. Examining the diverse cultural landscapes, current political climate, and economic elements involved in documenting intangible heritage, I will make a case for the U.S. becoming more invested in the UNESCO documentation system. Moreover, examples will be given of current cultural elements eligible for documentation, to prove that 1) the U.S. is home to wide-ranging cultural diversity; 2) elements of our complex immigrant heritage have developed into unique cultural identifiers; and 3) documenting these unique cultural elements not only fulfills a social obligation but will prove to be a means of financial gain for local communities.

*Oral Presentation: Room 320, 7:10 p.m.*

**Nichole G. Van Blaricum**

Professors Dan Bonenberger and Ted Ligibel

**Midwest Notched Log Architecture**

In America, the log cabin has become entrenched in our national identity. It symbolizes the “pioneer spirit,” and the romanticized sketches of log cabins provoke nostalgia for the time of expansion in American history. My presentation will deal with the types of notched log architecture found in Ohio, Indiana, Wisconsin, and Michigan and will discuss how these buildings were constructed, from the felling of trees to the whitewashing of the walls.

*Poster Presentation: Room 310, 1:15 p.m.*

**Lindsay Zaremski**

Professors Ted Ligibel and Nancy Bryk

**Darning Stitches as Connecting Threads: A Norwegian American Girl's Mending Stitches as Art**

An 1826 Norwegian American girl's needlework sampler serves as the backdrop for two areas of research: the sampler itself and assimilation vs. cultural pluralism of a non-Anglo American in the 19th century.

*Oral Presentation: Room 320, 4:10 p.m.*

**Department of History and Philosophy**

**William Boardman**

Professor Ronald Delph

**The Art of War: Reward, Duty, and Power in Renaissance Florence**

In Renaissance Florence between the 1430s and 1560s, Uccello, del Castagno, da Vinci, Michelangelo, Vasari, and Bronzino created artworks with historical and martial themes for the city's most important public spaces. The works were commissioned by the government to serve the needs of the state, but the role and content of these works changed depending on the political climate in which they were commissioned. My research will show that in the period of Medici rule, art was tied closely to patronage and rewarded individual service; in the Republican era of 1494-1512, it called on citizens to perform their civic duty; and in the era of ducal rule from 1531, it signaled the consolidation of authoritarian and dynastic power.

*Oral Presentation: Room 330, 3:50 p.m.*

**Jacob Casteel**

Professor Kathleen Chamberlain

**Red Power: Native American Activism and the End of the Termination Policy**

In researching the origins of Native American activism I found significant connections between the United States termination and vanishing policies and the uprising of organized opposition among the Native population. When Red Power demonstrations peaked in the 1960s and 1970s, the United States government was at a crossroads with its population. Taking cues from other activist movements, the American Indian Movement and the National Indian Youth Council forged a path towards realizing self-determination for the Native people and brought an end to the Termination Era policies that threatened their sovereignty. Their efforts made it impossible for the government to make them “vanish” and brought Native American struggles out from behind the shadows of a dark past.

*Oral Presentation: Room 330, 1:10 p.m.*

**Andrea S. Christmas**

Professor Joseph Engwenyu

**“Je vous ai compris”?: The Algerian War, Intellectual Antagonism, and the Dissolution of the French Essentialist Colonial Narrative**

The Algerian War caused deep rifts within the intellectual and social climate of both metropolitan France and Algeria itself. Among these conflicts, an intellectual dispute between existentialist thinkers Jean-Paul Sartre and Albert Camus emerged. Their debate reflected the national struggle for France to conceive of itself as something other than an imperial power, and for French-Algerians to understand Algeria as a separate entity. In the post-colonial period, with new paradigms of thought emerging, essentialist colonial narratives were necessarily replaced by schools of thought emphasizing the understanding of the nation state as a constructed entity. This work hopes to explore how Sartre and Camus' debate helped to change traditional narratives of colonialism.

*Oral Presentation: Room 330, 6:30 p.m.*

**Andrea M. Davis**

Professor Ronald Delph

**The Pazzi Conspiracy: Killing the Medici Men**

On Sunday, April 26, 1478, assassins attacked Giuliano and Lorenzo de' Medici at the most sacred moment of High Mass in the cathedral of Florence. As Giuliano's attacker furiously stabbed him 19 times, Lorenzo narrowly escaped to safety. This assassination plot was immortalized as the “Pazzi Conspiracy,” so named for the Florentine family who schemed with Pope Sixtus IV to eliminate the Medici family as de facto leader of Florence. My research reveals that this bloody plot was hatched because competition, fear, jealousy, and political maneuverings for power and wealth raged among these families and a corrupt pope. Florence suffered a horrific bloodbath, the Italian peninsula endured a devastating war, and Lorenzo tightened his grip on Florence until his death in 1492.

*Oral Presentation: Room 330, 4:10 p.m.*

**Andrew Karl Donovan**

Professor Ronald Delph

**Days of Shaking: The English Witch-craze as an extension of the English Civil War**

This presentation examines the English Witch Craze that occurred from 1645-1647. This event is unique as it was the only mass witch-hunt to occur in England and came during the height of the English Civil War. The witch-craze was directly influenced by the events of the war. Several factors—the politicization of religion and witchcraft, the real threat of war, and the spiritual threat of Satan—turned the conflict into both a political and spiritual battle. By examining political and religious writings of the period, wartime propaganda, and the memoirs of those involved, we can understand the mentality of the English population during the war. Linking the witch-craze to the Civil War adds to our understanding of the impact of the conflict and how many social and cultural aspects were altered.

*Oral Presentation: Room 330, 4:30 p.m.*

**Tamara R. Grit**

Professor Ronald Delph

**Harlots to Holy Women: The Rehabilitation of Prostitutes in Early Sixteenth Century Florence**

During the 15th century, prostitution was widely accepted as a “necessary evil” by secular and religious authorities in Florence to prevent the greater sin of homosexuality and to preserve the chastity of virtuous women. By 1700, attitudes toward sex work had turned dramatically, and attempts were made to minimize the growing threat it posed. This research examines a key aspect of this crusade: why the state encouraged rehabilitation of prostitutes through the Casa delle Convertite in early sixteenth century Florence. Evidence will show that because of the perceived threat the expanding sex trade presented to vulnerable populations and a new wave of Catholic reform sentiment, the government of Florence attempted to protect and reestablish prostitutes and other at-risk women and girls through this custodial institution.

*Oral Presentation: Room 330, 3:30 p.m.*

**Samantha Kies**

Professor Joseph Engwenyu

**African Matriarchy: The Women of Southeast Nigeria Prior to Colonization**

This presentation looks at the matriarchal foundations of Southeast Nigeria prior to the onset of colonialism. Though labeled a patriarchal society by Europeans, Southeast Nigeria was a society where women flourished, a society full of social positions and customs that empowered women and gave them a voice. From religion, politics, and the economy to women’s groups and women leaders, Southeast Nigeria cultivated a culture in which women were able to flourish and thrive and be an inherent part of their society. When we look at these customs, the damage that colonialism inflicted on these people and this society is more clearly shown and defined.

*Oral Presentation: Room 330, 6:50 p.m.*

**Donna A. Lehman**

Professor Joseph Engwenyu

**McCarthyism: Extreme Politics**

Historians have many definitions for the American political phenomenon known as McCarthyism. A simple but apt

characterization describes the episode as a manipulation of Cold War fears for political exploitation by both major political parties. The origins of this phenomenon precede the man whose name now symbolizes this unfortunate *cause celebre*. The anti-communism of both the Truman and Eisenhower administrations is increasingly viewed by historians in the context of conventional politics. Consequently, the exploits of Senator Joseph R. McCarthy have become somewhat eclipsed by the complex domestic and international developments that paved the way for his brief notoriety. Both sides reaped significant benefits from the political exploitation, but the American people were left with the beginnings of ideological polarization that would, in the future, gridlock the political system of the United States.

*Oral Presentation: Room 330, 7:10 p.m.*

**Edward W. McGovern**

Professor Ronald Delph

**The Rise of the Pilgrimage of Santiago de Compostela: Rural Backwater to Supra-Regional Shrine**

During the Middle Ages, pilgrimages to saints and their shrines were a part of life’s fabric. With all of Europe to choose from, why did a geographically isolated location at the western edge of the European continent, Santiago de Compostela, become one of the three holiest sites in all of Christendom and the destination of pilgrims from across all of Europe? The meteoric rise of the shrine and its attendant pilgrimage between the ninth and twelfth centuries was in large part due to the importance of St. James and the religious convictions of the Medieval Age, but also the maneuvering of the powerful political and religious elite. In promoting the pilgrimage to Santiago, the Catholic Church was fulfilling two dually important demands: the spiritual needs of the people and the geopolitical bulwark needed against Islam.

*Oral Presentation: Room 330, 2:00 p.m.*

**Jacquelyn S. Odum**

Professor Kathleen Chamberlain

**The Role of the Two-Spirit Movement in the Reclamation of Native American Cultural Tradition**

Historically, many American Indian tribal cultures included acknowledgement of gender identities beyond male and female. Such other-gendered individuals were believed to be situated naturally along a continuum of gender and were considered to be gifted with special talents and a unique closeness to the spirit world. Two-Spirits may or may not be, according to Euro-American heteronormative definitions, homosexual, and therefore feel that organizations such as the 1970s-founded Gay American Indians do not fully represent them. Formally organized in 1994, the Two-Spirit movement seeks a return to the place and status differently gendered Indians held in traditional culture and cosmology. They see this as an integral part of restoring the balance that was lost through colonial and post-colonial contact and policies. It represents a bridge not only between male and female but also between cultural authenticity and cultural obsolescence.

*Oral Presentation: Room 330, 1:30 p.m.*

**Branden O'Grady**

Professor Ronald Delph

**Heresy In the Heavens: Galileo and the Catholic Universe, 1609-1633**

The trial and condemnation of Galileo Galilei as a heretic in 1633 has overshadowed the larger struggle over the nature of the universe that was the real issue between proponents of heliocentrism and the traditional geocentric model. Why was the Catholic worldview threatened by what Galileo observed and recorded? The philosophical underpinnings that substantiated Catholicism formed a model of the universe with Earth at the center of Creation. In the early modern European mind, opposing perceptions of the universe presaged a shift towards or away from God. Galileo's work moved this debate from the purely hypothetical to the realm of the physical when he aimed a telescope at the night sky and recorded physical proof of man's place in the universe. Galileo threatened the Catholic understanding of the heavens because his scientific observations reordered the universe and impugned the established Aristotelian and Neoplatonist worldviews.

*Oral Presentation: Room 330, 2:20 p.m.*

**Matthew D. Penix**

Professor John Knight

**A Rational Disaster: the Ottoman Break with Britain in the First World War**

The Ottoman decision to join the First World War on the side of Britain's enemies led within four years to total defeat and the end of centuries of Turkish rule over the Middle East. Though even postwar Turkish authors blamed a handful of politicians in Germany for the disastrous anti-British alliance of 1914, this presentation will show that the conflict was the culmination of decades of British encroachment on Ottoman sovereignty. Faced with a dangerous geopolitical situation and with broad backing among the educated Ottoman elite, the statesmen in Istanbul made a considered, but fatal, decision.

*Oral Presentation: Room 330, 12:50 p.m.*

**Ashley Schwedt**

Professor Joseph Engwenyu

**Extreme Fear: Justifying Adults' Fright of the World Wide Web**

Technological innovations were a key theme of the 20th century, with the most significant being the creation of the World Wide Web. As one of the century's most extreme and unforeseeable changes, the Internet created anxiety, excitement, curiosity, and fear. While adults remained uncertain, youth took hold of the opportunities the Internet provided and made the most of this new media form. Today, youth have taken complete ownership of the Internet and made it into something both empowering and dangerous. Gen Y, also called Net Gen, are growing up as the first generation to have accessible Internet since childhood. This new and provocative media form will lead to the mobilization of millions of youth and will create a new, highly powerful youth culture with endless means of access and freedom.

*Oral Presentation: Room 330, 7:30 p.m.*

**William T. Zurenko**

Professor Ronald Delph

**For the Love of Money: Henry VIII and the Dissolution of the Monasteries**

Scattered throughout the English countryside are the ruins of hundreds of Catholic religious houses. Prior to 1536 these abbeys, priories, nunneries, and monasteries flourished as the economic, social, and religious centers of many English towns and villages. Yet from 1536 through 1539, King Henry VIII and his government closed more than eight hundred religious houses in England and Wales in one of the largest instances of land redistribution in English history. But why did Henry VIII take such drastic measures to suppress the Catholic Church in England? Hadn't his desire for a divorce from Catherine of Aragon been Henry's prime motivation for the Anglican split with Rome? Research indicates that Henry's suppression of the monasteries was motivated by precedent, lack of resistance, and the overwhelming desire to accumulate personal wealth. This presentation will explore what Henry VIII gained – and lost – with his decision to dissolve the monasteries.

*Oral Presentation: Room 330, 2:40 p.m.*

**Johanna E. S. Zwally**

Professor Ronald Delph

**The Pazzi Conspiracy of 1478: Murdering the Medici**

In the early 1440s, the influential Pazzi and Medici families had been allies in Florence, Italy. Thirty years later, this alliance soured and was ultimately severed when several members of the Pazzi family and their supporters attempted the assassination of Lorenzo and Giuliano Medici. Ultimately, this attempt led to Giuliano's death and a revival in support for the Medici across Florence. This study investigates the question "Why did the alliance between the Pazzi and Medici families deteriorate and eventually lead Riario, Pazzi, and Salviati to attempt the Medici assassination?" This research shows that the alliance deteriorated because of jealousy over the Medicis' increasing influence within the city of Florence. This deterioration led the Pazzi conspirators to contemplate assassination because the Pazzi family, as well as Pope Sixtus IV, sought to remove power from the corrupt Medici and to restore political balance within Florence.

*Oral Presentation: Room 330, 3:00 p.m.*

## Department of Mathematics

### **Nasrin Belbasi**

Professor Khairul Islam

#### **Growth and Predictors of Uninsured People in the United States**

The most recent data released by the U.S. Census Bureau show that the number of people without health insurance increased to 49.9 million in 2010, which is 13.3 million more than those in 2000. In this study we would like to fit a suitable model to address the growth of uninsured people in the USA from 2000-2010. We also intend to address what predictors contribute to such growth of the uninsured number of people.

*Oral Presentation: Room 301, 3:50 p.m.*

### **Reino L. Bruner and James D. Dalrymple**

Professor Tanweer J. Shapla

#### **Theory and Application of Incremental Shift Transformation**

We propose incremental shift transformation to achieve normality for skewed data and provided R code for its implementation. Our method was justified under four different strategies: (1) Creating contrived data sets using arbitrary shifts and ladder transformations upon random normal data in order to detect the arbitrary shift and transformation via the R application; (2) Comparing complex, naturally occurring frequency distribution datasets such as the Wakeby distribution by transformation efficacy, at arbitrary characteristic moments; (3) Investigating alpha error reduction using new incremental shift methodology via Monte Carlo modeling; and (4) Comparative analysis of previously published paper results versus our shift transformation method. We accomplish this by demonstrating how some vanilla ladder transformations do not yield normalized data while our shift methodology does. Finally, we explain why the optimal solution is the only non-arbitrary solution.

*Oral Presentation: Room 301, 4:10 p.m.*

### **Adrienne Hirschfelder**

Professor Jiuqiang Liu

#### **Using the Matrix Tree Theorem for Special Classes of Graphs**

The Matrix Tree Theorem is used to find the number of distinct spanning trees in a graph and can be used to generate closed formulas for special classes of graphs. The number of spanning trees is of interest in the analysis of electric networks. We have created proofs for closed formulas for the number of spanning trees in a variety of special classes of graphs using the Matrix Tree Theorem. We prove formulas for wheels and fans, whose formulas are based on the Fibonacci numbers, 'windmills,' and tripartite and n-partite graphs. We also give bounds for the number in Cartesian products of graphs (GxH) based on the number of spanning trees in G and in H.

*Oral Presentation: Room 301, 3:30 p.m.*

### **Shanna R. Simpson-Singleton**

Professor Andrew M. Ross

#### **A Mathematical Model of the Correlation of Mood in Bipolar Disorder**

Bipolar disorder cycles between manic, euthymic, and depressed moods. One existing mathematical model of the

disorder uses a deterministic modified Van der Pol differential equation. We add noise to this model in various ways to determine whether the times spent in each mood state are interrelated, a semi-Markov process, or some other stochastic model. We also explore the model for indications of rapid cycling. We expect a positive correlation between the times spent in each mood state but find that the Van der Pol equation produced a negative correlation. These correlations show that this model is not a semi-Markov process, and there were no indications of rapid-cycling. This suggests that the existing model may not accurately represent important aspects of bipolar disorder.

