11-14-2014

Graduate Research Conference Program, 2014

EMU Graduate School

GRADUATE RESEARCH CONFERENCE

EASTERN MICHIGAN UNIVERSITY 2014

NOVEMBER 14, 2014

PROGRAM SCHEDULE AND PRESENTER ABSTRACTS

Table of Contents

Graduate Research Conference
Schedule of Events
November 14, 2014
8:30 – 4:15 pm
Student Center, 3rd Floor

8:30 – 8:55
      Check-In, *3rd Floor Atrium*

9:00 – 10:15
      Oral Presentation Session 1

9:00 – 10:15
      Poster Session A, *Room 310 A & B*

10:30 – 11:45
      Oral Presentation Session 2

10:30 – 11:45
      Arts Front Session 1, *Kiva Room*

11:45 – 1:00
      "Deans & Dogs" Lunch, *Ballroom*

1:15 – 2:30
      Oral Presentation Session 3

1:15 – 2:30
      Poster Session B, *Room 310 A & B*

1:15 – 2:30
      Arts Front Session 2, *Kiva Room*

2:45 – 4:00
      Oral Presentation Session 4

3:00 – 4:15
      Innovation & Commercialization Lab, *Room 310 A & B*

COLLEGE OF ARTS AND SCIENCES

Africology and African American Studies

Lauryn Tidwell
Dr. Victor Okafor
How Africa is Externally Controlled
Africa is a continent with a complex history that has resulted in African countries having to constantly struggle to develop on their own and to become competitors in the global economy. The effects of the slave trade and colonization—the two biggest contributors to Africa's underdevelopment—still resonate across the continent. The purpose of this presentation is to demonstrate how Western European countries benefit from the continent of Africa more than the African people themselves. Furthermore, present-day efforts aimed at improving African countries' ability to retain stewardship over their economic resources will be explored along with additional suggestions on how African countries can gain complete control of their economies.
Oral Presentation: Room 352, 9:00 - 10:15 am

Art

Jennifer Lickers
Ryan Molloy
Ghost Dance
In 1894 the Edison Manufacturing Company captured Native Americans for the first time on film. The Sioux Ghost Dance was part of the traveling Buffalo Bill and the Wild West Show. My initial reaction to the film was that it was exploitative. However, upon further research I learned that while the film is exploitative in nature, "the natives" in the footage were able to practice their lifestyles, and many felt it was a ticket off the reservation. In light of my own experience with the film I am creating a work of art that asks the viewer to question his or her perception and create awareness of the other side of history. I am projecting the footage from The Sioux Ghost Dance on 5x7 index cards and tracing the "lights" frame by frame. I feel as if I am tracing my Native American ancestry and reinterpreting the Ghost Dance. The result will be approximately 100 index drawings that will likely create a short animation. My presentation will take the audience on my journey of discovery about the Buffalo Bill and the Wild West Show while creating art highlighting my ancestors and this important time in American history.
Arts Front: Kiva Room, 10:30 - 11:45 am

Giorgia Auteri
Dr. Allen Kurta
Activity of Bats during Migration in the Saginaw Bay Area of Lake Huron
The Great Lakes region includes species of bats that are long-distance migrants (red, hoary, and silver-haired bats), regional migrants (northern long-eared and little brown bats), and sedentary (big brown bats). Understanding the seasonal movements of these species may help limit mortality at wind-energy facilities and the spread of white-nose syndrome. To explore how bats deal with the barrier of open water, we set up passive acoustic detectors around the coast of Saginaw Bay in Lake Huron, as well as on Charity Island in Saginaw Bay. We predicted bats would preferentially fly across the narrowest point (21 km) and over Charity Island, instead of taking the longer route around the coast of the bay (>120 km). We recorded 168,223 calls (mean 74.6 ± 613 (SD) calls per detector per night) from 8 May to 25 September in 2013 and 2014. We used SaTScan to perform space-time analyses and found a significant cluster in activity from 2 to 31 August 2013. Analyses for 2014 are ongoing. This cluster included only detectors on the island and the single most proximal detectors to the north and south on the mainland, which suggests that migrating bats preferentially cross the water of the bay.
Oral Presentation: Room 300, 9:00 - 10:15 am

Jeanette Bailey
Dr. Allen Kurta
Using Patterns of Wing Venation to Identify Individuals
Photo-identification, instead of more invasive marking techniques, is commonly used to track cetaceans in the wild by documenting unique external features. When biologists are faced with the challenge of marking newborn bats for later identification, there are only a few temporary options available, such as paint and hair-clipping, but such techniques do not offer enough variability to serve as unique identifiers for the number of pups in a typical maternity colony. In this study, we show that photographs of the transilluminated wing may be used to identify individuals, based on the branching patterns of the veins. The general branching pattern of patagial veins is common, but each individual bat has unique branching characteristics that can be matched later when the same bat is recaptured and has matured enough to retain a lipped wing band. We photographed 33 non-volant big brown bats (Eptesicus fuscus) from a maternity colony in west-central Illinois in mid-June. We then photographed and banded volant pups in early July. By manually comparing several wing-vein patterns, side by side, we were able to identify the newly volant bats as the same individuals that we had examined several weeks earlier.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Kyle George
Dr. Allen Kurta
Roosting Ecology of the Northern Long-eared Bat, a Candidate for the Endangered Species List

The northern long-eared bat (Myotis septentrionalis) is a candidate for the endangered species list because of an introduced fungal disease, white-nose syndrome. Knowledge of the species' roosting ecology would promote informed management decisions and continued survival of the species. We examined the roosting ecology of M. septentrionalis during summer 2014 in the Manistee National Forest, northwestern Lower Michigan. Transmitters were placed on 7 adult females. Of the 13 roosts, 12 were black ashes, and 1 was a red maple. All roost trees were located in forested wetlands, and all roosting sites were either in crevices or cavities of dead or almost-dead trees. Bats switched roosts every 1–7 nights. Distances between roosts ranged from 45 m to 1 km. On average, 5.9 ± 5.3 (SD) bats exited from a roost each night, ranging from 1 to 22 bats. The tree with 22 bats was located 17 m from the location of a former roost tree containing 17 bats that was discovered in July 1999. Our results indicate that, within the study area, M. septentrionalis congregates in small maternity groups and roosts predominantly in dead black ash, and colonies may show long-term loyalty to a home area.
Oral Presentation: Room 300, 9:00 - 10:15 am

Joseph Hill
Dr. Cara Shillington
Activities of an Arboreal Tarantula (*Avicularia laeta*) During the Mating Season

Behavioral ecology of tarantulas in their natural habitat has not been well studied. As a group, tarantulas exhibit a scramble competition mating system where males search actively for females who remain close to their home retreats. In this type of system, there is little aggression among males during the mating season, as most of their resources are used searching for females. While several studies have examined mature male movements in terrestrial species, my study presents the only data to date on radio-tagged arboreal species, and comparisons between juvenile and adult activity patterns. Mature males were tracked throughout the mating season using radio-transmitters. Their location and proximity to female retreats were recorded nightly. These data were used to calculate distance traveled per day and search area. Results will be compared with previous studies on terrestrial species. Females and juveniles were observed in their home retreats every 30 minutes from twilight until daybreak, and data loggers measured corresponding changes in light and temperature. The body position of each tarantula in relation to his or her home retreat was recorded. I used these data to compare daily activity patterns between juveniles and adults and to examine how changes in light and temperature influence these patterns.
Oral Presentation: Room 300, 9:00 - 10:15 am

Katie Nolan
Dr. Margaret Hanes
A Comparative SEM Study of Carnivorous Pitcher Plant Leaves in the Genus Sarracenia
The carnivorous pitcher plant genus Sarracenia is found throughout the United States and Canada and has modified leaves adapted to lure, trap, and digest insects. Morphological characters from four general zones of the pitcher were examined using scanning electron microscopy in six species: the nectar roll (peristome) along the perimeter of the opening, the inside surface of the lid, the waxy zone just below the lid, and the digestive zone. Field-collected samples were chemically fixed. In all species, nectar glands, stomata, and hair trichomes were found on the lid. Overlapping layers of upward pointing "teeth" characterize the peristome in each species, as "teeth" varied in size and shape across all taxa. Hair structures in the digestive zone varied in size and density across species. Observed differences throughout Sarracenia are important to investigate because it sheds light on how the leaves of different species in the genus have adapted to different types of trapping mechanisms and prey.
Oral Presentation: Room 300, 9:00 - 10:15 am

Megan Scott
Dr. David Kass
Evolution of the mysRS Element in the Genome of Rodent Species in the Cricetidae Family
Retrotransposons are a type of transposable element in which DNA copies are produced via an RNA intermediate and integrate into new chromosomal sites, continually contributing to the dynamics of genomes. While sequencing the mys element among the Cricetidae family of rodents, we identified a previously uncharacterized element in the genome of the Mexican volcano mouse that we refer to as mys-related sequence (mysRS). This investigation provides a unique opportunity to contrast the evolution of the two retrotransposon families apparently restricted to a specific taxonomic group of rodents. By analyzing the genomes of various cricetid rodents, our results provide evidence that the mysRS element originated in an ancestor of the Reithrodontomini tribe of rodents, which diverged roughly 31.1 million years ago, and predates the appearance of the mys element.
Oral Presentation: Room 302, 1:15 - 2:30 pm

Chemistry

Nouf Alyami
Dr. Hedeel Evans
Using peptides to examine the communication between two enzymes in pyrimidine biosynthesis

Pyrimidine nucleotides perform a significant role in cellular metabolism and are needed for maintenance of normal cell growth and for the rapid growth of tumors and neoplastic tissues. This research aims at studying the last two steps of the de novo pyrimidine biosynthetic pathway which carries, in order, carbamoyl-phosphate synthetase II (CPSII), aspartate transcarbamoylase (ATC), and dihydroorotase (DHO) activities. The ATC and DHO domains from Aquifex aeolicus, an extreme hyperthermophilic organism, have been expressed in E. coli and purified using affinity chromatography. The interface of the published three-dimensional structure of the non-covalently associated dodecamer of DHO and ATC from A. aeolicus was examined using bioinformatics, and a peptide was designed to block a specific hydrophobic region. The peptide sequence NEGEVSALLGLS was synthesized by solid phase peptide synthesis (SPPS). Enzyme kinetics were carried out to measure the inhibition constant of the peptide. Experiments are underway to construct peptides of different sizes that can block the DHO-ATC interactions with high affinity.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Shane Canaday
Dr. Gavin Edwards
Modeling of Volatile Organic Compounds Emission from Materials Used in Passenger Vehicle Interiors.