*Poster Presentation: Room 310, 3:00 p.m.*

## Department of Music and Dance

### **Samuel Joshua**

Professor Gary Pedersen

#### **Paul Hindemith: Sonata No. 2 for Piano (1936)**

Born in Hanau, Germany, in 1895, Paul Hindemith became one of the most influential composers of the 20th Century. Hindemith's music is grounded in a strong, complex counterpoint style, reminiscent to that of J. S. Bach, and is set in modern, refined tonal harmony. Hindemith's relationship with the Nazi party was far from that of good rapport. On January 17, 1936, Hindemith signed an oath of loyalty to Hitler in hopes of reconciliation. It was later this year that he wrote his three piano sonatas, in which we hear strains of soul-searching on Hindemith's part. In October of the same year, his music was banned from Germany. This ended all hopes of a good working relationship with the Nazis, so Hindemith, along with his Jewish wife, left for Switzerland and in 1940 immigrated to America where he taught primarily at Yale University.

*Oral Presentation: Auditorium, 12:30 p.m.*

## Department of Physics and Astronomy

### **Nicholas W. Arnold**

Professor James Carroll

#### **Developing an Ion Gun for the Plasma Physics Lab at EMU**

In the Plasma Physics Lab, we have been designing an ion gun for use in future experiments. An ion gun is a directed source of charged particles, which in our case is a beam of argon ions. I will talk about the assembly of the ion gun as well as the theory of its operation. I will also discuss the process of building a new vacuum chamber to house the ion gun, the design of a control system for the gun, and the process of testing the new ion gun.

*Oral Presentation: Room 301, 6:30 p.m.*

### **Marc Bell**

Professor Ernest Behringer

#### **Trapping Swimming Cells with Infrared Laser Tweezers**

Infrared laser tweezers use highly focused infrared light to trap microscopic swimming cells and can be used to examine the force generated by the flagella of such cells. We have built infrared laser tweezers in an effort to trap and observe swimming cells within fluid streams. We will describe the tweezers apparatus and present the latest results from trapping experiments.

*Oral Presentation: Room 301, 7:10 p.m.*

**Paul T. Nelson**

Professor James Carroll

**Operation and Characterization of an Ion Beam Source**

I will explain the function of each electrode composing the ion source and demonstrate the effects that electrode bias and geometry have on the shape and charge density of the ion beam produced. I will attempt to determine operating parameters that maximize beam collimation. In order to show that the ion source functions in a predictable manner and to aid in determining optimal operating parameters, I will construct a computer model that will allow me to simulate ion trajectories through the ion source. Each parameter that is adjustable on the actual gun will be adjustable in the simulation. I will then correlate the simulated effects of adjustable parameters on the ion beam to those measured experimentally. Finally, I will demonstrate that the source has the ability to steer the ion beam onto and off of a target and that the bias applied to the sources deflector plates to do this is reasonable.

*Oral Presentation: Room 301, 6:50 p.m.***Department of Political Science****Nicolette Bateson**

Professor Joe Ohren

**Legacy Cost Funding: A Fiscal Indicator System for Decision Makers**

The Great Recession of 2007-2009 revealed structural municipal fiscal stress in cities throughout the United States. One component of the fiscal stress is increasing employee pension and retiree healthcare expenditures, collectively known as legacy costs. In aggregate, research reveals that pension systems appear adequately funded. In contrast, retiree healthcare liabilities are often not funded beyond the current year. Using a sample of U.S. cities that have experienced population growth and decline, a better understanding of legacy cost funding is developed. From this analysis, a fiscal indicator system is formed to measure the sustainability of funding retirement benefits. This system provides decision-makers with a tool to make better-informed decisions to balance citizen service delivery needs with long-term commitments made to employees.

*Oral Presentation: Auditorium, 1:10 p.m.***Joshua Carr**

Professor Claudia Petrescu

**Partisan Politics and Charitable Giving**

Research related to charitable giving has suggested that political conservatives are more generous than political liberals. However, the literature on this topic has been largely limited to the connection between political ideology and level of charitable giving. I seek to examine the relationship between national political ideology as measured by partisan composition of the federal government and level of charitable giving. Data from Giving USA and the National Center for Charitable Statistics were compared with possible partisan compositions of the federal government. My findings suggest that Republican control of the federal government is positively correlated with higher national levels of giving. Additional study using techniques to control for factors such as economic conditions are warranted.

*Oral Presentation: Room 320, 4:30 p.m.***Patricia Rayl**

Professor Joe Ohren

**Inter-local Agreements in Jackson County**

Interlocal collaboration and consolidation are topics of special interest to those who observe local government. These topics have gained even more importance in today's economic environment with cities, townships, and counties slashing services in attempts to balance their budgets. The use of interlocal agreements gives public administrators some breathing room, as shared resources are used to provide the past level of service to residents, despite the depressed economic situation. There are many reasons to create interlocal agreements (ILAs), and the forms they take are just as varied. A survey of ILAs between the units of local government in Jackson County was conducted in the spring of 2011. I will report the results and analyze the data against similar local government surveys.

*Oral Presentation: Auditorium, 12:50 p.m.***Shane Redman**

Professor Elaine Martin

**Structures of Local Governments: Mayoral Power and Ideal Types**

The ideal types of mayor-council and council-manager forms of government structure have been used for more than a century to categorize American cities. Through the years, however, scholarship has found that cities have diverged from these ideal types. States granting cities home rule has led to many cities creating variations or combinations of these ideal types, forming "hybrid" governmental structures. Consequently, mayoral power no longer indicates the form of government by which a city operates. By analyzing past and recent scholarship on forms of city government, I conclude in this study that the ideal types no longer represent most contemporary cities. While the scholarship in the field has so far used these ideal types to draw comparisons, I suggest that future scholarship would benefit by eliminating these types and classifying cities into more functional and relevant categories.

*Oral Presentation, Room 300, 7:10 p.m.***Department of Psychology****Tiffany Abrego**

Professor Carol Freedman-Doan

**Sex Talk: Religious Participation and Commitment and Parent-Teen Communication About Sex**

One factor that has been explored relating to early sexual debut for teens is the communication between parents and children about sex. This is important because increased parental communication about sex is correlated with more consistent condom use, later sexual debut, and fewer sexual partners among adolescents. This study evaluated how parents' religious beliefs influence the communication and comfort level with their teenagers about sex. Parents of adolescents in local Parent-Teacher Organizations, churches, synagogues, and clinics for teenagers participated in the study. Results showed that parents' religious beliefs and participation and their beliefs about their own teenager's behavior were related to the sexual topics parents discussed with their teenager.

*Poster Presentation: Room 310, 1:15 p.m.*

**Sarah M. Ahlfs-Dunn**

Professor Alissa Huth-Bocks

**Abusive Intimate Partners' Use of Children to Victimize Mothers: The Impact on Infant and Toddler Development**

This study investigated the effects of a form of intimate partner violence (IPV) on infant and toddler development that is often overlooked: the use of children by abusive intimate partners to victimize mothers. A community sample of 120 primarily low-income women participated in interviews at 1 and 2 years postpartum as part of an ongoing study on women's transition to motherhood. Preliminary t-test analyses revealed that children exposed during the first year of life to this particular type of IPV experienced significantly more social-emotional problems at 1 and 2 years of age, as well as more trauma symptoms at 2 years of age, than children not exposed to this type of IPV. There were no significant differences between groups in general development at age 1 or 2.

*Oral Presentation: Room 302, 3:30 p.m.*

**Amanda Price and Caroline J. Broermann**

Professor Steven Huprich

**Reliability and Validity of the TAT Oral Dependency Scale (TOD) in Clinical and Non-Clinical Samples**

The TAT Oral Dependency Scale (TOD) is partially informed by Freud's concept of oral dependency. TOD content involves oral gratification, parental figures/nurturers, asking for/receiving help, passive dependence, helplessness, loneliness and/or depression, a belief in luck or magic, and optimistic story ending. This study examined the prevalence of oral dependency in clinical (n=191) and non-clinical samples (n=136). Non-clinical participants were recruited from an undergraduate population. Participants told stories based on four cards of the TAT and each was scored for the TOD based upon criteria from Huprich (2009). The correlations of TOD scores and criterion variables and interrater reliability were reported.

*Poster Presentation: Room 310, 1:15 p.m.*

**Caroline J. Broermann, Valentina Ivezaj, Leslie Schuh**  
(*St. Vincent Carmel Hospital*) and **Melissa Pulcini**

Professor Karen Saules

**Family History of Substance Abuse Predicts Percent Excess Weight Loss in Bariatric Patients**

Although health care providers often conduct evaluations prior to bariatric surgery, little is known about factors predicting successful weight loss. This study examined factors that may contribute to percent excess weight loss (%EWL) after bariatric surgery. Participants were recruited from two bariatric treatment programs in the Midwest. Presurgical eating behavior, psychiatric history, substance abuse, and family history of substance abuse were assessed. Individuals with a family history of substance abuse had significantly lower %EWL than those without a family history of substance abuse, but personal pre-surgical substance abuse was not related to %EWL. Pre-surgical BMI and two coping styles were significantly associated with %EWL. No other variables assessed, including those related to disordered eating and psychiatric history, were significantly associated with %EWL.

*Poster Presentation: Room 310, 1:15 p.m.*

**Rhonda Caldwell**

Professor Jin Bo

**Sleep May Protect against Interference to Motor Sequence Learning**

Acquiring a new motor skill normally relies on several phases of learning, including a consolidation stage in which sleep plays a vital role. Early studies showed clear sleep-dependent gains in motor learning, whereas later studies attribute these gains to confounds and averaging effects. The current study examines whether sleep could protect against interference to motor sequence learning by introducing a competing sequence either before or after normal nocturnal sleep. It is expected to show that sleep does, in fact, stabilize motor learning. These data may have practical implications of motor learning and rehabilitation.

*Poster Presentation: Room 310, 3:00 p.m.*

**Maegan Calvert**

Professor Alissa Huth-Bocks

**Child Protective Services Reports and Potential Indicators of Risk**

Child Protective Services (CPS) is charged with protecting children from potentially unhealthy and harmful caregiving environments. Of the many risk factors that have arisen from CPS data, problematic parenting is one of the most common. This study will investigate the relationship between aspects of parenting such as maternal sensitivity, living conditions, caregiving helplessness, and CPS involvement over two years. Participants included a unique sample of 120 primarily low-income, unmarried, pregnant women and their infants after birth. Maternal sensitivity, caregiving helplessness, and maternal report of CPS involvement were measured at 1 and 2 years postpartum. Results may help identify those at risk for maltreatment.

*Oral Presentation: Room 302, 3:50 p.m.*

**Shannon Clark and Summar Reslan**

Professor Karen Saules

**Validating a Human Behavioral Economic Paradigm for Assessing Food Demand and Preference Shifts among Post-Bariatric Surgery Patients**

Recently, our lab validated that the behavioral economic framework can be used successfully to develop a human laboratory model of food-appetitive behavior. This study sought to expand these findings to post-bariatric surgery patients, as food choice behavior may be important in determining weight regain following surgery. Participants completed a screening survey to ensure that those recruited would be non-pregnant; at least 24 months post-surgery; without carpal tunnel syndrome; and liking of food items offered. Subjects participated in two experimental sessions involving choices between a high-carbohydrate/high-fat vs. high-carbohydrate/no-fat food, and a high-carbohydrate/high-fat vs. low-carbohydrate/low-fat food.

*Poster Presentation: Room 310, 1:15 p.m.*

**Alison M. Colbert**

Professor Jin Bo

**Implicit Motor Sequence Learning and Working Memory Capacity in Typically Developing Children**

The ability to integrate individual movements into complex action is an important developmental achievement, and recent research has noted the possible contribution of motor learning deficits in developmental disorders. Unfortunately, the developmental patterns of motor skill learning and related cognitive processes are unclear, and controversial results have been reported regarding the development of implicit learning in childhood. It has been suggested that working memory (WM) capacity plays a significant role in motor learning. A relationship between working memory capacity and implicit motor learning suggests interventions aimed at increasing WM could increase implicit motor learning ability and reduce adverse outcomes associated with motor learning deficits. My goal is to examine the contribution of WM to implicit motor learning.

*Poster Presentation: Room 310, 1:15 p.m.*

**Amanda Ellis**

Professor Carol Freedman-Doan

**Individual and Interactive Effects of Childhood Problem Behaviors and Maternal Discipline on Adolescent Problem Behavior and Alcohol Use**

There is considerable literature on the individual and interactive effects of childhood behavior and parental discipline on adolescent problem behavior. However, few studies have examined these relationships in older children and how these effects may operate across a longer time span. This study examines the interactive effect of child behavior and maternal discipline in childhood and how that impacts adolescent engagement in later problem behavior, using an existing longitudinal data set of low-risk, middle class parents and children. Harsh discipline in childhood was found to be significantly positively related to child externalizing behavior and to significantly moderate the relationship between child externalizing behavior and school problem behavior in adolescence.

*Oral Presentation: Room 302, 4:30 p.m.*

**Katherine L. Harris, Sarah M. Ahlfs-Dunn, and Maegan Calvert**

Professor Alissa Huth-Bocks

**Change and Stability in Attachment Security from Age 1 to Age 2: The Effects of Maternal Mental Health, Stressful Life Events, and Economic Hardship**

The importance of secure attachment on child development has been well documented. While attachment quality is considered to be relatively stable over time, significant environmental experiences may influence fluctuations. This study explores changes in the caregiving environment in relation to the stability of attachment security. Participants included a community sample of 120 primarily low-income, unmarried, pregnant women. Attachment security was measured at one (T3) and two years (T4) postpartum using the observer-rated Attachment Q-Set. Maternal and contextual risks measured at pregnancy (T1), T3, and T4 included maternal PTSD symptoms, negative life events, and monthly income. Repeated measures ANOVAs will be used to explore how changes in the caregiving environment are related to infant attachment patterns over time.

*Oral Presentation: Room 302, 4:10 p.m.*

**Kathleen Hlavaty**

Professor Carol Freedman-Doan

**Affective Relationship and Mothers' Actual Knowledge of Adolescent Activities**

Research has indicated that a mother's actual knowledge of her adolescent's activities has a greater effect on problem behavior when compared to the number of attempts to gain this knowledge and that a positive parent/adolescent affective relationship is key in a mother's ability to gain this knowledge. The current study attempts to understand how the affective relationship between 397 mothers and their adolescents affects a mother's actual knowledge. This study uses the Childhood and Beyond sample from the University of Michigan Institute for Social Research. For female adolescents, a positive affective relationship with their mothers across adolescence is related to an increase in mother's actual knowledge of their activities and a decrease in problem behavior.

*Poster Presentation: Room 310, 1:15 p.m.*

**Jamie King**

Professor Alissa Huth-Bocks

**Familial Influences on Young Children's Language Development**

Previous research has focused on the effects of problematic parental romantic relationships on parenting and a child's general development. However, less is known about the effects of parental relationships and a child's cognitive development. It is hypothesized in this study that problematic parental romantic relationships and high maternal depressive symptoms will significantly affect a child's expressive and receptive language development during the early preschool years. Data will be gathered from approximately 75 mother-child pairs when children are 2 and 3 years old. Mothers will complete measures on the quality of their current romantic relationship, experiences of partner violence, and depressive symptoms.

*Poster Presentation: Room 310, 1:15 p.m.*

**Chi-Mei Lee and Y. Kwak, S. J. Peltier, J. Bernard, M. Buschkuhl, S. Jaeggi, J. L. Wiggin, J. Jonides, C. Monk, and R. D. Seidler (University of Michigan)**

Professor Jin Bo

**Lifespan Changes in Cortico-striatal Resting State Connectivity**

Using resting state functional connectivity (fMRI), previous studies have identified distinctive cortico-striatal circuitries that serve cognitive, motor, reward, and affective processes based on connectivity between striatal seeds and cortical projection regions. The current study examined age-related differences in the cortico-striatal "cognitive" and "motor" circuitries in children, young adults, and older adults. We hypothesized that children and older adults would have more diffuse and weaker connectivity than young adults and that the cognitive circuitries would have stronger developmental and aging effects than the motor circuitries. Our preliminary analysis revealed a qualitatively similar pattern of cognitive and motor circuitries among the three age groups.

*Poster Presentation: Room 310, 1:15 p.m.*

**Kelly E. Luce and Caitlyn B. Sorensen**

Professor Renee Lajiness-O'Neill

**The Relationship between Joint Attention and Theory of Mind in School-Age Children with Autism Spectrum Disorders**

The purpose of this study was to assess the relationship between joint attention (JA) and theory of mind (ToM) in children with autism spectrum disorder (ASD). JA is a nonverbal communicative skill that takes place when one individual follows another's eye gaze to another individual or object, while ToM is the ability to infer another's thoughts and ideas. Previous literature has suggested that these two constructs are related; however, this relationship has not been directly examined. A better understanding of this possible relationship has implications for ASD treatment. Twenty children participated in this study. Results showed that ToM abilities correlated with social orienting behaviors and with age, receptive language, cognition, and ADOS scores.

*Poster Presentation: Room 310, 1:15 p.m.*

**Summar H. Reslan**

Professor Karen Saules

**Validation of an Online Questionnaire Measure of the Relative Reinforcing Value of Food**

The relative reinforcing value of food (RRV-F) is influenced by food deprivation, stress, dietary restraint, and many other variables. While laboratory methods and paper-and-pencil questionnaires to assess the RRV-F have been validated, this is the first study to validate an online questionnaire measure. The online RRV instrument showed strong convergent validity with laboratory food choice behavior, BMI, and food craving. Discriminant validity was supported by a lack of association between data from the online measure of the RRV-F and unrelated constructs. Results supporting the validity of this instrument suggest that online methodology is cost-effective and time-efficient, affords greater anonymity, and enables recruitment over a broader geographic region.

*Poster Presentation: Room 310, 1:15 p.m.*

**Jessica L. Riggs**

Professor Alissa Huth-Bocks

**Associations between Maternal Social Support during Pregnancy and Later Infant-Mother Attachment Security**

This study will examine how maternal perceived social support impacts mothers' relationships with their young children, including the quality of the mother-child attachment. More specifically, the purpose of this study is to investigate the associations between maternal PSSS scores at Time 1 (pregnancy) of a longitudinal study and infant AQS data at Time 3 (1 year post-partum). Data were collected on a sample of 120 mostly economically at-risk women and their infants across the transition to motherhood from before birth to age 2. It is hypothesized that greater perceived social support will be positively correlated with more secure infant-mother attachment.

*Poster Presentation: Room 310, 1:15 p.m.*

**Emily R. Sallen**

Professor Carol Freedman-Doan

**Wilderness Treatment Programs: Why They Work**

Researchers have attempted to evaluate the efficacy of adolescent residential treatment programs by conducting retrospective and meta-analytic outcome studies. However, the overwhelming lack of data and variability in both measurement instruments and methods has limited the generalizability of these findings. Wilderness therapy programs are a particular subset of treatment programs for adolescents that have recently shown both positive outcomes and growth in attendance. It combines individual and group therapy with outdoor, experiential-based activities such as backpacking and primitive skills in an outdoor-living environment. The current study aims to investigate the elements that contribute to the efficacy of wilderness therapy. By combining and comparing scores on a validated behavioral scale and a semi-structured narrative style interview, we hope to begin to understand the components that lead to successful treatment of adolescent behavior in a wilderness program.

*Poster Presentation: Room 310, 1:15 p.m.*

**Syreeta Scott**

Professor Alissa Huth-Bocks

**The Association between Attachment Trauma and Maternal Mental Health**

Attachment traumas are conceptualized as frightening events during childhood that prevent the goal of the child's attachment system by preventing the availability of the caregiver. Essentially, the child chronically lacks an external mechanism of physiological and emotional regulation that is important to the developmental trajectory of mental health. Previous research has demonstrated that attachment traumas, such as abuse, are likely to co-occur with other traumas in childhood. This study will examine the association between cumulative experiences of attachment traumas in childhood and mental health symptoms in an at-risk sample of mothers. Research in this area can help identify mothers most at-risk for negative outcomes by identifying salient historical risk factors for prevention and intervention efforts.

*Poster Presentation: Room 310, 1:15 p.m.*

**Alicia M. Totten**

Professor Alissa Huth-Bocks

**Maternal Transmission of Trauma Symptoms to Children**

The purpose of this study is to examine rates and severity of trauma symptoms in toddlers in relation to direct trauma exposure and maternal trauma symptoms. Data will be collected from approximately 100 mother-child pairs from a longitudinal study. Mothers' trauma symptoms will be measured using the PTSD Checklist during pregnancy (T1) and when the child is 2 years old (T4). Trauma symptoms will be measured in the children at T4 using the Toddler Trauma Symptoms Questionnaire as well as the Toddler Exposure to Traumatic Events. It is hypothesized that children who have not experienced trauma directly will exhibit trauma symptoms if they are reared by a mother who indicates high levels of trauma on the PTSD checklist.

*Poster Presentation: Room 310, 1:15 p.m.*

**Ashley A. Wiedemann**

Professor Karen Saules

**Weight Loss Surgery Patients in Substance Abuse Treatment: Do They Differ from the Traditional Substance Abuse Inpatient?**

Weight loss surgery (WLS) patients are overrepresented in substance abuse treatment programs. To understand unique factors that may affect WLS patients' substance abuse treatment prognosis, the present study compared WLS patients in a substance abuse treatment program with their non-weight loss (N-WLS) counterparts. WLS patients reported a significantly later mean age of first regular use of alcohol/drugs, concern about alcohol/drug use, and alcohol/drug treatment, and a significantly shorter time between having concerns about substance use and seeking treatment. Analyses comparing rates of other behavioral excesses did not yield significant differences between WLS and N-WLS patients. Results indicate that WLS patients who experience post-surgical substance use may differ from the "typical" substance abuse patient in several ways that may reflect unique treatment needs.

*Poster Presentation: Room 310, 1:15 p.m.*

**Department of Sociology, Anthropology, and Criminology**

**Erika A. Buckley**

Professor Kristine Ajrouch

**Next Generation Immigrant Negotiation Practices**

The negotiation practices among second generation (and 1.5) Chinese Americans provide insights into acculturation processes in American society. This study analyzes narrative data from 10 Chinese Americans who were either born in the U.S. or brought over at a young age. Results suggest that the language of assimilation needs reassessment. The key feature of this study was the behavior of negotiation, which participants use to constantly identify themselves with both their families as well as the mainstream American society surrounding them. New directions for scholarly work on immigrant acculturation are discussed.

*Oral Presentation: Room 302, 12:30 p.m.*

**Nour Fakhoury**

Professor Kristine Ajrouch

**Academic Achievement and Attitudes of Arab American Immigrants**

The purpose of this study is to determine the impact of the age at arrival, attitudes of students, reasons for migration, and the host country's reception on Arab American immigrant students and their academic achievement. Arab American students who arrived in the United States at age 10 or older will be recruited from two different high schools. Surveys will be administered to students in order to obtain information regarding these and other variables, and twenty Arab American immigrant students will discuss their experiences in depth during open-ended interviews. Official student academic records will be obtained to reveal how this group is performing academically. Findings from this study will shed light on how this specific immigrant group is faring in the United States.

*Oral Presentation: Room 302, 12:50 p.m.*

**Ellen Jayne Hine**

Professor Paul Leighton

**Shh... All Daddies Do This: The Thought Process Behind Sexually Abusive Fathers.**

This study is a compilation of previous research findings regarding the thought process behind sexually abusive fathers. The purpose of this research is to understand the feelings and thoughts that lead up to a father engaging in sexual violence with his daughter. While there is an abundance of research focused on the victim of sexual violence, there is very little that looks at the perpetrator. This study will look at statistics and characteristics of victims in order to lay the groundwork for the main focus of fathers and the thought process that allows them to justify having sexual relations with their daughters. It will also look at different forms of therapy for the perpetrators and explore how the abuse affects family relationships.

*Oral Presentation: Room 302, 1:10 p.m.*

**Department of Women's and Gender Studies**

**Erika M. Behrmann**

Professor Carol Haddad

**Investigating Trait Attribution through Gendered Avatar Play: An Analysis of The Sims 3**

This presentation introduces a study about whether the life-simulation videogame, The Sims 3, enables the deconstruction of the gender binary. The Sims 3 grants its players the ability to attribute similar traits to male or female avatars. In doing so, players can experiment with taboo trait attributions and potentially defy a male-female binary. A group of 82 The Sims 3 players was surveyed to determine their overall male and female Sims trait selections during game play. Players were asked about their personal gender identity as well as questioned on how their trait selection related to their personal identities. Results indicated that players tend to select traits that maintain a traditional gender binary. This presentation discusses the implications of why players continue to follow social norms even in technological environments conducive to deconstructing the gender binary.

*Oral Presentation: Room 352, 3:50 p.m.*

**Dana M. Creighton**

Professor Margaret Crouch

**Religious Fundamentalism as a Form of Violence against Women**

Religious fundamentalisms based in patriarchal traditions exacerbate various forms of violence against women and are, in fact, forms of violence against women in and of themselves. This can consist of restriction of mobility, visibility, spiritual access, and development; gender segregation; unequal access to social institutions; emotional abuse, economic abuse via restrictions on employment; domestic violence; nonsexual physical assaults; marital rape; street rape; female circumcision; coerced suicides; and honor killings. I will look at three branches of religious fundamentalism: Christian, Islamic, and Hindu. All of these religions have a patriarchal history and all contain fundamentalist sects and groups that have been on the rise, increasing in membership since the twentieth century. Countries that do not protect women from fundamentalist harms are violating international laws and treaties.

*Oral Presentation: Room 352, 4:10 p.m.*

**Shuli Han**

Professor Elizabeth Currans

**The Encounter between Judith Butler and Lao Zi: A Cross Cultural Dialogue between a Modern Western Feminist and an Ancient Chinese Philosopher**

The globalization of feminist movement calls for efficient dialogue between different cultures. However, the existence of the Western cultural hegemony in a globalized capitalist world hampers the effort of feminists to engage in equal cross-cultural communication. Through a tentative encounter between a postmodern Western feminist and an ancient Chinese philosopher, I attempt to explore the possibility of a free and equal transnational dialogue that transcends time and space. What brings Butler and Lao Zi together is their shared concern on the unbalanced power dynamics between men and women. I suggest that the dialogue between Butler and Lao Zi provides an alternative means for the deconstruction of the hierarchical dichotomy between men and women, as well as a possible new way to engage in an equal cross cultural dialogue.

*Oral Presentation: Room 352, 6:30 p.m.*

**Melissa S. Lininger**

Professor Elizabeth Currans

**The Agency of Role Models in Black Women's Reproductive Choices**

Throughout history, Black women have been socially controlled within American society. This paper explores how and why the reproductive rights of Black women have been systematically taken from them by various institutions. Various feminist theorists such as Dorothy Roberts, Chandra Mohanty, and Iris Marion Young examine this issue in their research, in addition to the history of Black women's reproductive choices and their limitations. Certain women, such as Loretta Ross and Elaine Riddick, stood out in Black women's fight against white supremacy. This presentation will show that black women serve as role models for each other against white supremacy in the fight for reproductive freedom.

*Oral Presentation: Room 352, 6:50 p.m.*

**Jessica Lohmann**

Professor Paul Leighton

**Internalized Homophobia in Lesbians: Unique Factors in Intimate Partner Violence**

Heterosexism is a pervasive form of bigotry built upon patriarchal foundations of sexism that affect lesbian relationships and encourage the development of internalized homophobia (IH). Lesbian relationships involving intimate partner violence (IPV) are significantly affected by IH, providing the need to seek out power and control that has been systematically stripped from lesbians, as well as restricting resources to victims of IPV. Through invisibility, distortion of perceived gender roles, and discrimination, IPV in lesbian relationships has been underreported, and the intervention has been compromised. This paper explores the development of IH using the minority stress perspective and the impact it has on lesbian relationships that involve IPV.

*Oral Presentation: Room 352, 4:30 p.m.*

**Aneshia T. Solomon**

Professor Elizabeth Currans

**Magnified Self-Identities**

This paper builds on the concept of intersectionality by exploring the instances when a person can experience a specific part of his/her identity being magnified to such a degree that it pushes all other aspects of that individual's identity to the margins of consciousness. This is referred to as magnified self-identity. The eliciting factor that is looked at in magnified self-identity manifesting in an individual is hostility in various forms, which are external, internal, and structural. It then looks at the ways in which magnified self-identity affects both the individual who is experiencing it and the society that it is being experienced in.

*Oral Presentation: Room 352, 7:10 p.m.*

**Lacey Story**

Professor Elizabeth Currans

**Feminists Mothering Through the Generations: How Feminist and Queer Theories Are Influencing Contemporary Feminist Mothers**

This work looks to identify the ways young feminist mothers are using their philosophies to influence their parenting practices and whether these philosophies and practices are in fact different from those of the former generation of feminist mothers. With gender, queer identity, and queer theory gaining more recognition in the field of women's and gender studies and within feminist activism, I am curious about the effects this has had on the younger generations of feminist mothers and in what ways, if any, it has influenced their parenting practices. I expect to find considerable differences in the parenting practices contemporary feminist mothers and those of previous generations. I interviewed twelve young feminist mothers to show the progression of feminism within contemporary feminism and within the study of feminist motherhood.

*Oral Presentation: Room 352, 7:30 p.m.*

**Department of World Languages****Nguyen T. K. Bui**

Professor Elizabeth Morgan

**Free Technological Tools and Activities for Enhancing Intercultural Communicative Competence**

Rapid evolution of modern information technology has facilitated virtual communications across boundaries; however, not all technologies are affordable and effective for the language learning and teaching process. This presentation addresses this issue by introducing the useful combination of such free technologies as Webs, ThinkFree, Jing, YouTube, Skype, Audacity, Google Docs, and Podomatic in facilitating the online intercultural exchanges between students of EMU and Tan Tao University in Vietnam. I will also show specific examples of how to apply these free technological tools for the so-called IT-HELPS activities to enhance students' intercultural communicative competence. This presentation is useful for those who are interested in developing a multimedia-based curriculum for exchange programs that foster language learners' intercultural communicative competence.

*Oral Presentation: Auditorium, 1:30 p.m.*

**Kirtland R. Eastwood**

Professor Wendy Wang

**Learner Noticing and Recasts in Group Tasks**

Learner noticing is believed to be crucial for improvement of accuracy in L2 learners. One of the ways in which noticing frequently occurs in ESL/EFL classes is via recasts. Recasts have been recently shown to be effective particularly when they are short, salient, and delivered with rising intonation. This research consists of two groups of students consisting of L1 speakers of Chinese and Arabic. Each learner's mistakes receive a recast that includes the asserted effective characteristics. In this case, the stimulated recall session is conducted immediately after the conversation as opposed to the delayed sessions in the original study. The stimulated recall session is also conducted in a group setting, with noticing of recasts directed towards other learners as an additional focal point.

*Oral Presentation: Auditorium, 2:00 p.m.*

**Diane M. A. Griffin**

Professor Wendy Wang

**Semantic Verb Categories and Their Impact on ESL Tense and Aspect Development**

The development of tense and aspect in English L2 learners follows a predictable pattern that is often related more to verbal semantics than form. The aspect hypothesis suggests that English L2 learners acquire tense-aspect morphology first with telic verbs, next with atelic (action) verbs, and finally with stative verbs. Thirty-four samples of ESL student writing were analyzed for general tense-aspect combination and specific application of present perfect. Results showed an acquisition order in keeping with the aspect hypothesis and suggested teaching implications.

*Poster Presentation: Room 310, 3:00 p.m.*

**Jing Guo**

Professor Wendy Wang

**Vocabulary Learning Strategies of Chinese University Students**

This paper reports on research conducted among 111 Chinese university students on their use of vocabulary learning strategies and also compares the strategies used by successful vocabulary learners to those used by unsuccessful vocabulary learners. The result indicates that 1) Most learners believe that words should be learned in context and use rather than through memorization, and the frequency of overall use, shown by order, is Guessing strategies > Note-taking strategies > Metacognitive strategies > Activation strategies > Memory strategies > Encoding strategies > Dictionary strategies; 2) There's significant correlation between overall vocabulary learning strategies and vocabulary size; and 3) Successful learners and unsuccessful learners report no difference in vocabulary beliefs, but they do differ in terms of vocabulary learning strategies.

*Oral Presentation: Auditorium, 2:20 p.m.*

**Michael Manuszak**

Professor Wendy Wang

**Present Perceptions of Team Teaching**

Team teaching, the joint instruction of a non-native English teacher and a native speaker of English, has become one of the most emergent issues within the English as a Second Language community in Asia. By replicating a comparative survey performed 13 years ago under similar situations, present classroom perceptions of team teaching and teacher roles in the Japanese classroom can be understood. Students attending a Japanese public high school were surveyed as to their perceptions of their native and non-native instructors and their expectations of classroom roles. Those results were juxtaposed with the English teachers', both native and non-native, understanding of their students' perceptions and expectations. Through this, better comprehension of current team-taught participant opinion and thought can be obtained. By identifying any possible differences, instructors may be able to reevaluate elements of this methodology to better facilitate classroom learning.

*Poster Presentation: Room 310, 3:00 p.m.*

**Eugenie Mukankwiro**

Professor Wendy Wang

**Corrective Feedback: ESL Learners' Views about Prompts and Recasts**

This study investigates ESL learners' perceptions of immediate oral feedback with a goal to find out their preferences, especially between recasts and prompts as corrective feedback techniques. Views were collected by means of a survey conducted through interviews and questionnaires. Twelve students from an advanced-level ESL class at EMU were surveyed by means of questionnaires, and a focus group of 4 students from the same questionnaire respondents was interviewed by means of a semi-structured interview. Results reveal that ESL learners prefer recasts in terms of their affective states but find elicitation prompts to be more productive than recasts in developing their proficiency in English.