Studies have indicated upwards of 150 volatile organic compounds (VOCs) present in ambient air within the cabins of new cars, some having adverse health effects. A model capable of estimating the emission of VOCs in a car cabin is the goal of this project. Although more work is needed, our current models have been shown to be accurate for chambers with static or dynamic airflow.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

DIivya Ganti and Hala Almutawa
Dr. Hedeel Evans, Deborah Heyl-Clegg
Examining the interface of pyrimidine pathway enzymes using synthetic peptides

Aspartate transcarbamoylase (ATC) and Dihydroorotase (DHO) catalyze the second and third steps in de novo pyrimidine biosynthesis, respectively. Both enzymes are active in Staphylococcus aureus and Bacillus anthrax. The main objective of the research is to understand the structural organization and the functional linkage

between the two enzymes and regulation of their catalytic activity. Synthetic peptides were designed to compete and modulate the enzymatic activity by mimicking the binding interface between the two proteins. Several peptides have been synthesized and purified, and protein expression of ATC and DHO from Staphylococcus aureus and Bacillus anthrax has been carried out in Escherichia coli. Assays were conducted to determine the binding affinities of the peptides to the ATC, DHO and DHO-ATC complex.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Samanthi Herath Gedara
Dr. Hedeel Evans
Exploring the interaction of humanin and its analogs with IGFBP-3 and regulation of apoptosis in Alzheimer's disease
Apoptosis of neuronal cells is known to result in neurodegenerative diseases such as Alzheimer's disease, and insulin like growth-factor binding- protein 3 (IGFBP-3) is known to induce apoptosis. The mitochondrial-derived peptide humanin may prevent cell apoptosis by binding to IGFBP-3 modulating its effects. We hypothesize that humanin protects against neuronal cell death induced by IGFBP-3 via a mechanism that blocks the importin -dependent nuclear import of IGFBP-3. Better understanding of this mechanism may provide clues to therapeutic drug development against Alzheimer's disease in the long run. Solid phase peptide synthesis, competitive ligand dot blotting, co-immunoprecipitation, and ELISA-based binding assay were used to investigate how analogs of humanin affect IGFBP-3-importin 1 interaction.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Reshmi Bhavana Gopagani
Dr. Ingo Janser
Synthesis and Kinetic Investigation of Differently Substituted Chalcones
α, β−unsaturated carbonyl compounds, such as chalcones, show many biological activities that include cytotoxic anti-tumor activity, enzyme inhibition activity by reacting with sulfhydryl groups involved in different pathways that lead to cancer. However, apart from their useful biological activities, chalcones also show harmful biological effects on normal human cells for which they are highly neglected in drug development. The biological activity of α, β −unsaturated carbonyl compounds is mainly based on the their α, β −unsaturated carbonyl moiety, also called the Michael system. Investigation of the reactivity of the Michael system with various aromatic ring substituents and their subsequent biological testing will allow for structure-activity relationship studies. This research is directed towards the synthesis of chalcones with different aromatic ring substituents and study of their reactivity against thiol containing compounds. The influence of different aromatic ring substituents on the

reactivity of chalcones is investigated and revealed by Nuclear Magnetic Resonance spectroscopy. The goal of this research is to synthesize and discover novel chalcones with no harmful effects on normal human cells.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Naga Pooja Kanneganti
Dr. Deborah Heyl-Clegg
Structure-Activity Relationships of Linear Derivatives of Tachyplesin Containing Fluorophenylalanine

Tachyplesin is an antimicrobial peptide isolated from hemocytes of Tachypleus tridentatus horseshoe crab. A linear analog of tachyplesin in which all the four cysteine residues were deleted (CDT, KWFRVYRGIYRRR) was reported to retain antimicrobial activity and display a lesser extent of undesirable hemolysis. In this work, peptides were synthesized by replacing phenylalanine with para-fluorophenylalananine, 2,4,6-trifluorophenylalanine and pentafluorophenylalanine in CDT to investigate whether the extra hydrophobicity was beneficial for interaction with cell membranes. These peptides were analyzed for membrane disruptive properties by a liposome dye leakage assay, and hemolytic activities were investigated using sheep erythrocytes. Antimicrobial activity was determined against two strains of bacteria, Escherichia coli (gram-negative) and Staphylococcus aureus (gram-positive). Results indicated that the pentafluorophenylalanine peptide was effective against both bacterial strains and showed less toxicity, as measured by degree of hemolysis. In fact, all analogues were more selective for bacterial over mammalian cells, making them promising as therapeutic leads.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Michael John Martin
Dr. Jeff Guthrie
Selection of Aptamers using Quantum Dot-Assisted Capillary Electrophoresis

Aptamers are short, synthetic oligonucleotide sequences that can selectively bind to targets with high affinity. Selection of aptamers is accomplished by the Systematic Evolution of Ligands by EXponential enrichment (SELEX). The target is incubated with a random sequence oligonucleotide library, and target-bound sequences are separated from the unbound pool to generate a higher affinity library for use in subsequent selection rounds. Capillary electrophoresis (CE) is a highly effective method for the selection of large protein targets but is less efficient for small molecular targets since the target-DNA complex lacks the necessary change in electrophoretic mobility to be separated from unbound sequences. To solve this problem, quantum dots (QDs) with covalently bound target molecules can be employed to effectively increase the size of small molecular targets and allow efficient separation based on the QDs mobility. As proof of concept we used commercially

available QDs conjugated with streptavidin to show that QD-target-DNA complexes can be separated from unbound DNA sequences. CE with laser-induced fluorescence detection and fluorescently labeled DNA allowed for real-time identification of DNA-target binding by changes in the mobility of the QDs. Future work will focus on selection of small molecule aptamers as sensors for environmental contaminants.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Ailing Zhou and Samanthi Herath Gedara
Dr. Larry Kolopajlo
A Free Periodic Table App for Teaching High School Chemistry
The purpose of this project is twofold: (1) to create a free periodic table app used by high school chemistry teachers and (2) to develop a tutorial to train teachers to develop their own customized teaching apps. Although apps teaching chemistry abound, most cost money and are very limited in scope. The best periodic table for iPad costs about $30, but teachers don't know that they can develop their own apps without too much effort. Moreover, like a Wiki, teacher-developed apps can use student work in an ongoing project that continually adds data to a "living" student and teacher-generated periodic table. The periodic table is then transformed into a learning tool.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

<u>Communication, Media and Theatre Arts</u>

Doug Brinker
Dr. Sam Shen
Understanding Customer Service through an Interpersonal Communication Lens: Exploring Internal Customers, Building Rapport, Satisfying Externally
This project explores the interpersonal communication aspects of customer service satisfaction through the lens of Dr. Judy Burgoon's Expectancy Violation Theory. The purpose of this presentation is to conduct a workshop that initiates organizational leaders techniques to incorporate into their workplace communication workshops to improve the satisfaction level internally, so that their external factor will improve. Through this interactive workshop, organizational leaders will be equipped with various techniques that drive employee morale up, lower the rate of dissatisfaction among external customers, and increases productivity, higher satisfaction levels, and employee retention.

Oral Presentation: Room 302, 9:00 - 10:15 am

Crystal S. Campbell
Dr. Anita Rich
Daddy-Love
This performance will feature a compilation of narratives that examine father absence and its affects on the adult lives of black women. It presents three distinct voices: the mother of a child abandoned by her father, a father who was compelled to remove himself from the lives of his children, and a fatherless daughter. The work is at times auto-ethnographic as the voice of the researcher is woven in as narrator, facilitator, instigator, and fatherless daughter between the three narratives in order to gain a fuller understanding of the long-term effects of father absence such as (or including) problematic relational intimacy and interpersonal relationships, compromised reproductive health, poor socio-economic standing, poor educational attainment, and negative self-concept.
Arts Front: Kiva Room, 10:30 - 11:45 am

Kristin Danko
Susan Badger Booth
The Arts & Thinking Skills: What America's Education System Left Behind
The arts in the United States's education system are in trouble. Arts programs are being cut, and students are learning to merely memorize and regurgitate facts which they then forget post-test, as opposed to learning thinking skills which they can carry over into other aspects of their lives. For hundreds of years the arts have been argued to be a driving force in teaching imperative thinking skills. If this holds true, why are the arts being cut from our public schools? What do history and research teach us about the arts and their relation to thinking skills? Are the arts as important as one might suggest? This presentation will address these questions through theory, history, and case studies.
Oral Presentation: Room 352, 1:15 - 2:30 pm

Sarah Erlewine
Dr. Anita Rich
I'm Not with the Band, I am the Band
This performance offers a phenomenological look at the experiences of female musicians in order to examine the questions of identity inherent in being a female in the male-dominated music industry. Secondarily, this performance will also explore what impact that role has on society's concept of women and women's concept of themselves. The compiled script brings together primary and secondary source narratives, auto-ethnography, pop culture media, and live music and places these performers' stories where they belong—on a stage—to better understand what it means for a musician to be female and what it means for a female to be a musician.