*Poster Presentation: Room 310, 3:00 p.m.*

**Elizabeth M. Namundyeb**

Professor Wendy Wang

**The Shades and Shadows of Learning English**

Although ample research on mother tongue and bilingual education has been carried out in countries such as the USA, Canada, and Australia, there is a lack of empirical research on the effects of English as a second language on the learner's first language development and academic achievement in Africa, specifically in Namibia. This study presents the extent of English displacement of the native languages in Namibia. Findings from this study reveal that learning solely through English instruction and neglecting the native language has strong consequential effects on learners' first language and academic achievement. The outcome of the study would be used to encourage all stakeholders involved in education to discuss and put in place amicable measures that will help in the implementation of an effective language policy that promotes mother tongue and bilingual education.

*Poster Presentation: Room 310, 3:00 p.m.*

**Lauryn Navarre**

Professor Wendy Wang

**Asking the Right Questions: Do Beginner ELLs Know How to Use Clarification Requests?**

This research looks at beginner level adult ESL learners in a university setting and considers what types of strategies they use for clarification of misunderstood or confusing messages, as well as reasons for choosing to ask or not ask clarification questions in the classroom. Nine adult ESL students completed an activity and follow-up survey to provide qualitative data. The study will highlight two needs in the ESL classroom: first, for teachers to be aware of possible mismatches between teaching and student understanding; and second, for teachers to help students develop cognitive strategies that will be useful in both the classroom context and the “real world.” Results of this study suggest a need for explicit instruction on clarification requests, coupled with meaningful practice

*Oral Presentation: Auditorium, 2:40 p.m.*

**Meng Wang**

Professor Wendy Wang

**Does An American Tongue Mean Everything?**

Do students studying English as a foreign language accept a native teacher because he/she speaks English as a mother tongue? Drawing on findings from related research, I designed three surveys in order to discover Chinese students’ attitudes towards their native and non-native English teachers. The subjects of this study were sophomore English majors who had been exposed to English language instruction offered by both NESTs and NNESTs, in one of China’s eight universities that focus on foreign language teaching; the teacher participants were in the same university. The researcher found that the students had higher overall expectations for non-native teachers. Some students pointed out that autocratic decisions guided by native speaker fallacy were not acceptable.

*Poster Presentation: Room 310, 3:00 p.m.*

**College of Business****Department of Accounting and Finance****Kimberly Kopka**

Professor Lois Mahoney

**The Relationship Between Firms’ Corporate Social Responsibility Initiatives and Formation of Strategic Alliances**

The rate of strategic alliance formation by firms has greatly increased over the past two decades, as has firm interest in corporate social responsibility (CSR) initiatives. Legitimacy theory suggests that firms may be increasing their CSR strategies to signal their willingness to operate within social mores. However, firms are faced with the problem of how to communicate their legitimacy to stakeholders in an objective manner. We analyzed data from the KDL and SDC Platinum databases and found support for the hypothesis that firm CSR scores are related to the rate of alliance formation and that the relationship between CSR and financial performance is stronger for alliance firms.

*Oral Presentation: Room 300, 6:50 p.m.*

**Melissa K. Zochowski**

Professor Howard Bunsis

**Preferences for Care after Early Pregnancy Failure**

Pregnancy loss is a common event, experienced by one in four women. However, few studies have considered patient preference when looking at treatment options for pregnancy loss. This study will examine patient treatment preferences for early pregnancy failure (EPF) and predict how patient treatment choice will affect cost of EPF management. Survey data were collected using self-administered written questionnaires from 130 women presenting for EPF treatment at the University of Michigan. The initial questionnaire was completed at or near the time of diagnosis and before any treatment decisions were made, and a second one was completed approximately six weeks after successful treatment. Analysis will examine patient factors associated with treatment patterns and preferences.

*Oral Presentation: Room 301, 1:30 p.m.*

**Department of Management****James Paterson, John Bowen, Chad Zarbaugh, and Robert Cerant**

Professor Morgan Milner

**Employee Engagement and Factors of Employee Outputs**

Drawing on previous research conducted on organizational behavior in the areas of human resource management and employee outputs, this study investigates factors related to employee engagement. The study specifically investigates the relationships between organizational climate, communication, compensation, identification, satisfaction, tension, and engagement. Regression analyses of (n=102) respondents of working adults gathered in the first quarter of 2011 support our hypotheses. Relationships between the stated variables are highlighted with implications and possible direction of future research discussed.

*Oral Presentation: Room 302, 2:00 p.m.*

**Mary L. Shindell, Lauria Dempsey, MacKenzie Roberts, and Mark Veal**

Professor Megan Endres

**Attitudes Toward Professional Image among Undergraduates**

What are the attitudes of EMU College of Business undergraduates toward professional image in the workplace? To answer this question, we used data from a survey created by our graduate research methods course specifically relating to attitudes on dress, piercings, and tattoos in relation to professional image. Some of the results were as we expected, but there were also some surprising findings. For example, there was a statistically significant positive correlation between dedication to dress and the effect of image on the evaluation of interview candidates. But we found no statistically significant correlation between age and the belief that a professional image is critical in an interview. Another surprising finding was that respondents with one or more visible tattoos were less likely to think a company has the right to ask them to abide by a policy that includes visible tattoos.

*Oral Presentation: Room 302, 1:30 p.m.*

## Department of Marketing

### **Erinc Erel Caglar and Paul Nucci**

Professor Sheila Sasser

#### **MIX Store Campaign: IMC Creative Messaging Plan**

MIX is a unique retail and home goods furnishings store located in downtown Ypsilanti, started by two married couples in 2009. The store, a product of past eBay offerings and the desire for a brick-and-mortar location, offers high-end women's clothing and accessories as well as some lightly used apparel. Home antiques and art complement the eclectic offerings from the store. Recently, the owners have expanded the store to include a small theater and a pop-up marketplace to better serve the citizens of Ypsilanti. Given that the store offers so much to consumers, this study analyzes what the store "MIX" is as a brand with its core competences and offers a solution that better represents the varied and wide array of goods and services by emphasizing the brand's potential through integrated marketing communication approach.

*Oral Presentation: Room 302, 2:20 p.m.*

### **Joseph Francis Garon**

Professor Sheila Sasser

#### **Fast Food Integrated Marketing Communications**

This presentation looks at an integrated approach to advertising with an emphasis on print advertising for small (fast-food) businesses. It explores the marketing problem and suggests solutions to overcome such problems, such as an intensive Integrated Marketing Communications (I.M.C.) program using specific marketing strategy and tactics. The paper explores I.M.C. objectives and its means ends, such as the creative and communication strategies for the intended target market. The desired effect is explored and the cost associated with meeting these goals using different advertising mediums. Finally, the evidence of results is weighed and recommendations are made.

*Oral Presentation: Room 302, 2:40 p.m.*

### **Amy Rule**

Professor Matthew Sauber

#### **Promoting Study Abroad at EMU**

To measure student interest and perceived value in study abroad programs and identify areas of concern, 17000 undergraduate students at EMU were surveyed. In determining whether they should participate in study abroad programs as part of their undergraduate education, students identify affordability and availability of scholarship/financial aid as the most important factors influencing their decision. Students' affordability concern is understandable since the majority of them are financially responsible for their own education and 60% utilize financial aid. While financial hardships may prevent many students from studying abroad, educational institutions should focus on the mission and value of study abroad programs and the need for international education and should extend opportunities to students of all means.

*Oral Presentation: Room 302, 3:00 p.m.*

## College of Education

### Department of Leadership and Counseling

#### **Shadin Atiyeh**

Professor Dibya Choudhuri

#### **Arab American Perspectives on Counseling**

This presentation will introduce the current research on culturally appropriate counseling approaches with Arab American clients and the unique needs of the population. It will demonstrate preliminary findings involving survey data that will attain a profile of the nationalities, immigrant experiences, religions, and education levels among the population, as well as information on the unique counseling needs of this population and serve as a model for counselors to gain information about their local community. This study's research questions will address the psychosocial concerns of Arab Americans in Washtenaw County, expectations for and perspectives of counseling, what resources besides counseling are available, and under what circumstances they are utilized.

*Oral Presentation: Room 350, 6:30 p.m.*

#### **Amanda Bell**

Professor Eboni Zamani-Gallaher

#### **Affirming Acts: Exploring Rawl's Theory of Social Justice, Intersectionality, and Access for Persons with Disabilities**

Individuals with disabilities are among a population of disenfranchised citizens who have limited access to educational opportunities. Policies such as Affirmative Action allowed colleges to take characteristics such as race, gender, and ability into consideration when admitting students, but this was a temporary solution, and even with the use of affirmative action as an admission criterion, the number of the white students in higher education was disproportionately higher than other minorities groups. The purpose of this presentation is to examine issues of educational access for minorities, specifically those who belong to numerous subjugated populations from the perspective of Rawl's Theory of Social Justice.

*Oral Presentation: Room 350, 6:50 p.m.*

#### **Michelle R. Burdick**

Professor Perry Francis

#### **Finding Your Way: Career Counseling for Nontraditional Students**

One third to one half of college students are over 25 years of age. These older, more experienced adults have different career counseling needs than traditional students. For example, almost one third of college students work full-time, and almost all commute to campus. Traditional career theories often focus on aligning a person's interests and abilities with a job, but they don't address dealing with job transitions. This project researched and identified the needs of a career counseling program targeted toward this group. Alternative career theories are explored and applied to this demographic. Based on the research and feedback from these other programs, a hybrid workshop (half online and half in person) was created to address these needs.

*Poster Presentation: Room 310, 1:15 p.m.*

**Kevin A. Calhoun**

Professor Eboni Zamani-Gallaher

**Dazed and Confused: Graduate/Professional Students and Student Affairs Professionals**

Much of the literature in student affairs focuses on the undergraduate experience and how important student affairs programming is to the development of traditional-age collegians. However, little research examines the relevance of student affairs in the development of graduate/professional students. This presentation provides commentary on the need for more research on the development of graduate/professional students. Arnett's Emerging Adulthood Theory provides conceptual underpinnings for this study as many graduate/professional students are in a period of exploration and discovery of their personal identity. The applicability of Schlossberg's Transition Theory as a framework for student affairs professionals in assisting students in navigating from undergraduate to graduate study will be discussed. The theoretical/practical application necessary for student affairs professionals to provide appropriate services to graduate/professional students will be highlighted.

*Oral Presentation: Room 350, 7:10 p.m.*

**Emily A. Compton and Lisa C. Andrews**

Professors Sue Stickel and Yvonne Callaway

**The Power of Therapy Animals: Animal-Assisted Therapy in Counseling**

This presentation defines animal-assisted therapy and how it may be used in schools, on campuses, and in mental health settings. The concept of using animals for human benefit is not new; however, its application in counseling is a growing area of interest with an increasing research support base. Therapy animals have been used worldwide across diverse populations, with promising results. Counselors may wish to consider implementing therapy animals into their treatment programs as a means of reaching clients.

*Oral Presentation: Room 350, 4:30 p.m.*

**Kelli A. Dowd, Haley Gire, Jaime Byrd, and Melissa Nisse**

Professor Ronald Flowers

**Higher Education in New Zealand**

The system of higher education in New Zealand is both similar to and different from that of the United States. The mixture of the native Maori tribe, Chinese immigrants, Polynesians, and Europeans contribute to the societal norms toward higher education: an average graduation rate of six to nine years, a government incentive for lifelong learning, and drastic disparities in financial readiness and availability. The government encourages students who attend one of the eight universities of New Zealand to pursue higher education and degrees to better the nation. This poster will present the history of the country, the student population, and the structure of higher education, as well as the opportunities, issues, key characteristics, and concerns with recommendations for improvement.

*Poster Presentation: Room 310, 1:15 p.m.*

**Angela Elkordy**

Professor James Berry

**Digital Badges: Assessments for Learning 21st Century Skills in Formal and Informal Contexts**

Educational researchers, policy makers, and educators are interested in defining new skill sets and competencies for the 21st century workplace; various frameworks and both national and state curriculum standards have been proposed. There is the lack of consensus, however, on proficiencies critical for an evolving, knowledge-based work place, which increasingly relies upon Internet and communications technologies (ICT). The ability of educators to effectively instruct and assess these skills in formal learning contexts has been significantly impeded by the lack of formal standards. Many of these skills are learned independently; with no formal mechanisms to reward or recognize learning, students are disadvantaged because their achievements are not effectively communicated. Interest is growing in a digital badge ecosystem, which may be used to assess and subsequently communicate learning in informal environments.

*Oral Presentation: Room 350, 4:10 p.m.*

**Linda K. Foran**

Professor Jaclynn Tracy

**Benefit or Battle?**

Each state, community, and school district has an opinion of what is the "best" method for evaluating teaching to increase student achievement. Michigan is now looking to implement a process for teachers to be evaluated annually using data on student growth as a measure of teacher effectiveness. More than 300 Michigan school districts have filed waivers claiming they currently have an effective evaluative tool in place. The impact of the new tenure law is up to conjecture; however, one result of the new law is increased workload for administrators. Evaluations must be completed annually with decisions based on student yearly growth. Although the process is in its early stages, this project is the first step in understanding the goals of the state and unified implementation of an evaluation tool.

*Oral Presentation: Room 350, 3:50 p.m.*

**Inna Gorlova**

Professor David Anderson

**Entrepreneurial Transformation of the College of Education at One Midwestern University**

This study investigates the entrepreneurial transformation of the College of Education at one large Midwestern public university. I am seeking to better understand the growth of the programs and services in the college and how theoretical concepts such as entrepreneurial behaviors, attitudes, and skills play out in the chosen college. Qualitative methods have been used for data collection and analysis. I collected artifacts and conducted observations and interviews of administrators, faculty, and students.

While the study is in the data analysis stage, preliminary conclusions can be drawn from the available data. Findings address the nature of the entrepreneurial elements in the college and how the organizational culture supports innovative ideas and projects by faculty, staff, and students.

*Poster Presentation: Room 310, 1:15 p.m.*

**Nicole M. Johnson**

Professor Yvonne Callaway

**District Reorganization of Detroit Public Schools**

This project will explore the organizational strategies in Detroit Public Schools and try to determine whether these modifications will improve post-secondary options for students.

*Poster Presentation: Room 310, 1:15 p.m.*

**Cheyenne C. Luzynski**

Professor Eboni Zamani-Gallaher

**Stereotype Threat and Self-Concepts: Effects on Leadership Among Women in Athletics**

With a growing number of females participating in sports, it stands to reason there would be an equally growing representation of women in athletic leadership roles; however, that is not the case. Actually, the number of female athletic directors is shrinking. Evaluating this phenomenon and potential reasons for the occurrence is necessary to promote leadership, which embodies the interests of both men and women. Understanding the limiting factors of discrimination, stereotypes, and cultural pressures may better position a female for success in a sport domain. The purpose of this presentation is to review the literature, identify different theories to better understand the role of women in athletic leadership, and propose a study to explore the gender gap phenomenon.

*Oral Presentation: Room 350, 7:30 p.m.*

**Lorinda F. Rausch, Kimberly Randall, Matthew Gill, and Kellie Durham**

Professor Ronald Flowers

**Understanding Change: The French Model of Higher Education**

The French system of higher education is alive with change. Class inequities, educational trends, stakeholder demands, and demographic shifts have all played a role in the current system of French higher education. This presentation will explore the history of the French higher education system, the organization and development of its current higher education structure, how that structure has evolved over time, and the challenges the system currently faces as the result of a changing French society. Because France was one of the first countries in the Western world to have a system of higher education, it is important to understand how the structure, development, and problems inherent in that system have influenced, and continue to influence, other systems of higher education.

*Poster Presentation: Room 310, 1:15 p.m.*

**Tania C. Reis**

Professor Ella Burton

**Analysis of the Developmental Viewpoints of Risk Student Athletes: Building a Holistic Model of Academic Support**

The primary objective of this research was to identify key factors in a student athlete's developmental viewpoint and use these to formulate a model of academic support. Sixteen students piloted the Academic Mentorship Program in Fall 2010. Seven students joined the program in Winter 2011. Data were collected via a student questionnaire that used a seven-point Likert scale to measure student response in three areas: identity, self-reflection, and knowing and learning. Findings suggest a significant positive correlation

between GRO score and a student's viewpoint of identity. Findings also indicate a positive correlation between self-reflection and knowing and learning.

*Oral Presentation: Room 350, 3:30 p.m.*

**Andrea J. Sulek**

Professor Diane Parfitt

**The School-Based Counseling Clinic Experience**

The School-Based Counseling Clinics (SBCCs) are satellites of the College of Education Counseling Clinic on Eastern Michigan University's campus. Since 2009, the SBCCs have provided free counseling services for many elementary, middle, and high school students, as well as a valuable experience for graduate counseling students. I will present the demographics of students counseled, along with anecdotal feedback from the students and their practicum counselors regarding their experience in the SBCCs. Counselor and student client evaluations were conducted at the end of each semester. The data collected will be presented to demonstrate the impact this program has on the students and counselors involved.