Arts Front: Kiva Room, 1:15 - 2:30 pm
Shaimaa Fatani
Dr. Darlene Leifson
The Impact of Geography on Attitudes toward Educational Drama in Saudi Arabia
Lifetime engagement with learning is the goal of education. Educational drama is considered one of these effective tools. Researchers advocate using drama to develop expressive language in children and to help nurture social and communication skills. Unfortunately, in Saudi Arabia Saudis have limited knowledge of and access to drama as an educational tool. While it may take time to build trust and familiarity with educational drama in Saudi schools, it will encourage students to think more deeply and to understand their life roles. When considering this change, it would be helpful to know which of the five different regions of the country may be more open and willing to adopt drama in school We need to conduct a survey of these regions to determine where to begin introducing drama in an educational setting. The findings would help determine whether to start applying drama in the Saudi education system. Second, this measurement includes the society's desire to involve their children in dramatic experiences in different regions and cultures. Third, it is important to gain a proper background of the needed subjects in order to correctly apply drama in the classroom.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Cathy Johnson
Dr. Darlene Leifson
African-American Women Trailblazers during the Civil Rights Era Using Arts Integration Creative Drama Process .
Creative drama, defined as an improvisational form of theatre in which participants are guided by a leader to imagine, enact, and reflect on human experiences, can be an effective educational tool for at-risk youth populations, those exposed to factors that may increase their tendency to engage in problem or delinquent behaviors. As a minister at Mt. Olive Missionary Baptist Church in Flint, Michigan, I developed two creative drama sessions for at-risk females aged 10 through 16 who attended those workshops at our Family Life Center. The purpose of these sessions was to increase participants' knowledge and perception of African-American women from Flint who were trailblazers during the Civil Rights Era of the 1960s. Two workshops, detailing the course of Civil Rights activity in Flint, Fair Housing, and on a regional and national scale, Freedom Riders, were conducted. In both workshops, participants were transformed as though they were experiencing those historical events in their real time and place. The presentations described the creative drama sessions and drew general conclusions about the effectiveness and impact of creative drama to positively influence at-risk populations

Oral Presentation: Room 352, 1:15 - 2:30 pm

Kayla Krahn
Dr. Tsai Shen
Reel Women: Examining Female Gender Stereotypes in Film
The purpose of this study is to gain a better understanding of how gender stereotypes in films contribute to the audience members' personal stereotypes of women. In particular, this study is interested in the way horror films enhance these stereotypes. This study uses the film Scream to assess the gender stereotypes the participants view and how those images affect their ideas of gender.
Oral Presentation: Room 300, 1:15 - 2:30 pm

Eunkyung "Nana" Oh
Dr. Darlene Leifson
For Better English Education: Offering TESOL Classes Using Drama
This presentation is to advocate for the importance of offering a drama class as part of TESOL (Teaching English to Speakers of Other Languages) education. As an English teacher in Korea for 14 years, I maintain that TESOL students who are already teachers or will be teachers should have a chance to learn how to apply drama and to be performers in their classrooms. A TESOL drama class will be helpful for educators to teach English in meaningful, effective, practical, and fun ways. Such a TESOL drama class should cover the concept of drama, drama games, and activities that English teachers can use in their classes, teachers as performers, applications of drama in English textbooks, and practicum.
Oral Presentation: Room 320, 10:30 - 11:45 am

Chartonay 'Cece' Sumpter
Dr. Darlene Leifson
Lights, Camera, Design: Integrating theatre design in K-12 education
This oral presentation aims to generate discussion regarding integrating theatre design in K-12 education and the possibility of creating and implementing theatre design resources for our educators. To validate and frame design as pedagogy and as a prominent tool in the K-12 curriculum, I will use Mishra and Girod's three frame methodology. Theme I: Design as transformative experience emphasizes the role of dialogue and interplay in learning. Fundamentally this concept allows its participants (i.e., student and teacher) to create ideas that in turn transform the individual and the world through the process of working those ideas. Theme II: Design as inquiry. Because of the pragmatic and practical fundamentals embedded in design, designers are required to go the extra mile in their thinking, assess challenges from different angles, get their hands dirty (figuratively and literally), and come up with a viable solution. Theme III: Design as expression. As Holloway and Compte explain, "Through

the arts, humans use movement, vocalization, visualization, verbalization, and auditory and sensory stimulation in a wide range of strategies to exercise their imagination." These findings allow us to analyze the value of theatre design and express its academic importance in the development of students in K-12 education.
Oral Presentation: Room 352, 1:15 - 2:30 pm

Elizabeth Terrasi
Dr. Sam Shen
"I Don't Know How to Be Affectionate": Blame the Parents or Blame Oneself?
Affection is a communicative behavior that is essential to all human interaction, especially for children and romantic partners. Not all individuals, however, express and receive the same amounts of affection. Researchers have examined early parent-child interactions and their influence on subsequent pro-social behavior, and the degree of affection and the attachment styles individuals develop with their primary care-giver often predict how individuals will approach future relationships. This does not necessarily mean, however, that individuals who received little affection are incapable of developing romantic relationships, but questions remain as to how these individuals maintain their relationships to a level of satisfaction. According to Floyd's Affection Exchange Theory (AET), individuals engage in affectionate communication behaviors that often lead to many inherent personal and relational benefits, and affection has been considered an essential element of human survival and fertility. Numerous studies in psychology and interpersonal communication have discussed the significance that affection plays in human existence. This study thus examines the implications of AET, its use for romantic relationships, and questions how distinct relationships are maintained by particular relational strategies based upon varying degrees of affectionate communication.
Oral Presentation: Room 300, 2:45 - 4:00 pm

Economics

Robert Canell
Dr. James Saunoris
Unemployment and the Shadow Economy
The shadow economy, or illegal actions from legal enterprises, is the focus of many scholarly articles. When measuring the impact that unemployment has on the shadow economy, a significant portion of the research uses the government reported unemployment rate. The purpose of this paper is to analyze alternative measurements of unemployment to see if the standard government calculation of unemployment is the most appropriate measurement.
Oral Presentation: Room 320, 1:15 - 2:30 pm

Traci Ruszkiewicz

Dr. David Crary

Determinants of Health Expenditures by Employment and Demographic Characteristics of Individuals

This study will use 2011 data from the Medical Expenditure Panel Survey to estimate determinants of individual healthcare expenditures including socio-economic, occupational skill set, and health and insurance information to evaluate the significance, size, and relative importance of these factors as indicated by other research to explain the variation in individual healthcare expenditures.

Oral Presentation: Room 301, 10:30 - 11:45 am

English Language and Literature

Saja Albuarabi

Dr. T. Daniel Seely

Raising to Subject in Standard Arabic and English

The purpose of this study is to investigate whether Standard Arabic (SA), like English, has "raising" verbs, by carefully analyzing key examples from both languages. In English, verbs like seem, appear, and others are considered a special type of verb, called raising verbs, which participate in a unique set of morpho-syntactic behaviors and which play a central role in evaluating competing syntactic theories. In contrast, there is vigorous disagreement about raising verbs (such as yebduu/"seem" and yadharuu/"appear") in SA. The paper concludes that in the English structure: The man seems [__ to like books], the subject the man raises up from the complement clause into the subject of the matrix verb, yielding the surface order. The subject has to move in order to satisfy case requirements. Unlike English, in the SA structure: yabduu anna-al-awlaad-u haDar-uu "It seems that the boys came," the subject al-awlaad-u can satisfy case requirements without moving because SA does not have an infinitive. Tentatively, we conclude that there is no raising in SA. However, we present a range of "new" data, not considered in the literature before, which raises interesting issues for this conclusion.

Oral Presentation: Room 302, 10:30 - 11:45 am

Mansour Altamimi

Dr. T. Daniel Seely

Arabic Pro-drop

The goal of this paper is to analyze pro-drop in Arabic in terms of both its syntactic properties and the nature of its occurrence and optionality. The latter topic has previously received little attention. The paper begins with a comprehensive review of five syntactic properties assumed to be universal to pro-drop languages and discusses

the use of each in both Standard Arabic and the Saudi Najdi dialect, the latter of which has seen little previous research in this area. It is concluded that Saudi Najdi is syntactically identical to Standard Arabic with regard to the null subject parameter and differs only in phonology. The topic then shifts to the question of whether the optionality of pro-drop in Arabic is tied more closely to syntax or discourse. This topic is investigated by using the Python programming language to analyze the Penn Arabic Treebank corpus. Using these new data, hypotheses about the optionality of Arabic pro-drop are posited.
Oral Presentation: Room 302, 9:00 - 10:15 am

William Daniels
Dr. John Staunton
Another Country: When Your Nation Doesn't Consider You To Be a Citizen
The novel Another Country by African-American author James Baldwin (1924-1987) exposes the fallible nature of hetero-normative and racial ideals that narrowly define a model citizen of a nation-state. The queer interracial relationships in the novel, particularly between the main character, Rufus, and his lover, Eric, transgress the boundaries of nation, race, and sexuality, thus revealing the illusionary nature of categorizations that are defined and applied by nation-state apparatuses in order to discriminate and maintain uniformity. I plan to show how the characters in Another Country uncover the inherently racist and homophobic requirements for citizenship in a nation. By analyzing the text, using the perspectives of Post-Colonial, Critical Race, and Queer Theory, I will demonstrate how the stringent requirements for citizenship in the 1960s correlate to discrimination that occurs contemporarily in the United States.
Oral Presentation: Room 352, 9:00 - 10:15 am

Yma Johnson
Dr. Christine Hume
Lady Cab Driver
"Lady Cab Driver" is a thirty-minute sound piece that highlights my experiences as a black female taxi driver working nights in the Ann Arbor and Ypsilanti area over the last fourteen years. I am the only speaker, and the project blends conversational narrative with well-known background music that could be heard on mainstream radio stations to create the sense that the audience is riding from order to order with me. Each order blooms into a character sketch within a larger narrative structure that explores ideas and raises questions surrounding race, gender, alcoholism, alienation, friendship, and mob violence. The significance of symbols and emotional intensity accretes with each story.
Arts Front: Kiva Room, 1:15 - 2:30 pm

Aleesa Millet
Dr. Ramona Caponegro
Nobodies and Somebodies: Adolescent Identity in "The Graveyard Book"

In many works of Adolescent Literature, the protagonist attempts to conform to his society's construction of normal. Sometimes a narrative forms around an individual classified as Other, where despite not being classified as normal he can still come to terms with an individual identity. Jaques Lacan's mirror-stage theory provides a model of identity development where a child grows to become one of the others surrounding him, but in the case of Adolescent as Other, the child neglects to take that step into belonging and he remains Othered. The community creates their own definition for the Othered subject's identity, one often inaccurate to how the individual defines himself. In Neil Gaiman's novel The Graveyard Book, the protagonist, Nobody, escapes being murdered as an infant by fleeing to a nearby graveyard, where mythical creatures raise him. Nobody becomes an Adolescent Other who comes to his own understanding of the world and develops an identity that allows him to cope with being different. While this affects his communal identity, Nobody as an Othered subject still embodies a contrasting self-identity. No matter how normal Nobody might seem, he still enters the world with the name Nobody, a signifier that he will never be an ordinary Somebody.
Oral Presentation: Room 301, 2:45 - 4:00 pm

Sarah Al Motairi
Dr. T. Daniel Seely
Examining the Present Progressive in Central Najdi Arabic

This study examines the use of the participle gāʿid "means sitting" as a progressive auxiliary in central Najdi Arabic, a subgroup of Najdi Arabic, spoken, in central Saudi Arabia. The participle gāʿid is a verbal noun that may function as a noun, adjective or verb; however, in the progressive construction, the participle gāʿid does not convey its regular semantic interpretation because it functions as a progressive auxiliary. The participle gāʿid is used to form the progressive in a way similar to what we classify in English as the progressive aspect. In English, the progressive aspect is formed by combining the present participle (gerund) form of the verb with the auxiliary "be"; however, the progressive in Najdi Arabic is indicated by combing the participle gāʿid with the imperfect verb. This progressive auxiliary agrees with its subject in number and gender; therefore, to form the progressive, both the auxiliary and the main verb take agreement morphology. To account for this agreement, we investigate the possible treatments of agreement within the generative framework. We conclude with the proposal that places the progressive auxiliary in the head of an AspP, and with the possibility of having two agreement projections.
Oral Presentation: Room 302, 9:00 - 10:15 am

Kellie Nadler, Nathan Gehoski, David Boeving, Julia Eussen and Yma Johnson
Dr. Rob Halpern
Embodied Language Somatic Poetry & Prose
What would it mean to write from your liver? What would it mean to reimagine the subject/object relationship? What would it mean for writing to privilege the body, not the mind—to assume that without the body, there could be no mind? Drawing from the works of Virginia Woolf, Robert Kocik, Maurice Merleau-Ponty, and Judith Butler, we generated somatic poetry and prose that embodies these questions and attempts to exceed, exhaust, or escape the confines of normative language. In our presentation we will share these works, and hold a discussion about somatic writing.
Arts Front: Kiva Room, 10:30 - 11:45 am

Meghan Radosevic
Dr. Ramona Caponegro
The Care and Keeping of You(teri): Contemporary Menarche Education in the United States
While medical studies concerning puberty have evolved, menarche remains a mystifying process for young girls, often inciting confusion and fear. This fear is highlighted due to the current lack of open conversation regarding menstrual periods between pre- and post-menarche females. While previous modes of menarche pedagogy involved conversations between females, the present trend in puberty education is to use puberty guides, namely the American Girl company's primer on all things puberty, The Care and Keeping of You book series, as surrogates for conversations. Through the lack of education and conversation with elder females, girls are taught to suppress their anxiety regarding menstruation. However, through the commercialization of feminine products, young girls are expected to be both "in the know" and concern-free. Using a feminist lens to look at the history of menarche education, this paper focuses on how the use of puberty self-help guides as an educational tool transformed the way in which young girls receive menarche education while also evoking feelings of shame regarding menstruation. By charting the timeline of menstrual education, I argue that the shifting methods of instruction not only work to shape ideas regarding menarche but also reinforce the commodification and control of the female body.
Oral Presentation: Room 302, 2:45 - 4:00 pm

Andres Sanchez
Dr. Carla Harryman
The Foundations of Literature

Mathematics and literature are traditionally thought as separate fields, with no real intersection of material. But what happens when a mathematical paper becomes a literary paper? What happens when mathematical rigor questions what lies at the foundations of literature? What happens when I start using the words "word," "sentence," and "paragraph" in a different context than I am used to? In this project, I explore these notions. Starting with axioms defining "words," "(straight) sentences," and "paragraphs," I begin to explore the geometry that lies inherent in literature and writing. Building upon the axioms, I notice how the geometrical approach starts to shake the concepts of these elements, as I discover that "Between any two words of a straight sentence, there always exists an unlimited number of words." And this is just the beginning! How does an angle take its shape in a paragraph? How do I show congruence of polygons? Just by simply translating a few words, I can explore concepts that are mathematically true yet literarily puzzling.

Arts Front: Kiva Room, 1:15 - 2:30 pm

Lindsay Stefanski
Dr. Beverley Goodman
A Study of Vowels /ɛ/ and /ɪ/ in African American English and Standard American English

This study compares, by testing speech perception in addition to acoustically analyzing speech samples, the vowels / / as in "tin" and / / as in "ten" in African American English (AAE) to those in Standard American English (SAE) spoken in the Detroit, Michigan, area. Collective data obtained through these analyses introduce both support for and contradiction of previously identified behaviors of both AAE and SAE, particularly with regard to speaker participation, or lack thereof, in vowel shifts such as the Northern Cities Shift (NCS), Southern Shift (SS), and pin-pen merger. This dual analysis of AAE and SAE vowels also exposes discrepancies between what can be said about speech sounds based on acoustic characteristics and what can be said about those same sounds based on speech perception. Speech perception, especially pertaining to varieties such as AAE, affects social perceptions and contributes to societal injustices particularly as these items relate to educational privilege. This study benefits the exploration of the broader connection between acoustic properties and speech perception in an effort to ultimately resolve such societal problems.

Oral Presentation: Room 302, 10:30 - 11:45 am

Christopher Stuart
Dr. Christine Neufeld
A Trickster and the Fall of Troy: The Exploitation of Courtly Love

In Chaucer's poem Troilus and Criseyde, Pandarus is mischievous, sly, and arguably malignant in the ancient city of Troy, but his role in the text is up for debate. As a central figure, his profound statements, devious word games, ability to move between social spaces, and his role in the fall of both Troilus and Criseyde distinguish him as a

trickster. What many critics of both the trickster and Pandarus miss is the ability for the trickster to introduce social change. Pandarus' assault on Troilus and Criseyde is more about courtly love than the two characters themselves. He complicates the convention of courtly love by using its established rules against itself. It is essential to recognize Pandarus as a trickster, for the trickster figure is the best catalyst for social change.

Oral Presentation: Room 301, 2:45 - 4:00 pm

Stephanie Walla
Dr. T. Daniel Seely
Because, language change: a new form of 'because'

Language is constantly changing, and thanks to the Internet, change can be brought around quickly in language fads. One current language change is centered on "because." Modeled similarly to Jack Handley's Saturday Night Live "because, hey" jokes, this construction has become widely popular through Internet memes starting in 2011 and has become so frequent that "because" was named the American Dialect Society's word of the year for 2013. Tentative names have been proposed for this, but existing articles fail to capture the scope and uniqueness of the new "because." The Because, X construction allows "because" to be followed by a noun phrase, adjective phrase, or even exclamation as a substitution of a sum or thoughts, a witty reply, or a verbal shrug. This paper compares the Because X construction to traditional uses as a subordinating conjunction or a compound preposition and explores this new construction through a detailed syntactic analysis. I conclude with the analysis that subordinating conjunctions, as a class, are shifting to appear with interjectionary complements, which creates the Because X construction. In the future this may continue to shift as this construction is used more because, creativity. Because, language change.

Oral Presentation: Room 302, 10:30 - 11:45 am

Geography and Geology

Marisa Laderach
Dr. Richard Sambrook
Sustainable Land Use Planning in the Amazon Rainforest.

Populations that grow rapidly in urban environments can have lasting impacts on the regional area. The canton of Tena, located in the Napo Province of Ecuador, has been experiencing rapid population growth and projects this growth to continue. This has put considerable pressure upon land use in the surrounding Amazon Rainforest. As an attempt to contain development within the urban areas, new methods of zoning and land use planning have been applied to the canton of Tena, with the overall goals of rainforest conservation, sustainable equity, and regional collaboration. A hybrid integration of an Urban Transect Model and Form Based Code methodology have

been incorporated into the Tena Master Plan, aiming to control land use intervention in one of the most poverty-striken provinces in Ecuador. This poster will showcase the Talag parish within the canton of Tena, the designated model and code boundaries, and specific issues facing this rural parish.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Matthew McKernan
Dr. Heather Khan
Land Banks: Community Responses to Vacant and Abandoned Property
Vacant properties have a negative social and economic impact on the health of neighborhoods. Communities around the country have been experimenting for decades to more effectively deal with the problem. Land banks emerged in the early 1970s as a means for communities to more proactively interact with the housing market. These early land banks were hampered by insufficient enabling laws that prevented them from fulfilling their full potential. In the early 2000s, the State of Michigan passed a series of progressive laws that completely restructured the tax foreclosure process and greatly enabled localities to create powerful land banks to manage the large new inventory of foreclosed properties that would revert to the counties. The Genesee County Land Bank, located in Flint, has become a national example of the success of these laws. The purpose of this research is to examine how Michigan's legal framework has allowed the success of the Genesee County Land Bank, and how that success could be replicated by the newly formed Detroit Land Bank Authority and in other cities nationwide.