*Poster Presentation: Room 310, 1:15 p.m.*

**Eric Sweet**

Professor Irene Ametrano

**Animal-Assisted Therapy with Psychiatric Patients**

The purpose of this presentation is to explore the findings of research conducted on the efficacy of animal-assisted therapy with psychiatric or counseling patients. Within animal-assisted therapy, animals are used as a tool for empowering, motivating, and empathizing within the therapeutic setting. I first explore research suggesting that there is a scientific basis for pet therapy in relieving psychological problems. The subjects included within these findings sought treatment for schizophrenia, substance abuse, anxiety, depression, or any combination of these. I will then look at the patients' expectations and the outcome effects of animal-assisted therapy in patients who have chosen to seek treatment.

*Poster Presentation, Room 310, 1:15 p.m.*

**Department of Special Education**

**Jacob Bal**

Professor Willie Cupples

**The Validity of the TTAP for Assessing Adaptive Skills Necessary for Successful Transition into Employment for Young Adults with Autism Spectrum Disorders**

The present study seeks to address the validity of the recently published Treatment and Education of Autistic and Communication related handicapped Children (TEACCH) Transition Assessment Profile – Second Edition (TTAP). The purpose of the TTAP is to measure the adaptive skills needed by individuals on the autism spectrum in order to successfully transition into employment. In order to assess validity of the TTAP, this study will utilize the Home Scale of the TTAP and the Parent/Caregiver form of the Vineland Adaptive Behavior Scales II (VBAS-II), comparing the results of both measures. A Supplemental Questionnaire was developed in order to collect additional information about how young adults on the autism spectrum use technology to develop and maintain social networks and additional information on their friendship networks.

*Oral Presentation: Room 350, 12:30 p.m.*

**Melissa M. Brown**

Professor Gilbert Stiefel

**Pieces Still Missing: A Professional and Personal Look at Mental Health Care: Rachel's Story**

This 14-minute documentary spotlights the mental health system through a personal account of "Rachel," a 15-year-old student, and her mother, "Carol." While Rachel and Carol recount parts of their 15-year history and touch on taking their struggles day by day, professionals speak on their experience within the public school and juvenile court systems. Rachel speaks about her mental health struggles as "a puzzle with the pieces still missing," inspiring the title of this piece. This documentary is available for viewing upon request.

*Oral Presentation: Room 350, 2:20 p.m.*

**Maria V. Cudas**

Professor Gilbert Stiefel

**Test Accommodations for Test Administrators who are Blind: Experience of Adapting the WJ-III Tests of Achievement**

Test accommodations are changes in administration procedures or materials, and their goal is to make sure students with special needs participate and receive valid scores. This research project will explore some considerations about test accommodations, explain the implications of making test directions and scoring accessible for test administrators with visual impairment, and, as an example, present such adaptations made to the Woodcock-Johnson III Tests of Achievement.

*Oral Presentation: Room 350, 2:40 p.m.*

**John F. Conley IV**

Professor Ann Orr

**Can the iPad Address the Needs of Students with Cognitive Impairments by Meeting IEP Goals?**

The iPad is changing lives by allowing students with cognitive impairments (CI) the opportunity to communicate, access vital information, and facilitate the routine of daily life. When utilized to accomplish these tasks, iPads can be considered assistive technology (AT) and can thus be written into students' Individualized Education Plans (IEPs). This research project will examine how the iPad may be used to meet the needs of students with severe CI in accordance with their IEP goals.

*Poster Presentation: Room 310, 1:15 p.m.*

**Barbara C. Coven-Ellis**

Professor Sarah Ginsberg

**Educating for Clinical Empathy**

Doctor/patient role-playing scenarios using trained actors have been a successful teaching methodology employed by many medical schools in the US since the 1960s. The aim of such programs is to help young clinicians develop better communication with and understanding of their patients and to learn the skills of empathy that are so important in moving new clinicians beyond the limits of just medical knowledge and into an understanding of the human condition and embracing and using the power of empathy. Currently, no such programs are available at this University for the training of Speech Pathology students. This study focuses on whether this model would be a valuable addition to the SLP training curriculum.

*Poster Presentation: Room 310, 1:15 p.m.*

**Kevin Dorn**

Professor Derrick Fries

**Universal Design in Science: Impact on Students with Autism Spectrum Disorder**

Abstract Autism spectrum disorder (ASD) currently affects 1:110 children in the United States and often involves differences in sensory functioning. It is imperative to adapt educational programming to support all students. Particularly little research has focused on how to meaningfully include students with ASD in science and nature education. However, research does show that multi-sensory universal design for learning (UDL) effectively supports students with ASD. This study aims to qualitatively assess the affects of retooling a universally designed, multi-sensory science and nature activity based on family satisfaction and student engagement. The hypothesis is that improving the multi-sensory UDL of the science and nature activity will increase family satisfaction and student engagement.

*Oral Presentation: Room 350, 2:00 p.m.*

**Jill A. Herzig**

Professor Gilbert Stiefel

**Kinship Foster Care: Overview and Educational Implications**

This paper examines literature and research on the topic of kinship foster care placements for children and the implications following these latest trends. Children who are in custody of the local child welfare systems are increasingly being placed with relatives in kinship care as opposed to traditional non-relative foster care placements. As a quarter of our foster care population is placed with relatives, this suggests that welfare systems must provide the same services and documentation that non-relative foster care providers receive. This, however, is often not the situation, and the complexity of kinship foster care provisions must be addressed for the wellbeing of the 408,425 children residing in foster care. This presentation first investigates the benefits and shortcomings of kinship care and, second, concludes with insight into how educators may perceive children within kinship foster care and how these perceptions may influence the attitudes of educators.

*Oral Presentation: Room 350, 3:00 p.m.*

**Elizabeth Howard**

Professor Sarah Ginsberg

**Breastfeeding and Dysphagia: A Study to Support Interdisciplinary Understanding**

Infants presenting with dysphagia [difficulty swallowing] that are improperly diagnosed and/or managed are at an increased "risk for poor nutrition and health outcomes" (Arvendson, 2008). Swift, accurate diagnosis and management is imperative for this population. When dysphagia is present in the absence of concomitant factors, there is potential for delay in diagnosis and intervention. The transition from identification to diagnosis and intervention requires clear communication between professionals involved in the child's case. For the interdisciplinary team involved in the assessment and treatment of breastfeeding neonates presenting with dysphagia in the absence of concomitant factors, an overlap in scope of practice exists between speech-language pathologists and lactation consultants. The purpose of this presentation is to validate the necessity for speech-language

pathologists to understand the evaluation process employed by lactation consultants in the assessment of oral mechanism function and dysphagia in the absence of concomitant factors in the breastfeeding neonatal population.

*Oral Presentation: Room 350, 12:50 p.m.*

**Sally P. Jakeway**

Professor Sarah Ginsberg

**How Participation in Aphasia Support Groups Influences Perceptions of Aphasia**

Aphasia secondary to stroke can have a profound effect on a person's ability to participate in daily activities. For some, participation in an aphasia support group is a crucial part of their recovery. The purpose of this study is to understand how participation in these groups influences how a person with aphasia (PWA) perceives his/her disorder. Previous research has explored the influences of support groups on a PWA's social circles, quality of communication life, and life participation. This research will focus on how support groups affect attitudes and perceptions of aphasia from the perspective of the PWA, his/her caregiver/spouse, and his/her speech therapist. Results could inform clinicians working with people with aphasia as well as promote additional research on client attitudes about aphasia and aphasia support groups.

*Poster Presentation: Room 310, 1:15 p.m.*

**Sandra M. Jurado**

Professor Sarah Ginsberg

**The Role of the Speech-Language Pathologist during Gender Transition**

I will conduct a qualitative study to develop an understanding of the role of speech-language pathologists (SLPs) who work with the transgender population during gender transition. Descriptive data will be gathered using personal documents, fieldnotes taken during observations, photographs, people's own words from surveys or interviews, and official documents. The sample may include transgender individuals, their families, SLPs, mental health professionals, and others. Qualitative methods of data collection will be used in an attempt to understand the variety of perspectives involved. The speech and language component of the process will be a particular focus. The research could influence the amount of information regarding the transgender population to which speech and language professionals are exposed.

*Poster Presentation: Room 310, 1:15 p.m.*

**William A. Massey**

Professor Phil Smith

**The Ten Stereotypes of Disability in American Cinema**

From the beginning, starting with the earliest film by Thomas Edison, persons with disabilities have been represented in American films in a less than flattering manner, culminating in the stereotypic, ableist manner in which those with disabilities are represented in major motion pictures today. These depictions are troubling. Many Americans do not know anyone with a significant disability, and the only information they have ever received about those with disabilities comes from the mass media. If this is how those with disabilities are represented, what does this say about our society and our perceptions of people with disabilities, and what impact do these images

have on how people with disability see themselves in our society?

*Oral Presentation: Room 350, 1:10 p.m.*

**Sarah S. Radu**

Professor Phil Smith

**"This is Your PATH": A Qualitative Study on Person-Centered Planning**

Person-centered planning (PCP) is a group of methods of action focused on a particular human being who wants to make a design, drawing, or map into the future. PCP has become a well-known and widely used approach to individual program planning for students at the secondary grade level in the field of special education. However, very little qualitative research exploring person-centered planning practices for children with disabilities at the primary grade level has been done. The purpose of this article is to present qualitative data obtained from semi-structured interviews used to gain an insight into the effectiveness of person-centered planning as a means to assist in the discovering, planning, and pursuit of future goals for a primary grade level child with developmental disabilities and their family.

*Poster Presentation: Room 310, 1:15 p.m.*

**Ruth Salles**

Professor Phil Smith

**One Voice of Many**

The original short stories, poems, narratives, and photographs that were used to create *One Voice of Many* is intended to help the audience suspend their own experiences and perceptions in order to contemplate the lives of people with disabilities. It is a slideshow presentation that includes vivid photographs that illustrate the short stories, poems, and narratives that focus on different disabilities. This project was inspired by Arc's People First Language, which asks that people are recognized for being people rather than for the disabilities they may have, and which is intended to motivate all individuals to think about how they perceive themselves as compared to others who have different abilities.

*Oral Presentation: Room 350, 1:30 p.m.*

**Kathlene C. Talladay**

Professor Ana Claudia Harten

**Perceived Roles of Parents and Speech-Language Pathologists in Training for and Maintenance of Augmentative and Alternative Communication Devices**

This qualitative research study examines the perceptions and experiences of parents and speech-language pathologists regarding the training in and maintenance of augmentative and alternative communication (AAC) devices. Previous literature reveals that parents encounter difficulties in learning AAC technologies and in updating their child's devices. The goal of this study is to gain a better understanding of both parents' and speech-language pathologists' expectations as to who is responsible for assuming the roles of providing training and programming. In addition, this study will compare these views, identifying any inconsistencies. Through interviews of parents of children with autism and their primary clinicians, data will be collected and analyzed in order to make sense of these feelings and identify where gaps in perspectives exist.

*Poster Presentation: Room 310, 1:15 p.m.*

## Department of Teacher Education

### **Jennifer Banks**

Professor Valerie Polakow

#### **Instructional Practices that Motivate Students**

This qualitative study examines the instructional strategies of four African American female teachers (K-12) in Michigan, in an effort to understand how these teachers motivate their students. Two teachers work in low-income districts, and two teachers work in affluent districts. To understand the teachers' perceptions of effective instructional strategies, an ethnographic approach was used. Through a series of open-ended and semi-structured interviews and classroom observations, several key themes are identified including the importance of teachers' passion for their students, positive teacher-student relationships, and the commitment to a culture of achievement.

*Oral Presentation: Room 300, 3:50 p.m.*

### **Nicole A. Carter**

Professor Valerie Polakow

#### **Black Female Youth Activism as an Educational Endeavor**

This qualitative study looks outside of traditional educational spaces to explore the worlds of young Black females engaged in community activism. Through community activism, the young women featured in this study share their stories about the consciousness-raising, knowledge construction, and empowerment that are promoted through activism. The city of Detroit serves as the canvas on which the stories of these women are painted. Through in-depth interviews and observations, the narratives, reflections, and poetry of these young women are revealed. Key themes such as self-efficacy, feminist consciousness-raising, and engaged public pedagogy reveal that youth activism is a mechanism for educational advancement. These findings illuminate facets of the research on urban education, which has largely ignored the voices of young Black female community activists.

*Oral Presentation: Room 300, 1:10 p.m.*

### **Susanna Coll-Ramirez**

Professor Valerie Polakow

#### **Perceptions of Latino Students about their Experiences of Higher Education**

Despite being the fastest-growing community in the United States today, Latinos have the lowest percentage of students attending any institution of higher education. As Latinos constitute a diverse demographic group with no specific country of origin, the characteristics and needs of this large community are very different. This pilot qualitative research project presents the experiences and perceptions of five Latino students at higher education institutions. Key thematic findings point to barriers, such as financial aid, language impediments, and cultural shock, and supports that facilitate Latino students' higher education experience, such as mentors and personal motivation. Both barriers and supports are discussed, and recommendations are suggested to facilitate Latino students' success in higher education.

*Oral Presentation: Room 300, 4:10 p.m.*

### **Nigora Safarovna Erkaeva**

Professor Paul Ramsey

#### **Women in Central Asia during Soviet Union**

Until the WWII, women in Central Asia were very secluded. They were covered fully and were not encouraged to be active in public spheres. However, after the formation of Soviet Union, the Soviet government encouraged women to participate in social life, get an education, and be part of building a socialistic society. Women started to be active and participate in jobs that were previously considered for men only. This process involved men and women into building a socialistic society; thus they both became part of gender equality process. During this period, women in Central Asia got a decent education and became more liberated than in the past. One of the main reasons for women's liberation was to build an industrialized society where everyone's involvement was crucial and necessary.

*Oral Presentation: Room 300, 12:30 p.m.*

### **Celeste L. Hawkins**

Professor Valerie Polakow

#### **Why My Words Aren't Good Enough**

Children come to school from various backgrounds and speak a variety of dialects. I argue that African American Vernacular English (AAVE) is a stigmatized dialect that affects African American students' experiences in schools. This complex topic has been debated for years. Research shows a strong connection between teachers' negative attitudes about stigmatized dialects and lower teacher expectations for students, leading to lower academic achievement. This qualitative research project investigates parent perspectives about their children's experiences in school through in-depth interviews with a small sample of African-American and bi-racial parents in SE Michigan. Recommendations include culturally sensitive teacher preparation, classroom instruction, and practices to increase levels of student achievement among those children who may be marginalized based on the way they speak.

*Oral Presentation: Room 300, 3:00 p.m.*

### **Tiffany B. Hartman**

Professor Patricia Pokay

#### **University Student Academic Self-Entitlement: Levels of Entitlement, Academic Year, and Gender**

Academic self-entitlement is a rapidly increasing phenomenon in universities today. Self-entitled students expect high grades for minimal effort and tend to be highly demanding; they exhibit strong emotions when outcomes fail to meet their expectations. This type of student behavior increases the burden placed upon unprepared faculty, emphasizes performance goals rather than learning goals, and threatens the core values of education. This study investigates two possible factors that may contribute to self-entitled behavior: student gender and years spent in school. The purpose of this study is to raise further awareness of the growing prevalence of academic self-entitlement and to help identify possible relationships between self-entitled behavior, academic year, and gender. Suggesting these possible relationships (or lack thereof) may help to support current and future research and, over time, assist in addressing and finding solutions to the problem of academic self-entitlement in universities.

*Oral Presentation: Room 300, 6:30 p.m.*

**Kelli R. Hatfield**

Professor Valerie Polakow

**Student Perceptions of the Sacrifices and Rewards of Participating in an Early Middle College**

Early middle college programs have been described as the educational models of the 21st century. With 19 early middle college (E/MC) programs in Michigan, they have been deemed “the fastest growing programmatic innovation in education.” This qualitative pilot study explores the lived experiences and perspectives of the students who make up these unique learning communities and examines the principles and practices of E/MC programs through existing research. The findings from the study illuminate student perceptions of what they identify as components that set E/MC models apart and depict the daily challenges and rewards in the context of an actual E/MC program in Michigan.

*Oral Presentation: Room 300, 2:00 p.m.*

**John J. Lupinacci III**

Professors Ethan Lowenstein and Rebecca Martusewicz

**Teacher as Mediator: Introducing an Ecologically-Centered Learning Model**

In this presentation I propose a model of teacher learning that builds on the “How People Learn (HPL) Framework” and complicates the situational context of teaching and learning to draw closer attention to the impact of a person’s primary socialization and the role of culture. The presentation conceptualizes learning as a part of existing in an ecology of language patterns within which the teacher is a mediator of both professional growth and student learning in both a social and ecological community. This notion of the ecology of the learning situation will draw from Bateson’s “Ecology of Mind” as a way to frame the complexity of learning relationships. The poster introduces and explains an ecologically-centered learning model that will propose and invite inquiry to the development of a learning model that works to develop strong a ecological-ethical consciousness.