Oral Presentation: Room 352, 10:30 - 11:45 am

Shelly Neitzel
Dr. Nancy Bryk
Clara Ford and Fair Lane: A Response to Modernity
In the original 1912 renderings for Henry and Clara Ford's new home, architect Marion Mahony depicted Fair Lane as a Prairie-style mansion. After the foundation was laid in 1913, the Fords dismissed the original architects. A new designer radically altered the external appearance of the house, superimposing turrets and castellations. Fair Lane's original and strikingly modern Prairie lines were largely obscured by English features, giving the house an esthetic firmly rooted in the past. Clara Ford's world was the epicenter of the dramatic change in modern life in the early 20th century. Introduced in 1907, the Model T changed how Americans lived, worked, and played, and its success brought immense wealth to the Ford family. By repudiating the modern design of Fair Lane, Clara Ford responded to the rapid onslaught of change and modernity by embracing a traditional architectural style for her home.

Oral Presentation: Room 302, 2:45 - 4:00 pm

Melanie Parker
Dr. Nancy Villa Bryk
TBD
Effective museum exhibits present the stories of people in ways that visitors find relevant and relatable. Local history sites have a unique opportunity to alter local misconceptions and ignite discussion about nearby history. Carefully conducted research and a partnership with the Wyandotte Historical Museum (WHM) in Wyandotte, Michigan, aided in the ongoing development of an exhibit about the Drennan family. The Drennans resided the longest in the Ford-MacNichol home, operated by WHM. The exhibit has two main purposes: First, it tells the little-known story of the Drennan family. The five daughters of the household represent atypical female roles of the early 20th century, shedding light on issues surrounding women's education, autonomy, and mental health. Second, the exhibit conveys this information in innovative and unconventional ways. The online component increases the accessibility of primary resources, allowing the museum to reach new audiences remotely. Using oral reminiscences recorded with Drennan descendants allows the family to tell their story, a change of pace from the expected authoritative, didactic museum voice. The presentation of this project will reflect the importance of audience relationship building, out-of-the-box thinking, and the willingness to share the narrative in the museum environment.
Oral Presentation: Kiva Room, 9:00 - 10:15 am

Kristin Rheinheimer
Dr. Ted Ligibel
A Summer in the Park Accompanied by Sculptures
This past summer I had the opportunity to be part of an internship with the Central Park Conservancy, working as a Seasonal Monument Conservation Technician— meaning that I worked to preserve, conserve, and maintain the sculptures in the park. The monuments are primarily bronze, with a few stone monuments scattered here and there, and they all require annual cleaning and maintenance. This includes cleaning each monument with an ionic soap, Vulpex, if bronze, and then applying either a cold wax or a hot and then a cold wax, plus making any necessary repairs. This sounds easier than it was because many of these sculptures are larger than life size and are on high pedestals, requiring the use of ladders and a boom lift to reach, all while using a propane torch. This internship was exciting, teaching me many useful skills, enabling me to work with great people, and giving me additional educational opportunities such as touring the conservation labs at the Met. It was the summer of a lifetime.
Oral Presentation: Kiva Room, 9:00 - 10:15 am

Lyudmila Austin
Dr. Jesse Kauffman
A Mission Betrayed: Soviet Socialist Origins to Gender Equality.
This research discloses the difficulty with which gender equality was systematically enforced in the Soviet Union by focusing on the initial stages of its development. This research proposes that the lack of egalitarian female involvement in nascent Socialist politics created grave implications for women after the Russian Revolution. This work integrates an analysis of the major Socialist theories relating to gender equality and reveals the level of Soviet obfuscation of Socialist ideology when confronted with the consequences of turning theory to practice.
Oral Presentation: Room 302, 2:45 - 4:00 pm

Tabatha LM Keller
Dr. Joseph Engwenyu
The Role of Rumor in Interpreting History
Through the careful analysis of the publications of Dr. Luise White, this project reconstructs the significance of rumors in the interpretation of African history. From tales of European vampire doctors to fears of American Cannibalism in the Belgian Congo, this project seeks to grasp the significance of these rumors in understanding agency as well as personal and collective interpretations of colonial intentions in Central Africa in the mid-20th century.
Oral Presentation: Room 352, 9:00 - 10:15 am

Alan Keskitalo
Dr. Ronald Delph
An Ambiguous Treasure: Gifts of Songbooks in Sixteenth-Century Florence
Pope Leo X's love of music was legendary in his time, and the Medici Pope filled the Vatican with musicians of the highest caliber. Accordingly, in celebration of the wedding of his nephew Lorenzo in 1518, he gave the young Duke of Urbino a hand-crafted songbook alongside several other gifts. As a physical object, the book showed intricate craft and detail, demonstrating the skill of the scribes who copied it. However, as a personalized gift it shared the faults of similar songbooks of the period in its inclusion of thematically inconsistent motets referencing seemingly irrelevant political events. In contrast, a portrait of Leo by Raphael, another of the pope's gifts to Lorenzo, showed great care in personalizing it for the recipient. Why did songbooks given as gifts in early Cinquecento Florence lack the degree of meticulous planning

evident in other gifts such as paintings? This research will show that songbooks lacked such planning because the gift economy of music encouraged the wide circulation of compositions, and the songbooks did not have a strong public component to their ownership.

Arts Front: Kiva Room, 1:15 - 2:30 pm

Samantha Kies
Dr. Joseph Engwenyu

Proposed title - The impact of Matriarchy and Colonialism on the Igbo Women's War of 1929

This study examines the Igbo women of Southeastern Nigeria from the eve of colonial intrusion to the imposition of colonialism, the Women's War of 1929, and its aftermath. By placing the Women's War into the context of the stripping away of inherent rights guaranteed them by matriarchy following the imposition of patriarchy upon the society, this study provides a new explanation of the women's involvement and lack of male participation in the war. Under traditional matriarchal umbrellas, through their networks and social groups and by the banding together of all women, the Igbo Women's War of 1929 was the beginning of the struggle for the re-gaining of women's rights in Southeastern Nigeria. Through the examination of primary sources, current historiography, and the voices of the women themselves, this study demonstrates the women's reasons for rising up, what they lost with the imposition of patriarchy, and what they stood to gain.

Oral Presentation: Room 320, 2:45 - 4:00 pm

Kyle McMillen
Dr. Joe Ramsey

The Consolidation of Lakewood Public Schools

Rural public schools in the mid-twentieth century have been often referred to in the context of the "rural school problem." Many scholars have argued that consolidation of rural schools occurred due to an external force, mainly from urban reformers seeking to remake rural schools in the image of urban schools. However, my research on the small rural school district of Lakewood in west Michigan has proven that not all rural schools required outside coercion in order to consolidate. The movement to consolidate Lakewood Public Schools was an internal one, with only underhanded attempts from outside sources, thus breaking with the historical narrative of the "rural school problem."

Oral Presentation: Room 330, 1:15 - 2:30 pm

Zeinab Moughnia
Dr. Joseph Engwenyu
Nelson Mandela's Walk to Freedom: Trials and Tribulations
Nelson Mandela, currently known as a hero and an example of freedom for all of humanity, was never free from issues and stereotypes that continue to be attached to his name. From his interactions with the opposite gender to his unpredictable tactics in his fight to end apartheid, Mandela serves as an example to all of mankind in that the fight to freedom doesn't come without its devastating price.
Oral Presentation: Room 352, 9:00 - 10:15 am

Ann Christiansen Remp
Dr. Ronald Delph
Niccolo' Machiavelli's Discourses on Livy: War, Internal Discord, and Survival of the Italian Republics
On August 29, 1512, the Spanish army sacked Florence's neighbor, Prato, and approached Florence with Cardinal Giovanni de' Medici under its protection. Florence surrendered; the Medici had returned to rule. The French and the Hapsburgs continued to war over Italy; internal discord was a part of daily life. Could small Italian republics, governed by councils, survive against these more powerful enemies? Niccolo Machiavelli (1469-1527), who lost his position as secretary in Florence's Second Chancery two months after the coup and who was imprisoned and tortured for conspiracy against the Medici, continued to ask this question. Concurrently with writing The Prince, Machiavelli began his examination of republics, The Discourses on Livy. Why did Machiavelli turn to Livy's History of Rome in search of answers? Could there be principles in the history of ancient Rome for the survival of Italy's republics, especially Machiavelli's beloved Florence? This paper presents Machiavelli's analysis.
Oral Presentation: Room 320, 2:45 - 4:00 pm

Scott Roy
Dr. Joellen Vinyard
My Experience as an Intern at the Monroe County Historical Museum
I was recently an intern at the Monroe County Historical Museum. I led tours, gave presentations, operated historical sites, and participated in first-person interpretations. In my presentation, I plan to speak about the benefits of an internship. It is a life-changing experience, and it allows students to gain first-hand training that will prove essential when applying for jobs.
Oral Presentation: Kiva Room, 9:00 - 10:15 am

Colleen M. Walter
Dr. Ronald Delph
''Instruments of the Devil': Women and Witchcraft in Sixteenth and Seventeenth Century England

In the sixteenth and seventeenth centuries in England, the European witch craze was at a peak, often pitting neighbor against neighbor. One of the foremost "witch finders" at this time, Matthew Hopkins, can be credited with leading nearly 200 women and men to execution in East Anglia between 1645 and 1647 alone. Accusations of witchcraft were most fiercely directed at women within communities that believed they had in some way been "bewitched." The accusation of women, frequently against those who did not fit into their socially accepted roles, raises questions as to what were the underlying reasons behind witchcraft accusations. Why were women in 16th- and 17th-century England more frequently accused of witchcraft than men? My research will demonstrate that English women were often accused of witchcraft because they were both the victims of sexist attitudes toward their gender and the target of local purges aimed at regaining social conformity.