*Poster Presentation: Room 310, 1:15 p.m.*

**Shana R. Holden-Murphy**

Professor Valerie Polakow

**The Road Less Traveled: The Experiences of Urban Teachers**

The current “urban crisis” has been plagued by detrimental politics leading to unemployment, physical deterioration, poverty, under-resourced schools, violence, discrimination, and social isolation; these factors define the daily realities of America’s urban children. Many urban teachers work in distressed environments; however, a small minority of urban teachers have consciously chosen to take the road less traveled. This qualitative research study explores and analyzes the experiences of five urban schoolteachers. Through open-ended interviews, the researcher uncovers the lived world experiences of an urban teacher. Individual case studies are presented as well as a thematic analysis of the overall themes found throughout each of the narratives. Key themes that emerge are the practice of education for freedom, the importance of relationships, the role and impact of school administrators, and a sense of resiliency.

*Oral Presentation: Room 300, 1:30 p.m.*

**Vanessa A. Lancaster**

Professor Alane Starko

**Academically Gifted Adolescents Transferring to an Independent Gifted School: Effects on Academic Identity**

This qualitative study compares experiences of transferring to an independent gifted school on the academic identity of gifted adolescents from low-, middle-, and high-income school districts. Focus groups and interviews of gifted 6th-12th graders inform data demonstrating how changes in school SES context shape academic identity. Students discuss perceptions of academic success, how transferring schools has affected academic success, how prior school(s) prepared them academically for a gifted independent school and how that preparation affects overall experience at the independent school, and challenges they’ve overcome as transfer students. Suggestions are made for gifted schools to develop program plans that will best reach adolescent transfer students from various backgrounds. This study opens doors for future studies comparing academic identity of adolescent students in various school contexts.

Additionally, future comparison studies can be made with students who attended a gifted school from primary through middle/high school.

*Oral Presentation: Room 300, 12:50 p.m.*

**Syprose A. Owiti**

Professor Rebecca Martusewicz

**Globalization and Food Insecurity among Rural Sub-Saharan African Women**

Despite their important contribution in the agricultural sector (FAO, 2008), rural sub-Saharan African women have remained the poorest and hungriest (Food First, 2008). This review examines both local and global policies and their effects on food security among these women. In order to ensure food security, particularly among rural sub-Saharan African women and sub-Saharan African population as a whole, a replacement of these failed policies with those that acknowledge gender inequalities in addressing these women’s unique challenges is proposed in the conclusion.

*Oral Presentation: Room 300, 4:30 p.m.*

**W. Samino Scott II**

Professor Valerie Polakow

**The Path Less Traveled**

In this study I explore the role of family and social influences on the college-choice decision-making process of African American male students. This process encompasses a variety of experiences that shape a child’s predisposition towards college beginning in kindergarten. A literature review of the factors that affect African American males depicts personal and environmental challenges that permeate poor urban communities. By focusing on the voices of college students through interviews and exploring the perceptions of their parents, the findings of the study highlight the unique obstacles that African American males must overcome to enroll in college. Key themes that emerge speak to the importance of their complex and challenging life experiences, including coping with social disorder, and factors that encourage discourage students in their pursuit of higher education.

*Oral Presentation: Room 300, 2:20 p.m.*

**Caroline G. Semrau**

Professor Brigid Beaubien

**Comparison of MEAP scores of Fifth-Grade Students in Self-Contained and Departmentalized Classrooms in Ten Rural Michigan Schools**

With the current emphasis on student achievement and teacher accountability, elementary schools are reconsidering the organizational structure of traditional self-contained classes. In contrast, departmentalized classrooms divide students into groups that travel between two to four teachers. This study addresses whether fifth-grade students in departmentalized classrooms achieve higher test scores in math, reading, and social studies than in self-contained settings. I identified ten rural Michigan schools with 30%-40% of students on free and reduced lunch and collected their 2009-2010 MEAP scores. The findings do not conclusively support either organizational structure and are consistent with previous studies. I recommend further research on how rural Michigan schools design their departmentalized programs.

*Poster Presentation: Room 310, 1:15 p.m.*

**Dawn L. Stewart**

Professor Valerie Polakow

**Foster Care and Independent Living: Real Stories, Real Voices**

Each year, growing numbers of foster youth ages 18 and older are emancipated from the child welfare system. Prior to this, they are prepared for adulthood through the provision of independent living services. Nevertheless, many youth find themselves unready to assume the responsibilities of adulthood. Much information has been garnered from foster parents, case managers, children's attorneys, and family members but fails to incorporate the voices of the youth. This study illustrates the unique challenges foster youth experience after they age out of foster care, as told by the five participants in this study. Their distinctive experiences, from their initial placement in foster care to their emancipation from care and subsequent road to independence, are chronicled through their voices, which raise questions about the impact and efficacy of current independent living programs.

*Oral Presentation: Room 300, 3:30 p.m.*

**Huayun Xu**

Professor Valerie Polakow

**Within a One-Room School: Stories about the Town Hall School and Rural Education**

In this oral history project, six current and former EMU university professors, local residents, and pioneer family members were interviewed about their experiences and perceptions of a one-room school, the Town Hall School on EMU's campus. Besides narratives, photos and archives were used to present the context and analyze the stories collected. The narratives were analyzed and organized into three categories: school experiences, the history of the normal school, and changes in public education. The analysis focuses on understanding the legacy of the one-room schoolhouse, its meaning to the history of American education, and the impact of consolidation on local education and community life.

*Oral Presentation: Room 300, 2:40 p.m.*

**College of Health and Human Services**

**School of Health Promotion and Human Performance**

**Heather Anderson**

Professor Donna Kay Woodiel

**Nutrition Education for Obese Developmentally-Disabled Adults: Application of the Social Cognitive Theory**

Obesity has reached an epidemic level in the United States. This is particularly the case for adults with developmental disabilities, a population with overweight and obesity prevalence of up to 2.1 times the national average. In addition to over-nutrition and lack of physical activity, trends towards increased living independence as well as health care service inequities place developmentally-disabled adults at greater risk of becoming obese. A workshop intervention aimed at improving the dietary habits of these adults was developed based on the Social Cognitive Theory. Key theory constructs of reciprocal determinism, self-efficacy, and incentive motivation were built into a lesson plan providing instruction on the USDA's food guidance initiative, Choose My Plate.

*Oral Presentation: Room 352, 2:40 p.m.*

**Melissa Burner, Brian Emling, Samer Moussa, and Kevin Vines**

Professor Frank Fedel

**Lifecasting for Prosthetics: Fabricating Limb Models with Unprecedented Biorealism**

Lifecasting, as used in the field of Orthotics and Prosthetics (O&P), is the process of using assorted molding and casting techniques to produce realistic analogues of parts of the human body. In order to provide patients with optimal fit and function, students must learn to palpate the bony landmarks of sound and residual limbs and to perform proper techniques when creating clinical molds. The degree of reality offered by existing artificial models is less than satisfactory. As part of a continuing pioneer project in lifecasting techniques and materials, first-year O&P students at Eastern Michigan University are working with Professor Frank J. Fedel to create and present models of sound and residual limbs, from deep to superficial tissue layers, with an unprecedented degree of biomimesis.

*Poster Presentation: Room 310, 3:00 p.m.*

**Theresa C. Field and Meghan Prunty**

Professor Frank Fedel

**The Anatomy and Physiology Crossword Study Guide**

A broad knowledge of human anatomy and physiology is required in any medical field. Since anatomy and physiology can be difficult to grasp, our team developed a study tool based on Universal Design for Learning principles in order to appeal to a broad spectrum of learners. Students learn more effectively using different means of representation, so we created a physical/digital booklet of crosswords that references the body's systems and components in a variety of ways. To make the booklet valuable to students at various levels of education, it includes incremental levels of difficulty. In summary, it is an entertaining and engaging study guide and feedback tool designed to help struggling students maintain interest while learning the science of the human body.

*Poster Presentation: Room 310, 3:00 p.m.*

**Megan M. Flanagan**

Professor Robert Rhodes

**A Survey-Based Study on the Rates of Success in the Professional Field of Orthotics and Prosthetics**

This survey-based study was sparked by the well-known “fact” that the orthotics and prosthetics (O&P) field has a 100% employment rate after graduation from a certified program. After searching various journals within the O&P field, no such study has been performed to research who is/is not employed or that address which residency was done first and correlated to the students’ passing rates. Thus, this became a two-fold study correlating employment rates and graduation year/institution and choice of residency and passing rates of the American Board of Certification (ABC) exams. A 10-question survey via surveymonkey.com will be sent out via the O & P listserv and will be correlated accordingly. The hypotheses are that the employment rate will be close to 100% regardless of institution or year of graduation and that those who do their orthotics residency first will have a higher passing rate on their ABC exam.

*Poster Presentation: Room 310, 3:00 p.m.*

**Briana Gascho**

Professor Frank Fedel

**Grief and Recovery Following Limb Loss: A Two-Part Resource for Prosthetics Students and Practitioners**

Limb loss profoundly affects the person who has undergone amputation, both physically and psychologically. Prosthetists primarily work with amputees to replace the physical body part that has been lost; these professionals must also understand the psychological impact of amputation. To inform students and practitioners in this realm, this two-part resource combines academic theories of grief and adjustment following loss, personal anecdotes from amputees, and analysis of how the amputation impacts the patient psychologically. It explains the importance of psychology in prosthetic practice and provides users with a guide to working with patients at various stages of emotional recovery. It includes examples of key behaviors and how to respond to them, as well as probable patterns of behavior and thought of patients based on age, level of amputation, and etiology of amputation.

*Oral Presentation: Room 352, 12:30 p.m.*

**Deidre T. Hardemon**

Professors Donna Kay Woodiel and Megan Rickard

**An Epidemiological Review and Intervention Plan for Breast Cancer in African American Women**

According to the Centers for Disease Control and Prevention (CDC), breast cancer is the most common cancer in women and leads to many deaths per year. Data from the CDC from 1999 to 2007 show that while white women had the highest incidence rate of breast cancer, black women were more likely to die from it. Additional statistical data provided by The Breast Health Center reported that from 1999 to 2006, women aged 50-69 had the highest incidence rate of breast cancer, followed by women aged 42-49. From this data, an intervention entitled “My Sister’s Keeper” is proposed in an effort to decrease the mortality rate of breast cancer in African American women aged 40-69. The intervention utilizes Best Practice methods recommended by the Community Guide to Preventative Services. This presentation will review in

detail the previous summarized epidemiological data as well as the proposed intervention of “My Sister’s Keeper.”  
*Oral Presentation: Room 352, 2:20 p.m.*

**Angela Kanavel, Kristen Balcom, Theresa Field, Christine Skelton, Alisha Thompson, and Katie Wellman**

Professor Frank Fedel

**Gait, the Complexity of Something So Simple**

Gait (walking) is composed of a series of complex motions. Professionals in orthotics and prosthetics need to thoroughly understand gait to provide optimum patient care. The goal of this project was to create a visual multimedia tool that incorporates Universal Design in Learning (UDL) principles to explain the normal gait cycle. A literature review was completed to ensure that it could be used as a component of Evidence Based Practice (EBP). Using the EMU Gait Lab, we analyzed the gait of a variety of subjects and identified “normal” gait characteristics, then broke each attribute into simple components so students could understand the motions occurring at the ankle and the knee from various perspectives. The multiples phases, events, and periods of gait are also discussed. Having synchronized mixed media makes this a valuable tool for students to use while learning at their own pace.

*Oral Presentation: Room 352, 12:50 p.m.*

**Andrea Kramer, Ryan Sheridan, and Meghan Prunty**

Professor Frank Fedel

**Multimedia Selection Guide for Upper Extremity Prosthesis Terminal Devices**

Selecting the optimum terminal device for an upper extremity prosthesis is an important decision that can maximize a patient’s quality of life and functional outcomes. The clinician’s preprosthetic preparation involves identifying patient goals and choosing the appropriate device based on its functional characteristics. Using the multimedia software, Panopto, this presentation offers viewers an auditory, textual, and visual comparison of terminal devices used on body-powered upper extremity prostheses. This comprehensive educational tool is ideal for introducing prosthetic students to upper extremity terminal devices. Information on terminal devices included in this presentation includes basic characteristics, advantages, disadvantages, and identification of those for whom they are commonly indicated. This presentation will benefit prosthetic students by familiarizing them with the various body-powered terminal device options, teaching them to discuss the terminal devices with patients, and helping them make well-informed clinical decisions.

*Oral Presentation: Room 352, 1:10 p.m.*

**T. Michelle Moten**

Professor Donna Kay Woodiel

**Fun and Functional Fitness Programming for Older Adults**

All humans will inevitably age. However, the ultimate goal is to not simply grow old but to maintain a healthy lifestyle into our golden years. This presentation explores the benefits and protective mechanisms of exercise for adults 65 years and older. A review of epidemiological data compares physical activity trends among older adults in the U.S. and Michigan. Relative risk data are used to identify physical inactivity as a modifiable risk factor for mortality

from cardiovascular disease, stroke, and some cancers. The research presented is used to design a fun and functional intervention program that encourages exercise participation and adherence among apparently healthy older adults.  
*Oral Presentation: Room 352, 3:00 p.m.*

**Jeffrey M. Olson II**

Professor Frank Fedel

**Evaluation of Rocker Soled Shoe Designs on Coronal Plane Movement**

This study offers a new and quantitative approach to identifying the spatial-temporal, kinetic, and kinematic differences between various rocker soled shoe designs, including a previously untested reverse rocker. One out of three adults over the age of 65 falls each year, and fall-related medical costs exceed \$28 billion annually. Fear of falling leads to decreased levels of physical activity and therefore increases the risk of developing pathologies that contribute to falls in older adults. Compensating for biomechanical losses associated with instability and neuropathy are common goals of orthotic intervention. Rocker sole shoe modifications are often utilized to treat soft tissue damage, but there is also potential for treating balance deficits. This research may identify an important clinical tool for preventing falls in the elderly population.  
*Poster Presentation: Room 310, 3:00 p.m.*

**Andrew Stevens**

Professor Frank Fedel

**Differences Between Normal Gait and Patients with Simulated Upper Limb Amputations**

Gait is a complex process, and all individuals have a unique set of forces that their body must oppose in order to perform the gait cycle. This project was designed to discover the differences between someone within the normal range of gait and that same individual simulating an upper limb amputation. The results are displayed incorporating Universal Design in Learning (UDL) including a poster and video recording along with the personal presentation. Gait information gathered in the gait lab was placed side by side to easily show the change that occurs, which can be used in the future to help improve patient function and mobility.  
*Poster Presentation: Room 310, 3:00 p.m.*

**Lucas J. Wall**

Professor Stephen J. McGregor

**Using High Resolution Accelerometers with Laboratory Measures Strongly Predicts 10k Running Performance**

The purpose of this study was to determine whether high-resolution accelerometers (HRA) can be used with other laboratory measures to predict performance in collegiate cross-country runners. Seven NCAA Division 1 cross-country runners completed 3k and 10k performance trials and one incremental trial on a treadmill that included wearing an HRA at the approximate center of mass. Blood lactate levels and metabolic gases were measured to determine pace at LT (LTP), VO<sub>2</sub>max, and speed at VO<sub>2</sub>max. HRA signal was examined in three planes of motion and compared to speed. Laboratory measures and performance data were compared by correlation and stepwise regression. Linear stepwise regressions including LTP, 3k, and other laboratory measures did not significantly improve relationships with 10kTT over LTP

alone. When HRA parameters were added to LTP, 3kTT, and VO<sub>2</sub>max, significant and substantially stronger relationships were obtained ( $r=0.993$ ,  $p<.001$ ).  
*Oral Presentation: Room 352, 1:30 p.m.*

**Andrea D. Workman, Lucas Wall, and Joshua Gordon**

Professor Stephen J. McGregor

**Comparisons in Running Economy and Mechanics between Male and Female Collegiate Runners Using High Resolution Accelerometers**

The purpose of this study was to compare O<sub>2</sub>cost and running mechanics between male and female collegiate Cross Country Runners (XC) using high resolution accelerometers (HRA) during an incremental treadmill test. Seventeen athletes, 8 males and 9 females, performed a running test (VO<sub>2</sub>max) consisting of 3-minute stages, beginning at 8 kph, increasing 2 kph until exhaustion, wearing tri-axial HRAs. Root mean square of accelerations, Euclidean resultants (RES), and expired gasses (VO<sub>2</sub>, O<sub>2</sub>cost, RER) were compared between groups for the last minute of each stage. Females exhibited greater ML, AP, and RES ( $p<.05$ ) than males, but VT were not different. RER, relative VO<sub>2</sub>, and O<sub>2</sub>cost ( $p<.05$ ) were greater among the females, but absolute VO<sub>2</sub> was not. Running is more costly for female XC than males, corresponding to greater axial accelerations in females.  
*Oral Presentation: Room 352, 2:00 p.m.*

**Erica Zonder and Zara Northover**

Professor Brenda Riemer

**Facility Management of a Dog Obedience Show: The Outsider's Perspective**

Sport Management 562 is designed to teach students about sport facility management. One component of the course was a service learning project. The students were to plan and implement the facility management of the Marshbanks Dog Show at the Northfield Dog Training Facility. The end result was the creation of a facility event manual to be used in future years. It started with a class competition; the class was broken up into groups to "bid" on the right to create plans in the following areas: concessions, parking, set-up, custodial, and awards. This presentation details the journey from bid to event to manual completion, while sharing an outsiders' perspective of the inside of a dog show.  
*Oral Presentation: Room 352, 3:30 p.m.*

**School of Health Sciences**

**Anthony J. Galati**

Professor Stephen A. Sonstein

**Prevalence of Human Papillomaviruses (HPV) in Triple Negative Breast Cancer**

Human papillomavirus (HPV) has been identified in breast carcinogenesis. Paraffin embedded tissue collected between January 2005 and December 2010 from the Mercy Specimen Bank in Toledo, Ohio, were sampled in order to look for the presence of HPV by p16 determination. Forty cases of triple negative breast cancer were identified. When tested for p16 by immunohistochemical staining, approximately 87% were positive, suggesting the possibility of HPV as a causative mechanism for these tumors. The intensity of p16 staining correlated with younger age, mimicking the demographic distribution of other HPV infections in communities. Although HPV DNA

was not confirmed by in situ hybridization, its low viral load rendered it difficult to confirm. However, the possibility that the elevated p16 occurred as a result of HPV infection during carcinoma development cannot be ruled out and should be further studied.