Oral Presentation: Room 301, 2:45 - 4:00 pm

Bradley Watkins
Dr. Ronald Delph
"This is Mine": The Nature of Sixteenth Century Irish Rebellions

From the mid-sixteenth century to 1603, Ireland was plagued by rebellion. Why was this, and what does it reveal about Gaelic-Irish, Anglo-Irish, and English social and political structures? What will become clear throughout this study is that the rebellions carried out by Thomas Offlay, Earl of Kildare, and Hugh O'Neill, Earl of Tyrone, were motivated by a desire to consolidate their own political power within the traditional Gaelic social structure, while at the same time establishing a power base separate from English influence. Furthermore, their attempts were bolstered by disjointed approaches by the English Crown, namely, their unwillingness to commit to full and direct governance of Ireland, which is exemplified by the Crown's attempts to enlist the loyalty of powerful Irish earls, like Kildare and Tyrone. Finally, the developing religious antagonism between English Protestantism and Irish Catholicism will be considered because both Kildare and Tyrone adopted this religious divisiveness in order to further legitimize their efforts.

Oral Presentation: Room 320, 2:45 - 4:00 pm

Christopher S. Yelonek
Dr. Steven Ramold
A Leave of Absence: Gerald R. Ford and the Decisions from the Latter Years of the Vietnam War
During the first four months of 1975, the Democratic Republic of Vietnam (DRV [aka North Vietnam]) carried out its final offensive against the Republic of Vietnam (RVN [aka South Vietnam]). While the DRV's 1975 offensive was taking place, General Frederick Weyand recommended in his report to President Gerald Ford that a bombing campaign was the president's best option for the U.S. to assist the RVN. President Ford had supported American efforts in Southeast Asia since the 1940s, and Congress saw Ford as one of the most prominent hawks of the Vietnam War. However, President Ford never sent American bombers into Vietnam. Instead, Americans and numerous Nationalist Vietnamese from the RVN were evacuated under President Ford's orders. Ford, who was described as a hawkish President, opted for an evacuation and not a bombing campaign in Vietnam during 1975. The events prior to and during 1975 influenced President Ford's decision on the evacuation. Overall, this decision for an evacuation of Vietnam was a break from the Nixon Presidency, kept in line with the major goals of the Ford Administration, and struggled with the anti-war legislation of the 1970s, and his kitchen cabinet presented realistic insights on the situation.
Oral Presentation: Room 320, 2:45 - 4:00 pm

Leadership and Counseling

Julie Helber
Dr. Ron Williamson
Self-efficacy and Instructional Leadership: Does mentoring make a difference?
The responsibility of principals has shifted significantly over the past few decades. Previously, they were expected to be organizers and managers of schools and serve as buffers to the organization in order to protect a weak technical core that existed because of an increase in responsibilities, increased size of schools, and a more diverse population of students. Now there is an increased attention on academic achievement and accountability in schools. Principals are being held responsible for the quality of their teaching staff and the results of high stakes assessments. I predicted that today's building leaders have a low sense of perceived self-efficacy in instructional leadership. I conducted this study based on the premise that there was a relationship between self-efficacy and instructional leadership qualities based on a principal's mentoring experiences. A survey was sent to approximately 4,350 public

school building principals to evaluate their self-efficacy in the identified areas while controlling for contributing factors such as school type, years of service, race/ethnicity, gender, age, and level of education was sought. The results of this research will contribute to the existing research on the effects of a mentoring program on instructional leadership abilities and will prove to be beneficial to school districts, college and university educational administration programs, and school district and building leaders across the state.
Oral Presentation: Room 352, 10:30 - 11:45 am

Kevin Merrill
Dr. Ronald Flowers
Public Relations at the University of Michigan: Environmental Antecedents and Institutional Functions
American colleges and universities have served key roles throughout the history of the United States. In response to external environmental influences, these institutions, functioning as an organizational type, attempted to adapt through structural modifications.
Oral Presentation: Room 350, 9:00 - 10:15 am

Xingbei Ye
Dr. David Anderson
Lost and Found: Cultural Difference, Intercultural Maturity, and Self-authorship among International Students
The number of international students at colleges and universities in the United States has increased to a record high of 819,644 in the 2012/13 academic year. The presence of international students requires higher education professionals to understand how international students develop their intercultural maturity in order to survive and thrive academically and personally in a new culture environment. This study reflects and examines the transition process of how international students struggle from a predetermined culture to an integrated culture, and finally achieve self-authorship, "the capacity to internally define a coherent belief system and identity that coordinates engagement in mutual relations with the larger world" (Baxter, Magolda, & King, 2004).
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Mehmet Ali Yilik
Dr. Ronald Flowers
Role of Higher Education in Knowledge and Technology Production Policies in Turkey
The purpose of this proposed research study is to understand the organizational milieu of knowledge and technology production and to uncover the processes and

organizational structures of knowledge and technology production in Turkey within the context of higher education, as well as to depict the role of higher education in accomplishing knowledge and technology policy-making and implementation. The main implication of the study is the likelihood of guiding policy development and policy implementation toward knowledge and technology production in Turkey. By employing institutional theory as the conceptual framework, a qualitative study will be conducted. A multiple-case study with data tools of semi-structured interviews and document analysis will be carried out.
Oral Presentation: Room 350, 1:15 - 2:30 pm

<u>Mathematics</u>

Mozhde Aminmadani
Dr. Khairul Islam
Assessing Risk of Health Insurance: A Model-based Analysis of Survey Data
This study investigates the risk of health insurance by socio-demographic and health characteristics of people in the USA using data from the 2014 U.S. Census Bureau. We employ a model-based approach using a logistic regression technique. SAS will be used as a data analysis tool.
Oral Presentation: Room 352, 10:30 - 11:45 am

Jigyasa Bhagat
Dr. Khairul Islam
Bootstrap Confidence Interval of Regression Parameters: A Distribution Free Simulation Approach
Inference of a simple linear regression model is based on the assumption that the random component associated with the model is normally distributed. Under the assumption of the normal regression model, the confidence interval estimates of regression parameters are obtained using t interval. However, if the random component is not normally distributed, the confidence interval estimates of parameters are invalid or lead to misleading conclusion. In this study, we use bootstrap method to find confidence interval of regression parameters for a simple linear regression model, and we compare the results with those of normal regression model.
Oral Presentation: Room 330, 9:00 - 10:15 am

Nathan Richards
Dr. Stephen Blair
An Introduction to Linear Algebra: A GeoGebra Approach to Learning

Technology usage in the mathematics classroom has been an educational demand over the years to help develop a stronger competency in mathematics and promote higher-order thinking skills in students. GeoGebra is dynamic software that has gained great traction over the years for its zero cost, user-friendly and intuitive design, and ability to be used on multiple platforms. My project focuses on using GeoGebra to enhance a lab-inspired mathematics classroom aimed to explore introductory topics of linear algebra.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Physics and Astronomy

Brian Colson
Dr. Weidian Shen
Study of the effect of particles added to polymer coatings
To improve the mechanical properties of polymer coatings, nano-silicon particles and micro-silicon particles have been added. I have examined the surface distribution of the particles using an Atomic Force Microscope and measured the distribution of the particles as a function of depth in the coating using a Confocal Raman Microscope. The coating's hardness, elasticity, and scratch resistance have also been measured using a Nano-Indenter. These results were compared to the standard coating without the particles, coating with nano-silicon particles, and the coating with both nano- and micro-silicon particles.

Oral Presentation: Room 302, 1:15 - 2:30 pm

Justin Hodges
Dr. Natthi Sharma
Generating Single Photons through Parametric Down-conversion to Verify the Quantum Nature of Light
Quantum optics is an exciting field that is rapidly expanding. However, there are a limited number of facilities where students can properly observe and study this field. We are conducting a series of single photon experiments that explore quantum optics in an attempt to incorporate these experiments into the curriculum at EMU. We generate single photons by sending 50 mW 405 nm blue laser light into a type-I nonlinear crystal. The nonlinear crystal spontaneously outputs correlated pairs of down-converted 810 nm photons. We detect the photons with avalanche photodiode detectors and measure coincidences with a field programmable gate array (FPGA) and LabVIEW. We can use these photon pairs to verify the quantum nature of light, including single photon interference, quantum eraser, and entanglement. Similar experiments conducted at other universities cost upwards of $20,000. We are able to conduct these experiments at costs less than $10,000 by using sensors that are

designed for educational labs and replacing the previously used nuclear instrumentation modules and time-to-amplitude converters with a FPGA.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Political Science

Daryl Holman Jr.
Jack Bidlack
Highway Robbery: The Michigan Insurance Industry

In the state of Michigan, insurance rates are based primarily upon age, credit score, and zip code, almost neglecting the driving record of the policyholder. As a result, the average cost of insuring a car in Detroit is $5,948 per year, 56% more expensive than any other city in the United States. These sky-high rates have led over a million drivers to go without insurance, a practice prohibited by law. In the city of Detroit, drivers are faced with the dilemma of risking tens of thousands in liability, jail time, or a $500 fine for refusing to shell out the value of their car in yearly insurance rates. The inability to pay these rates primarily affects working class citizens, which means that the consequences for these crimes will as well. The inequity of Michigan's insurance industry highlights the necessity for a nonprofit automotive insurance agency that can provide policies at an affordable rate for low-income citizens of the state.
Oral Presentation: Room 352, 10:30 - 11:45 am

Psychology

Morgan Bolen and Natalie Morris
Dr. Catherine Peterson
Mother/Father Differences in Psychological Aspects of Childhood Food Allergies

Parents of children with allergies experience heightened anxiety, which can impact their child's opportunity to engage in developmentally appropriate social experiences. While mother and father differences have been identified in other chronic illness populations, to date, this has not been examined in food allergies. As a whole, fathers are underrepresented in existing pediatric research. We examined parental gender differences in knowledge, self-efficacy, and activity restriction in 141 parents of children with allergies. Independent samples t-tests were conducted to compare allergy knowledge, self-efficacy, and activity restriction in mothers and fathers. Results indicated a significant difference in scores for maternal knowledge (M=8.88, SD=2.782) and paternal knowledge (M=6.16, SD=1.967); t(164)=6.935, p<.001. There was a significant difference in the scores for maternal self-efficacy (M=26.27, SD=6.033) and paternal self-efficacy (M=28.71, SD=7.114); t(147)= -2.271, p<.05.