*Poster Presentation: Room 310, 3:00 p.m.*

**Deirdre Guenther, Kim F. Lorenz, and Abby Zukauský**  
Professors Andrea Zakrajsek and Elizabeth Schuster  
**Coming Home: Transitions of Older Adults from Hospital to Home**

This study explores the experiences of older adults during the transitional process from hospital to home. Perspectives of health care professionals and older adults will be represented. The study identified supports that are needed to facilitate community integration, as well as barriers to transitioning. A participatory action research approach was used to guide this project, and grounded theory methods were utilized to analyze the data. The data being presented represent findings gathered through qualitative research methods involving in-depth interviews and observations. Resources are being created in collaboration with stakeholders in an effort to decrease the barriers older adults experience during hospital-to-home transitions.

*Poster Presentation: Room 310, 3:00 p.m.*

**Paula M. McElmeel, Amanda Palen, and Katie Sytniak**  
Professor Elizabeth Francis-Connolly  
**Mothering Emerging Adult Children**

Motherhood is a common phenomenon, yet it is this very commonality that masks the importance and complexity of this role. Missing from the literature is an exploration of mothering beyond the early years of a child's life. Rossi and Rossi noted that the parenthood research is conducted at two ends of the continuum: the transition to parenthood and then later with adult children providing care to elderly parents. This qualitative research study attempts to fill this gap through in-depth interviews and focus groups of mothers of young adult children (or more commonly known in the social science literature as emerging adults). The goal of this study is to explore how mothering experience changes and evolves over time.

*Poster Presentation: Room 310, 3:00 p.m.*

**Monica Sarkar, Kristen McLaughlin, Jessica Dow, and Kristin Haudek**

Professor Gretchen Dahl Reeves

**The Effect of an Integrated Play Group Program on Social Behavior in Children with Autism Spectrum Disorders and Their Peers**

This study examines the effect of an Integrated Play Group (IPG) model on play style in preschool- and kindergarten-aged children identified with autism using a single-subject design. Autism is a spectrum disorder marked by impairments in three areas: social interaction, communication, and imaginative play. Presently, one in 110 children in the U.S. are identified with this disorder. Playgroups include children with autism, called novice players, and their typically developing peers, called expert players. Groups meet weekly using a familiar routine in a consistent environment. Each session is video recorded and examined for the quality of engagement, communication, and play initiation demonstrated in children with autism.

*Poster Presentation: Room 310, 3:00 p.m.*

**Sarah M. Streng**

Professors Valerie Howells and Abbey Marterella

**Giving Back: An Ethnographic Study of American Legion Volunteers**

This poster describes a semester-long ethnographic study that sought to discover the reasons people join the American Legion and why members volunteer. Data collection included participant observation, field notes, and interviews. Working categories and themes were identified and confirmed by my research advisor. Three major themes were identified in the data. First was Community; second, Participation and Giving Back; and third, "What Drives Us." Many participants link the call to serve based on their beliefs about patriotism and honoring veterans and history. This research is relevant to the field of Occupational Therapy because it helps us to further our understanding of why people choose to participate in activities and what motivates their actions.

*Poster Presentation: Room 310, 3:00 p.m.*

**Emily A. Yagiela**

Professor Colleen Croxall

**Implementation of a New Health Care Operation: University of Michigan Children's and Women's Hospital Milk Room**

This project outlines my past year of planning, hiring, training, and opening a new health care operation at University of Michigan, the Milk Room. Specialized infant and pediatric feedings for patients in the hospital setting are often a crucial part of their medical treatment plan to ensure optimal healing and growth. There is ongoing research of best practices used to prepare infant and pediatric feedings of mixed formulas and breast milk in the hospital setting. These methods abide by use of aseptic technique, and they optimize nutrients in the prepared feeding product. In the planning for the opening of the new Children's and Women's Hospitals at University of Michigan, which opened in December 2011, it was decided that a centralized location would be created with the new hospitals to prepare these specialized feedings. This new operation, the Milk Room, is now an active health care operation.

*Poster Presentation: Room 310, 3:00 p.m.*

**School of Nursing**

**Corinne Lee**

Professor Tsu-Yin Wu

**The Impact of Breast Cancer Education on Knowledge and Breast Self-Examination Practice among Korean American Women**

Among Korean-American women, breast cancer is the second leading cause of death. Although their incidence is lower than that of Caucasian women, Korean-American women are more likely to be diagnosed at more advanced stages of breast cancer. One of the suggested methods in breast cancer prevention is early detection and routine screenings. This study explored the impact of breast cancer educational workshops on breast cancer knowledge and breast self-examination practices among Korean-American women. Fifty women in Washtenaw County participated in the study through three separate workshops; results indicated that these workshops have a positive influence on breast cancer knowledge and health beliefs. This study demonstrated that education delivered through workshops

plays an important role in increasing breast cancer knowledge, which may promote breast cancer screenings.  
*Poster Presentation: Room 310, 3:00 p.m.*

#### **Bhavana M. Toprani**

Professors Mary Sue Marz and Delbert Raymond

#### **Evaluation of a Bed Alarm in Reducing Adult Inpatient Falls**

This quasi-experimental study evaluated the effectiveness of a bed alarm for reducing falls in an adult inpatient setting. A retrospective, quasi-experimental, nonrandomized study was used to evaluate the effectiveness of the bed alarm in reducing falls in adult inpatients. This pre-post quality improvement study examined differences in the incidence of falls between pre-intervention and post-intervention periods. All rooms of the Medical Cardiology unit (MCU) were equipped with the Stryker's Chaperone Bed Exit System in the post-intervention period. A total of 3,030 patients admitted during the two periods met the inclusion criteria. A Pearson chi-square test was conducted to determine whether the incidence of falls was less in the post-intervention group than in the pre-intervention group. Test results were not significant ( $\chi^2(1) = 3.822, p = 0.051$ ). The investigation of post-intervention fall data also revealed factors complicating this analysis. Further investigation is warranted toward a rigorous evaluation of Bed Alarms.

*Poster Presentation: Room 310, 3:00 p.m.*

### **College of Technology**

#### **COT Doctorate**

#### **Judy L. Weaver**

Professor Janet Fisher

#### **Suicide...Why? What Educators Need to Know about Hurting Hearts**

Using the Weaver Target Recovery Model (WTRM), the question "Why do people commit suicide?" will be looked at. The WTRM, developed by Judy L. Weaver in 2003, incorporates the latest research and best practices for understanding suicide and the challenges of the ones that are left behind, all from the perspective of a survivor. Educators need to understand what is going on in the mind of students who have hurting hearts.

*Oral Presentation: Room 304, 7:10 p.m.*

#### **School of Engineering Technology**

#### **Alireza Aghamohammadi**

Professor Ali Eydgahi

#### **Identifying and Fixing the Most Common Software Vulnerabilities**

Poor or weak implementation of Software vulnerabilities preventions puts many users at risk. Software vulnerabilities are ubiquitous because they can be found in various technologies from iOS and Android to Cloud-based applications. Software vulnerabilities are typically addressed as part of security implementation of the software development process and code review steps. However, implementation of code to prevent software vulnerabilities varies, and in some cases engineers and developers have to address software vulnerabilities by applying patches to existing applications. This study

focuses on identifying the 21 most common software vulnerabilities as categorized by National Institute of Standards and technology (NIST) and providing a solution about how to address each software vulnerabilities.

*Oral Presentation: Room 304, 6:30 p.m.*

#### **Nadia A. Arafah**

Professor Shinming Shyu

#### **The Most Significant Factors that Affect Interior Design in Saudi Arabia**

Saudi Arabia is a unique country where religion, culture, and norms are highly valued by its people. There are some factors that changed the interior design of the Saudi houses. Islamic rules regarding privacy and gender separation played an important role in interior design. Due to the discovery of oil, the Kingdom grew rapidly, and that led to the use of new material and ideas to be applied in Saudi houses. In addition, Saudi Arabia is well known for its desert weather. This extreme hot weather forced Saudis to use different techniques to face this situation. This presentation explains the influence of Islam and culture regulations, the economic evolution after the oil discovery, and the desert climate, as the most important factors on the interior design in Saudi Arabia.

*Oral Presentation: Room 304, 1:10 p.m.*

#### **Katie Armbruster**

Professor Maria Sipos

#### **The Impact of Indoor Environmental Quality in Educational Facilities**

Recent attention to the Sustainability Movement has led to more research into the built environment. Indoor Environmental Quality (IEQ), which includes indoor pollutants, thermal conditions, and Heating Ventilation and Air Conditioning (HVAC), has become an important issue in the educational world because of its impact on student absenteeism and achievement. This presentation will assess current statistics, facts, and studies that stress the significance of IEQ and explain why it should be addressed in all existing and new construction. The paper will also provide some design considerations to apply good use of IEQ in educational facilities.

*Oral Presentation: Room 304, 1:30 p.m.*

#### **Olfat Mohammad Barayan**

Professor Shinming Shyu

#### **A Study on Sustainable Material in Historic Architecture in Saudi Arabia**

The concept of sustainability in the Kingdom of Saudi Arabia (KSA) played an essential role in cultural, environmental, and economical areas a long time ago. This concept has been applied in historical villages and traditional buildings as well. All of these dwellings and settlements are a treasure today. Therefore, the Saudi Commission for Tourism and Antiquities (SCTA) and The National Built Heritage Forum work hand in hand to renovate and restore these valuable resources under sustainability definition. The building materials most often used in these buildings were sustainable ones, such as stones and mud brick. In this presentation I will provide essential characteristics about mud, brick, and adobe, and why they are good examples of sustainable material.

*Poster Presentation: Room 310, 3:00 p.m.*

**Jennifer Benson**

Professor Shinning Shyu

**Sustainable Strategies for Hotel Design**

According to the Florida Department of Environmental Protection, the hospitality industry spends \$5 billion every year on energy and consumes about four billion kWhs of electricity. Considering these staggering numbers, the hotel industry is a good candidate for becoming more sustainable. Hotels can use many of the same sustainable practices that residential and other commercial buildings use; the challenge is that hotels are a 24/7 business. This project will look into many of the sustainable options available for hoteliers and take into consideration cost effectiveness, convenience, and appeal to the average hotel guest. Sustainable practices to consider include energy efficiency, sustainable exterior and interior materials, and water conservation. This project will also explore how to make energy conservation measures appealing to hoteliers.

*Oral Presentation: Room 304, 2:00 p.m.*

**Holly M. Brown**

Professor Maria Sipos

**Can Sustainable Hospitality Design Influence Behavior**

Interior designers can influence behavior with their designs. If a hotel is designed in such a way that it's easy to recycle, the designer could influence a person to act in a sustainable way. The easier a task is to do, such as recycling, the more likely people are to do it. Using smart design and sustainable products is just a start to influencing the population to be sustainable. A designer's job is to make sure the design is done in a way that will make people stop thinking about recycling and just do it because it has become second nature.

*Oral Presentation: Room 304, 3:30 p.m.*

**Preetinder S. Gill**

Professor John C. Dugger

**Engineering Changes Management Software Tool**

A range of supply chain management software packages designed for mid-sized enterprises were identified. These software packages were compared and evaluated for their strengths and weaknesses. The analysis served as the basis for identification of key success factors for a novel software tool for engineering change processing at mid-sized enterprises. A business process requirement document was created for the proposed software tool. The presentation will describe this tool in adequate detail such that product software development could commence.

*Oral Presentation: Room 304, 4:30 p.m.*

**Na Han**

Professor Maria Sipos

**Effects of Passive Solar Systems and Materials on Sustainable Design**

Sustainable design is ecologically friendly design that enhances both the environment and human life. The effective building system in sustainable architecture and design is the passive energy system. This system uses location, insulation, and materials for generating heating and cooling systems in optimized conditions. Passive solar energy design can reduce negative effects on the Earth and is concerned with protecting the environment and preserving natural resources for future generations. For these reasons, interior designers should start to implement

passive solar design principles and materials. Moreover, using passive solar energy helps sustain the environment and has economic benefits including preserving energy and reducing construction waste.

*Oral Presentation: Room 304, 3:50 p.m.*

**Megan J. Hromco**

Professor Maria Sipos

**Aspects of Memory in Design**

Abstract Science influences the fields of architecture and interior design. A new contributor to the field is Neuroscience. Neuroscientists found that certain parts of the brain control human memory, which has a significant influence on humans' experience of the built environment. Three important types of memory are archetypes, proprioception, and cognitive memories. By understanding memory, designers can be more precise when solving problems, improve navigable spaces, and better communicate with clients. This knowledge impacts design considerations in health care, with the elderly and those with brain disorders or injuries. Discoveries in neuroscience will continue to influence the fields of architecture and design.

*Oral Presentation: Room 304, 2:40 p.m.*

**Amanda L. Kaserman**

Professor Maria Sipos

**Wayfinding Strategies for Residents Suffering From Dementia**

This research compares the available literature on wayfinding for people suffering from dementia. Dementia is an incurable memory loss disease, and its incidence is rising as the elderly population grows. Wayfinding is a tool that helps people feel self-sufficient and independent. Architectural typology plays an important role in the experience a person has inside a space, and two of the most popular and beneficial ones are described in this presentation. The other design strategies addressed are signage; indoor design elements, such as color and lighting; and sensory stimulation. With a growing elderly population, research on wayfinding in dementia-friendly environments is fundamental to help benefit the people diagnosed with dementia.

*Oral Presentation: Room 304, 4:10 p.m.*

**Katherine J. Maxim**

Professor Maria Sipos

**Designing A Four-Generational Office**

As the workforce evolves to span four very different generations, the workplace must be designed for everyone's optimal productivity. Therefore, framework must take into account the differences and similarities of how Traditionalist, Baby Boomers, Generation X, and Generation Y work. These will drive what each generation needs to work independently and in a group setting. It will also show the importance of moving between these different types of work, and how the environment can better enable the transition between the independent and group work. All employees must be provided with adjustable workspaces to accommodate their wide range of differences. The office needs to be an environment that provides focus, because none of the generations benefit from multitasking.

*Oral Presentation: Room 304, 3:00 p.m.*

**Anna E. McComb**

Professor Shinming Shyu

**Economical and Aesthetic Aspects of Photovoltaic Systems for Residential Applications**

My research will address the cost, installation, and efficiency of photovoltaic (PV) solar panels in residential applications. The installation research will not only explore new, innovative, and economical installation methods of the solar panels but will also discuss the possibility of finding more aesthetically pleasing installations for residential applications. My research will study the economical/financial pros and cons for using photovoltaic solar panels and will show the relationship between cost of installation and maintenance and the amount of energy conserved and produced. I will provide a detailed outline that will show the potential environmental, financial, and economical benefits of using PV solar panels.

*Oral Presentation: Room 304, 12:50 p.m.*

**Kimberly A. Michels**

Professor Shinming Shyu

**Business Profitability and Environmental Sustainability: A Case Study on IKEA**

Businesses have long been focused on profitability, disregarding the negative impacts their business practices have on the environment and their customers. Using IKEA as a case study, this presentation explores steps companies can take to promote globally responsible business practices while remaining profitable. IKEA has taken aggressive action: eliminating disposable bags, ending the sale of energy hungry incandescent bulbs, and utilizing both geothermal energy and solar panels, all in an effort to reduce the carbon footprint of their stores. The continued success of IKEA demonstrates that in today's global market, a business can shift emphasis from the traditional profit only driven mentality to one that is also more socially and environmentally responsible and thrive while doing so.

*Oral Presentation: Room 304, 12:30 p.m.*

**Linda Montgomery**

Professor Shinming Shyu

**Sustainable Design: Green Roofs**

The main goal of sustainable design is to reduce the negative impact buildings have on the environment. Although there are many sustainable strategies, this study will look specifically at green roofs. Green roofs are a growing trend in sustainable design. This study will introduce what green roofs are and will highlight their many environmental, social, and economic benefits. Furthermore, I will show existing examples of green roofs to show not only their benefits but also how and when they should be installed. Additionally, I will explain the components and parts of a green roof, to give an understanding of the overall technology involved in using it on a design project.

*Oral Presentation: Room 304, 2:20 p.m.*

**Rory Skrent**

Professor Walter Tucker

**Effects of Internet Culture on Product Development**

This study examines the effects of Internet culture on the product development process as well as how open source communication changes standard business practices. With the globalization of business today, humans are constantly connected to each other in a real time communication channel. Somewhere in the world, an awake and working business professional is available to share knowledge on the Internet and in the open source community. Since the customer is now global as well, the study also looks at how international customer requirements affect the efforts to standardize the physical technical specifications during the product development process. This study sees an opportunity to form a single universal language open-source human knowledge database that mixes Wikipedia, Skype, Facebook, Reddit, LinkedIn, & Google translate.

*Oral Presentation: Room 300, 7:30 p.m.*

**School of Technology Studies****Steven Aiello and Flora Du**

Professor Brad Wilkerson

**Compliance vs. Security: Is it Money Well Spent?**

In today's IT and business world, there is a need for transparency and control. The current trend in government and business space is to achieve a sense of control over complex environments through compliance standards. These compliance standards can be government-imposed or business sector-based. These processes are time-consuming and costly for many businesses. So we need to post the question: Do compliance initiatives actually accomplish the intended goals? We wish to examine this question to see if these compliance standards truly provide a benefit.

*Oral Presentation: Room 304, 6:50 p.m.*

**Najma E. Jamaludeen**

Professor Subhas Ghosh

**Recycled Runway: Re-polymer, re-fiber, re-fashion**

The United State's textile and apparel industries are significant contributors to the solid waste stream and are called one of the worst offenders in terms of pollution. While both natural and man-made fibers contribute to the industry's waste stream, the inherently unsustainable polymer-based products and man-made fibers have a greater impact. To help to decrease this impact, some apparel manufacturers have employed recycling systems that break down discarded polymer-based products and reprocesses them into polymer chips for the manufacture of post-consumer recycled (PCR) apparel and other textile products. This research examines the performance ability of three PCR polyester knit fabrics, currently used for the design of sportswear, to the performance specifications of a couture design and implicates possible ways that PCR textiles in the apparel industry can be expanded.

*Oral Presentation: Room 304, 7:30 p.m.*

## Oral Presenters by Location and Time

### **Session I: 12:30-1:45**

#### Room 222

- 1. Haley E. Atkinson**  
English Language and Literature
- 2. Carly Francescut**  
English Language and Literature
- 3. Andrea Boog**  
English Language and Literature

#### Room 300

- 1. Nigora Safarovna Erkaeva**  
Teacher Education
- 2. Vanessa A. Lancaster**  
Teacher Education
- 3. Nicole A. Carter**  
Teacher Education
- 4. Shana R. Holden-Murphy**  
Teacher Education

#### Room 301

- 1. Shawn T. Duke**  
Biology
- 2. Jennifer K. Kirk**  
Biology
- 3. Sarah Schrader**  
Biology
- 4. Melissa K. Zochowski**  
Accounting and Finance

#### Room 302

- 1. Erika A. Buckley**  
Sociology, Anthropology, and Criminology
- 2. Nour Fakhoury**  
Sociology, Anthropology, and Criminology

- 3. Ellen Jayne Hine**  
Sociology, Anthropology, and Criminology
- 4. Mary Shindell, L. Dempsey, M. Roberts, and M. Veal**  
Management

#### Room 304

- 1. Kimberly A. Michels**  
Engineering Technology
- 2. Anna E. McComb**  
Engineering Technology
- 3. Nadia A. Arafah**  
Engineering Technology
- 4. Katie Armbruster**  
Engineering Technology

#### Room 320

- 1. Adam Ostrowski**  
Art
- 2. Christine M. Bruxvoort**  
Art
- 3. Morgan S. Barrie**  
Art
- 4. Melinda Ortiz**  
Art

#### Room 330

- 1. Presentation Canceled**
- 2. Matthew D. Penix**  
History and Philosophy
- 3. Jacob Casteel**  
History and Philosophy
- 4. Jacquelyn S. Odum**  
History and Philosophy

#### Room 350

- 1. Jacob Bal**  
Special Education
- 2. Elizabeth Howard**  
Special Education
- 3. William A. Massey**  
Special Education
- 4. Ruth Salles**  
Special Education

#### Room 352

- 1. Briana Gascho**  
Health Promotion and Human Performance
- 2. Angela Kanavel, Kristen Balcom, Theresa Field, Christine Skelton, Alisha Thompson, and Katie Wellman**  
Health Promotion and Human Performance
- 3. Andrea Kramer, Ryan Sheridan, and Meghan Prunty**  
Health Promotion and Human Performance
- 4. Lucas J. Wall**  
Health Promotion and Human Performance

#### Auditorium

- 1. Samuel Joshua**  
Music
- 2. Patricia Rayl**  
Political Science
- 3. Nicolette Bateson**  
Political Science
- 4. Nguyen T. K. Bui**  
World Languages

## Session II: 2:00-3:15

### Room 222

1. **Aquila Sams**  
English Language and Literature
2. **Melissa R. Pompili**  
English Language and Literature
3. **Doug Crandall**  
English Language and Literature
4. **Tabetha K. Violet**  
English Language and Literature

### Room 300

1. **Kelli R. Hatfield**  
Teacher Education
2. **W. Samino Scott II**  
Teacher Education
3. **Huayun Xu**  
Teacher Education
4. **Celeste L. Hawkins**  
Teacher Education

### Room 301

1. **SaiDeepthi Illendula**  
Chemistry
2. **Anupama Jasthi**  
Chemistry
3. **Nirosha D. Perera**  
Chemistry

### Room 302

1. **James Paterson, J. Bowen, C. Zarbaugh, and R. Cerant**  
Management
2. **Erinc Erel Caglar and Paul Nucci**  
Marketing

### Room 303

3. **Joseph F. Garon**  
Marketing
4. **Amy Rule**  
Marketing

### Room 304

1. **Jennifer Benson**  
Engineering Technology
2. **Linda Montgomery**  
Engineering Technology
3. **Megan J. Hromco**  
Engineering Technology
4. **Katherine Maxim**  
Engineering Technology

### Room 320

1. **Shelly J. Neitzel**  
Art
2. **Lauren E. Carpenter**  
Geography and Geology
3. **Sam Constantine**  
Geography and Geology
4. **Judith Davis**  
Geography and Geology

### Room 330

1. **Edward W. McGovern**  
History and Philosophy
2. **Branden O'Grady**  
History and Philosophy
3. **William T. Zurenko**  
History and Philosophy
4. **Johanna Zwally**  
History and Philosophy

### Room 350

1. **Kevin Dorn**  
Special Education
2. **Melissa M. Brown**  
Special Education
3. **Maria V. Cudas**  
Special Education
4. **Jill A. Herzig**  
Special Education

### Room 352

1. **Andrea D. Workman, Lucas Wall, and Joshua Gordon**  
Health Promotion and Human Performance
2. **Deidre T. Hardemon**  
Health Promotion and Human Performance
3. **Heather Anderson**  
Health Promotion and Human Performance
4. **T. Michelle Moten**  
Health Promotion and Human Performance

### Auditorium

1. **Kirtland R. Eastwood**  
World Languages
2. **Jing Guo**  
World Languages
3. **Lauryn Navarre**  
World Languages

## Session III: 3:30-4:45

### Room 222

1. **Sean Kilpatrick**  
English Language and Literature
2. **Edward G. Randolph III**  
English Language and Literature
3. **Antonio A. Barroso**  
English Language and Literature

4. **Molly McCord**  
English Language and Literature

### Room 300

1. **Dawn L. Stewart**  
Teacher Education

2. **Jennifer Banks**  
Teacher Education
3. **Susanna Coll-Ramirez**  
Teacher Education
4. **Syprose A. Owiti**  
Teacher Education

**Room 301**

- 1. Adrienne Hirschfelder**  
Mathematics
- 2. Nasrin Belbasi**  
Mathematics
- 3. Reino Bruner and James Dalrymple**  
Mathematics

**Room 302**

- 1. Sarah M. Ahlfs-Dunn**  
Psychology
- 2. Maegan Calvert**  
Psychology
- 3. Katherine L. Harris, Sarah Ahlfs-Dunn, and Maegan Calvert**  
Psychology
- 4. Amanda Ellis**  
Psychology

**Room 304**

- 1. Holly M. Brown**  
Engineering Technology
- 2. Na Han**  
Engineering Technology
- 3. Amanda L. Kaserman**  
Engineering Technology

- 4. Preetinder S. Gill**  
Engineering Technology

**Room 320**

- 1. Kelly A. Johnston**  
Geography and Geology
- 2. Belinda G. McGuire**  
Geography and Geology
- 3. Lindsay Zaremski**  
Geography and Geology
- 4. Joshua Carr**  
Political Science

**Room 330**

- 1. Tamara R. Grit**  
History and Philosophy
- 2. William Boardman**  
History and Philosophy
- 3. Andrea M. Davis**  
History and Philosophy
- 4. Andrew Karl Donovan**  
History and Philosophy

**Room 350**

- 1. Tania C. Reis**  
Leadership and Counseling
- 2. Linda K. Foran**  
Leadership and Counseling

- 3. Angela Elkordy**  
Leadership and Counseling
- 4. Emily Compton and Lisa Andrews**  
Leadership and Counseling

**Room 352**

- 1. Erica Zonder and Zara Northover**  
HPHP
- 2. Erika M. Behrmann**  
Women's and Gender Studies
- 3. Dana M. Creighton**  
Women's and Gender Studies
- 4. Jessica Lohmann**  
Women's and Gender Studies

**Auditorium**

- 1. Callie S. McKee**  
Communication, Media, Theatre Arts
- 2. Victoria A. Tomalia**  
CMTA
- 3. Amanda Grazioli**  
CMTA
- 4. Courtney Wright**  
CMTA

**Session IV: 6:30-7:45**

**Room 222**

- 1. Ahmed Saeed Manati**  
English Language and Literature
- 2. Brent Woo**  
English Language and Literature
- 3. Brent A. Miller**  
English Language and Literature

**Room 300**

- 1. Tiffany B. Hartman**  
Teacher Education
- 2. Kimberly Kopka**  
Accounting and Finance
- 3. Shane Redman**  
Political Science
- 4. Rory Skrent**  
Engineering Technology

**Room 301**

- 1. Nicholas W. Arnold**  
Physics and Astronomy
- 2. Paul T. Nelson**  
Physics and Astronomy
- 3. Marc Bell**  
Physics and Astronomy

**Room 302**

- 1. Lance Vought**  
Economics
- 2. Michael J. Barna**  
Economics
- 3. Abdulla Ali**  
Economics

**Room 304**

- 1. Alireza Aghamohammadi**  
Engineering Technology
- 2. Steven Aiello and Flora Du**  
Technology Studies
- 3. Judy L. Weaver**  
COT Doctorate
- 4. Najma E. Jamaludeen**  
Technology Studies

**Room 320**

- 1. Barbara A. Barber**  
Geography and Geology
- 2. Amara J. Frontczak**  
Geography and Geology
- 3. Marcus P. Schwimmer**  
Geography and Geology

**Room 330**

- 1. Andrea S. Christmas**  
History and Philosophy
- 2. Samantha Kies**  
History and Philosophy
- 3. Donna A. Lehman**  
History and Philosophy
- 4. Ashley Schwedt**  
History and Philosophy

**Room 350**

- 1. Shadin Atiyeh**  
Leadership and Counseling
- 2. Amanda Bell**  
Leadership and Counseling
- 3. Kevin Calhoun**  
Leadership and Counseling
- 4. Cheyenne C. Luzynski**  
Leadership and Counseling

**Room 352**

- 1. Shuli Han**  
Women's and Gender Studies
- 2. Melissa S. Lininger**  
Women's and Gender Studies
- 3. Aneshia T. Solomon**  
Women's and Gender Studies
- 4. Lacey Story**  
Women's and Gender Studies

**Poster Presenters in Room 310 by Time**  
**Session I: 1:15-2:30**

**Virginia Davis**  
Art

**Virginia C. Zimmerman**  
CMTA

**Jana Rosinski**  
English Language and Literature

**Nichole G. Van Blaricum**  
Geography and Geology

**Tiffany Abrego**  
Psychology

**Caroline J. Broermann, V. Ivezaj,  
L. Schuh and M. Pulcini**  
Psychology

**Shannon Clark and Summar  
Reslan**  
Psychology

**Alison M. Colbert**  
Psychology

**Kathleen Hlavaty**  
Psychology

**Jamie King**  
Psychology

**Chi-Mei Lee, Y. Kwak, S. J. Peltier,  
J. Bernard, M. Buschkuehl, S.  
Jaeggi, J. L. Wiggin, J. Jonides, C.  
Monk, and R. D. Seidler**  
Psychology

**Kelly E. Luce and Caitlyn B.  
Sorensen**  
Psychology

**Amanda Price and Caroline J.  
Broermann**  
Psychology

**Summar H. Reslan**  
Psychology

**Jessica L. Riggs**  
Psychology

**Emily R. Sallen**  
Psychology

**Syreeta Scott**  
Psychology

**Alicia M. Totten**  
Psychology

**Ashley Wiedemann**  
Psychology

**Michelle R. Burdick**  
Leadership and Counseling

**Kelli A. Dowd, Haley Gire,  
Jaime Byrd, and Melissa Nisse**  
Leadership and Counseling

**Inna Gorlova**  
Leadership and Counseling

**Nicole M. Johnson**  
Leadership and Counseling

**Lorinda F. Rausch, K. Randall, M.  
Gill, and K. Durham**  
Leadership and Counseling

**Andrea J. Sulek**  
Leadership and Counseling

**Eric Sweet**  
Leadership and Counseling

**John F. Conley IV**  
Special Education

**Barbara C. Coven-Ellis**  
Special Education

**Sally P. Jakeway**  
Special Education

**Sandra M. Jurado**  
Special Education

**Sarah S. Radu**  
Special Education

**Kathlene C. Talladay**  
Special Education

**John Lupinnaci III**  
Teacher Education

**Caroline Semrau**  
Teacher Education

## Session II: 3:00-4:15

**Christina M. Casto**  
Biology

**Jason D. Collins**  
Biology

**William J. Fitzsimmons**  
Biology

**Rachel C. Parent**  
Biology

**Danielle M. Rosen**  
Biology

**Stephanie Simon**  
Biology

**Mary E. Skinner**  
Biology

**Himabindu Anumala**  
Chemistry

**Architha Ellenki**  
Chemistry

**Theodora Katsika, Santita  
Campbell, Jacinda Lisi, and  
Ebaa Saad**  
Chemistry

**Steve R. Spaulding**  
Chemistry

**Christina A. Varney**  
Chemistry

**Shanna Simpson-Singleton**  
Mathematics

**Rhonda Caldwell**  
Psychology

**Diane M. A. Griffin**  
World Languages

**Michael Manuszak**  
World Languages

**Eugenie Mukankwiro**  
World Languages

**Elizabeth M. Namundybo**  
World Languages

**Meng Wang**  
World Languages

**Melissa Burner, Brian Emling,  
Samer Moussa, and Kevin Vines**  
Health Promotion and Human  
Performance

**Theresa C. Field and Meghan  
Prunty**  
Health Promotion and Human  
Performance

**Megan M. Flanagan**  
Health Promotion and Human  
Performance

**Jeffrey M. Olson II**  
Health Promotion and Human  
Performance

**Andrew Stevens**  
Health Promotion and Human  
Performance

**Anthony J. Galati**  
Health Sciences

**Kim F. Lorenz, Deirdre  
Guenther, and Abby Zukausk**  
Health Sciences

**Paula M. McElmeel, Amanda  
Palen, and Katie Sytniak**  
Health Sciences

**Monica Sarkar, Kristen  
McLaughlin, Jessica Dow, and  
Kristin Haudek**  
Health Sciences

**Sarah M. Streng**  
Health Sciences

**Emily A. Yagiela**  
Health Sciences

**Corinne Lee**  
Nursing

**Bhavana M. Toprani**  
Nursing

**Olfat Mohammad Barayan**  
Engineering Technology

## 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:

Deb de Laski-Smith  
Susan Anderson  
Lisa Mills Walters  
Michael McVey  
Marion Laskowski  
Betsy Proctor  
Christen Mitchell  
Lorinda Rausch

### Other EMU Offices:

The Student Center  
Parking Control  
University Marketing

### Printing:

Standard Printing

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