Finally, there was not a significant difference in the scores for maternal activity restriction (M=50.49, SD=15.606) and paternal activity restriction (M=51.03,

SD=13.730); t(141)= -.214, p=.831, p=.827. Results suggest that while mothers are more knowledgeable about food allergies and treatment of allergies, fathers feel more confident in their ability to manage their child's food allergies.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Meagan Carr
Dr. Karen Saules
Issues of Gender in Assessing for Disordered Eating Behavior
Epidemiological research finds that eating disorders are significantly more common in women than in men. This gender skew has been observed in cases of anorexia nervosa, bulimia nervosa, and, to a lesser extent, binge-eating disorder. The current study aimed to explore the extent of disordered eating behavior in a college sample as well as the demographic and psychological correlates of these behaviors. Using the diagnostic criteria from the DSM-V, women were found to have a higher incidence of eating disorders. However, closer examination of the specific criteria revealed that men are in fact engaging in disordered eating behaviors, yet are not meeting criteria at rates similar to women. Additionally, when the scope of disordered eating behavior was expanded to include compensatory behaviors more often observed in men, additional cases of disordered eating were identified. Importantly, these individuals were found to have similar rates of psychological distress as well as body image disturbances in the form of drive for muscularity. Findings indicate that special attention must be paid to the ways in which eating pathology presents in men.
Oral Presentation: Room 301, 9:00 - 10:15 am

Alison Colbert
Dr. Jin Bo
The Relationship of the Working Memory Index and Subscales to Dimensional Levels of ADHD Symptoms in a Community Sample.
The WM model of ADHD suggests WM is a core component of ADHD. The WISC-IV Working Memory Index is a common clinical measure of WM. Preliminary results indicate the WMI subtests that may be most related to ADHD symptoms are the Digit Span and Arithmetic subscales. Within the Digit Span subscale, Digit Span Backward appears more related to inattention symptoms than the combined subscale.
Oral Presentation: Room 350, 2:45 - 4:00 pm

Ana-Mercedes Flores, Tiffany Andersen, Casey Swick, Ryan Goodcase, Kaitlyn McFarlane, Susan Bowyer, Jon Brennan and Loulia Kovelman
Dr. Renee Lajiness-O'Neill

Relationship Between Neural Coherence and Social Functioning in Autism Spectrum Disorder

Autism spectrum disorder (ASD) is characterized by atypical social functioning, communication, and restricted/repetitive behaviors. With increasing prevalence (1 in 68), it's imperative to identify biomarkers underlying ASD that may lead to earlier diagnosis. One proposed neurophysiological underpinning is abnormal neural synchrony. This study investigated relationships between neural coherence (i.e. synchronous brain oscillations) and social functioning. Twelve ASD and 13 typically developing (TD) children, ages 8 to 12 years, underwent magnetoencephalography (MEG) during resting state, a noninvasive technique that can measure neuromagnetic fields and neural synchrony between discrete brain regions. Alpha- and gamma-band frequencies were probed. Pearson correlations were computed to explore relationships between coherence and social functioning. Alpha band: In ASD, higher coherence between cingulate and additional frontal gyri was related to greater social motivation and awareness. In TD, lower coherence between left caudate and bilateral fronto-parietal regions was related to higher social motivation and less restricted behaviors. Gamma band: In ASD, higher coherence between left temporal and right frontal cortices was related to greater social difficulties. In TD, lower coherence between right angular gyrus (parietal) and temporal cortices was related to higher social functioning. Results suggest possible altered cortical organization for regions critical for social functioning in ASD.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Katherine Guyon-Harris
Dr. Alissa Huth-Bocks

The Impact of Childhood Maltreatment and Ongoing Intimate Partner Violence on Trajectories of Posttraumatic Stress Disorder

The transition to parenthood is an especially difficult time for women who experienced maltreatment as children and intimate partner violence (IPV) as adults. Research examining the impact of ongoing interpersonal trauma on individual differences in the severity of posttraumatic stress disorder (PTSD) symptoms over time is needed. The present study examined trajectories of PTSD symptoms across the transition to parenthood among 120 ethnically diverse, economically

disadvantaged women. Symptoms of PTSD and experiences of IPV were assessed in the third trimester of pregnancy and 1, 2, and 3 years following the birth of the child. Childhood maltreatment was assessed retrospectively during the third trimester. Trajectories of PTSD symptoms were identified using latent class growth analysis. Experiences of childhood maltreatment and IPV before, during, and after pregnancy were included as covariates. Four classes were identified: steady mild (60%), steady moderate (18%), initial increase (9%), and late increase (13%). Childhood maltreatment predicted PTSD severity during pregnancy, and IPV in the year before pregnancy predicted class membership. Thus, women experience different trajectories of PTSD symptoms following past trauma and accounting for ongoing trauma, which highlights the need for ongoing assessment of experiences of trauma and PTSD symptoms.
Oral Presentation: Room 300, 2:45 - 4:00 pm

Daniel Henley
Dr. Natalie Dove
Gender Bias in the Workplace
Gender bias remains a serious problem in the workplace. In order to begin addressing this complex issue, we must isolate the factors that influence these inequalities. Is one such factor political ideology? If so, how does it relate to these inequalities? Research methods used in previous and relevant studies were modified in order to explore this issue. The current research used fictional samples of applicant information and mock interview transcripts in order to simulate a hiring process (Hoyt, 2011). In order to show differences in attitudes, both the sex of the applicant and his or her prospective occupations were manipulated. Additionally, the background information of the applicant either made no mention of children or the applicant was depicted as being the primary caregiver for their children in order to induce traditional female gender role salience. More specifically, each participant was randomly assigned to read through one of the eight possible applicant transcripts. Then applicant hireability and participant political ideology were assessed. The hypothesis is that conservatives would be less likely than liberals to hire women for gender atypical positions when the traditional female gender role is salient.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Rachel Kentor
Dr. Flora Hoodin
Psychological distress in pediatric hematopoietic stem cell transplant (HSCT) recipients and their mothers: A preliminary report
The prevalence of psychological distress in pediatric HSCT recipients and their mothers is well documented, though minimal research has examined the interaction of this distress between mother and child. The present study sought to examine the relationship between maternal and child distress and the potential mediating effects

of experiential avoidance. This study involved a cross-sectional survey of 20 pediatric HSCT recipients (ages 6-18) and their mothers. While the group mean reported distress was within normal limits, both mothers and children evidenced higher rates of depression and anxiety than are reported in non-clinical samples. Posttraumatic stress was significantly correlated between mothers and children, though there was no significant relationship within dyads for depression or anxiety. Experiential avoidance was positively correlated with distress within persons. However, maternal experiential avoidance was not significantly correlated with child experiential avoidance. Child age, maternal education, and income also emerged as significant predictors of distress. Identification of these demographic and psychological factors predicting distress can provide guidance for medical providers regarding which patients may require closer monitoring. Moreover, study findings provide further empirical support for the role of experiential avoidance in distress, identifying a potential target for psychological intervention.

Poster Presentation: 310 A and B, 1:15 - 2:45 pm

Ketrin Lengu and Tristan Nyman
Dr. Renee Lajiness-O'Neill
Functional Near-Infrared Spectroscopy (fNIRS) as a Tool for Assessing Infants at Risk for Autism Spectrum Disorder

Early detection of Autism Spectrum Disorder (ASD) is critical, particularly in light of recent research suggesting improved prognosis with the implementation of early intervention. The advent of neuroimaging technology for infants, such as functional Near-Infrared Spectroscopy (fNIRS), has made studying the infant brain and identifying early neural correlates of behavior possible. Unlike magnetoencephalography (MEG) and functional magnetic resonance imaging (fMRI), fNIRS is a more suitable choice for analyzing brain responses in young children because it is less vulnerable to motion artifact during data acquisition and better tolerated by infants. This presentation provides a methodological example of how fNIRS can be used to improve assessment, and, ultimately, diagnostic detection. More specifically, with fNIRS, the present study assesses the hemodynamic responses in infants when presented with visual social communication cues. During this visual paradigm, it is anticipated that typically developing infants, unlike those at risk for ASD, will show increased activation in the medical prefrontal cortex (mPFC), an area which has been empirically linked to social information processing. Results from a single case study will be presented to demonstrate the role the mPFC may have in the assessment of early social cognitive skills.

Oral Presentation: Room 300, 10:30 - 11:45 am

Karla Maschalko and Patrick Weaver
Dr. Catherine Peterson

The Association Between Parental Knowledge and Family Activity Restriction in Youth with Food Allergies

As the most common group of pediatric chronic illnesses, severe food allergies are frequently associated with adverse or life-threatening immune responses. Although research has examined psychosocial impacts of disease management and subsequent activity restriction, no studies have investigated the influence of parental knowledge of allergens on the amount families restrict activities due to risks associated with allergen exposure. Greater parental knowledge may predict more normative activity restriction. One hundred and forty-three parents of children with food allergies were recruited through an online survey. Participants were primarily Caucasian, female, with above-average annual incomes. Correlation and multiple regression analyses were conducted to examine how parental knowledge of allergies and demographic variables affect family activity restriction. Regressions indicated that parental knowledge explained 2.8% of the variance. Additionally, parental knowledge significantly predicted family activity restriction. Parental knowledge of allergies is significantly associated with greater restriction of the family's activities. However, family activity restriction may be better explained by parental anxiety accretion stemming from greater knowledge of risks associated with allergen exposure. Future research is needed to examine the potential mediators (e.g., parental anxiety) of this association.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Adam P. Natoli

Dr. Steven Huprich

Comparing Two Different Methods for Measuring Object Relations when Predicting Depressive States and Traits.

Impaired Object Relations (OR) is a contributing factor of depressive symptoms and traits. Little research has assessed the concurrent use of two OR assessment methods to determine how they're related to predicting depression. Clinical and nonclinical subjects completed two OR measures, the BDI-II and the SCID-II. Hierarchical regressions were performed for both samples. BORRTI subscales were entered first, followed by SCORS-G subscales. Results are discussed in light of methodological issues related to the assessment of OR and depression.

Oral Presentation: Room 301, 9:00 - 10:15 am

Sharon Nelson

Dr. Steven Huprich

The Cognitive Affective Processing System (CAPS) as an Integrative Model through which to Understand and Improve on Psychotherapeutic Assessment and Technique

The Cognitive-Affective Processing System (CAPS) is a dynamic and expansive model of personality proposed by Mischel and Shoda (1995) that incorporates dispositional and processing theories by considering the interaction of the individual and the situation, and the patterns of variation that result. These patterns of cognition, affect, and behavior are generally defined through the use of "if…then…" statements and provide a richer understanding of the individual than more simplistic models do. The CAPS model has been used in both the personality assessment and personality disorder literature and can be used to integrate and overcome the shortcomings of existing techniques. This presentation will describe the CAPS model in more detail, as well as how it can be used as an integrative model and applied in the assessment of a patient's dysfunctional behavior and in the application of therapy techniques. We will provide examples how psychodynamic, cognitive-behavioral, and interpersonal therapies can be integrated into the CAPS model.

Oral Presentation: Room 301, 9:00 - 10:15 am

Lauren Ostarello and Cory Stanton

Dr. Thomas Waltz

Alcohol Related and Unrelated Reinforcement, Negative Reinforcement, and Psychological Distress

Access to reinforcement is a central component of a behavioral conceptualization of psychological health. Clinical extensions of the matching law advocate improving the frequency of positively reinforcing behavior patterns to improve wellness for those with stressors including and beyond depression. An under-investigated dimension of a reinforcement-based account of clinical wellbeing is negative reinforcement. This poster will involve an exploratory analysis of a new self-report instrument for positive and negative reinforcement in a convenience sample of 133 college freshmen. Participants completed a variety of self-report instruments including recent alcohol use, the Depression, Anxiety, and Stress Scale (DASS), and a reinforcement inventory involving 180 positive reinforcing events (with and without alcohol involvement) and 90 related negative reinforcing events. Initial analysis comparing those in the outer quartiles for positive reinforcement found a trend for those with higher self-reported reinforcement access to have lower total scores on the DASS (t(65) = 1.66, p = 0.10, d = 0.31, CI[5.87,9.87]). Additional analyses will explore the importance of reinforcement rates in relation to topical domains (education, sexuality, entertainment, leisure, civic, domestic, social, employment, and deviancy) as well as relative rates of positive to negative reinforcement as these relate to the DASS.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Kaitlin Oswald

Dr. Jin Bo

The Effects of Handedness on Unimanual and Bimanual Tapping

Tasks requiring bimanual coordination are essential to daily functioning and may appear effortless. To execute these tasks efficiently, complex interhemispheric communication between motor areas must occur. Research suggests unsynchronized bimanual tasks are more challenging than synchronized bimanual tasks due to increased interhermispheric interactions between motor areas. Research also indicates unimanual task execution is more complex than synchronized bimanual tasks, due to increased inhibition of the inactive hand during unimanual tasks. The role of handedness on this bimanual advantage was also of interest. It was predicted that out-of-phase tapping would reveal the most variability, and synchronized tapping would have the lowest variability. It was also predicted that individuals with low handedness would reveal lower variability in synchronized conditions and higher variability in unimanual and out-of-phase conditions than those with strong handedness. Results revealed that the unsynchronized bimanual condition resulted in greatest mean variability, followed by the unimanual condition. The synchronized bimanual condition had the least mean variability. In the left hand, these relationships ranged from marginal to strong significance. In the right hand, all relationships were generally marginal in significance. Between hands variability was strongly significant in unimanual versus bimanual conditions.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Jerrica L. Pitzen and Jessica L. Riggs
Dr. Alissa Huth-Bocks

Associations between parental reflective functioning and maternal sensitive and interfering parenting behavior towards toddlers

Parental reflective functioning, that is, a parent's capacity to identify and understand a child's mental states, serves an important role in the intergenerational transmission of attachment. The Parental Reflective Functioning Questionnaire (PRFQ) examines three elements of parental reflective functioning: Pre-Mentalizing (PM), or nonmentalizing, Certainty about Mental States (CMS), and Interest and Curiosity in Mental States (IC). The aim of our study is to examine the association between PRFQ dimensions and observed parenting behaviors among a high-risk sample of mothers. To examine how the three elements of the PRFQ interact in our sample, a polythetic hierarchical method cluster analysis was used to examine sub-types of reflective functioning. The analysis produced two subtypes. The first subtype represented optimal parental reflective functioning, with higher levels of CMS and IC and lower levels of PM. The second subtype was non-optimal, with lower levels of CMS and IC and higher levels of PM. The present findings indicate that the three elements of the PRFQ interact with one another in a significantly distinct manner. Further analyses will be conducted to determine a link between parental reflective functioning and observed parenting behavior.

Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Sarah Rice and Lauren Harrison
Dr. Catherine Peterson
Demographics and Allergy Severity Predict Parent Worry in Childhood Food Allergy
Food allergies are adverse immune responses to food protein and are most prevalent in childhood, affecting approximately 8% of US children. Given the fear of life-threatening reactions, allergies can result in decreased quality of life in children and families. Few studies directly assess the effect that severity of food allergy has on parental worry. The present study examines how allergy severity (e.g. recency, frequency, and number of reactions) and demographics affect amount of parent worry. An online survey was administered to 147 parents (56% female; 85% Caucasian) of children with food allergies. Results of Pearson correlations show parent gender is related to amount of parent worry, with mothers reporting higher amounts of worry than fathers. Stepwise regression analyses revealed a significant, positive linear relationship between recency of allergic reaction and amount of parent worry ($r(144) = .337$, $p<.01$). Frequency of allergic reaction also predicted parent worry ($F(1,142) = 18.750, p<.01$). Findings indicate that parent demographics and allergy severity play a significant role in parent worry and should be assessed and monitored in clinical settings, particularly following adverse reactions.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Rachel Sienko
Dr. Karen Saules
Psychological Characteristics of Online Daters
Some research suggests that participating in social media can negatively impact one's mood. This study explored whether this applied to online dating by examining differences between college students who have engaged in online dating and those who have not. In addition, this study explored the relationship between experiences of perceived weight stigma and mental health among online daters. Data were collected from a sample of 678 undergraduate students. It was hypothesized that 1) online daters would have higher levels of depression, anxiety, and disordered eating than their non-online dating counterparts; 2) among those who participated in online dating, those who felt they experienced biased treatment based on their weight/shape would report higher levels of depression, anxiety, and disordered eating than their counterparts. Results indicated that online daters had significantly higher levels of depression, anxiety, stress, and disordered eating than non-online daters. Online daters who felt they experienced biased treatment based on weight/shape had significantly higher levels of disordered eating than online daters who did not experience weight bias. This implies that the impact of social media on mood may extend to the realm of online dating.
Oral Presentation: Room 350, 10:30 - 11:45 am

Aimee Sohnleitner

Dr. Steven Huprich

Understanding Interpersonal Problems in Individuals using Contingent and Global Self-Esteem Measures

Historically, a reliable method of capturing global self-esteem is through the Rosenberg Self-Esteem Scale (RSES). As of late, research suggests that other self-esteem (SE) measures, such as contingent self-esteem (CSE), should be administered in addition to the RSES to comprehensively examine an individual's SE. In this study, 1,270 undergraduate students were administered the RSES, the Pathological Narcissism Inventory (PNI; composed of 12 questions assessing CSE), and the Inventory of Interpersonal Problems (IIP). A median split was calculated to assign individuals into one of four categories: 1=high global SE/high CSE, 2=high global SE/low CSE, 3=low global SE/high CSE, and 4=low global SE/low CSE. Interpersonal problem discrepancies were found between the four groups. Individuals within Group 3 experienced the highest overall level of interpersonal distress, while individuals within Group 2 experienced the least. Groups 1 and 4 experienced moderate interpersonal difficulties, with Group 1 having a slightly higher mean. Although total interpersonal distress levels were similar within Groups 1 and 4, these individuals experienced interpersonal profile differences. Interpersonal difficulties of non-assertive, accommodating, and self-sacrificing types were most evident in individuals within Group 3.

Oral Presentation: Room 301, 9:00 - 10:15 am

Cory Stanton, Lauren Ostarello and Thomas Waltz

Dr. Thomas Waltz

What Drives the Dive? Social Goals and Barriers in Therapeutically Relevant Discounting

Discounting assessment methods have been used to evaluate participant preferences for differing amounts of outcomes, such as money and illicit drugs, associated with different kinds of inconvenience such as delay and effort. The present study involves translational research with a discounting task involving therapeutically relevant outcomes (social distress) and inconveniences (changes in social functioning) and assesses related social goals and barriers. A convenience sample of 272 college freshmen rated the importance of various social goals in their lives, as well as the presence of barriers to their social goals, before completing a therapeutically relevant discounting task. Preliminary analysis using median splits for the barriers and goals assessment found no significant differences in discounting by goals ($t(272) = 1.22$, $p = 0.22$, $d = 0.14$, 95% CI [-0.05 to 0.50]) but marked differences by barriers ($t(272) = 4.59$, $p < 0.001$, $d = 0.54$, 95% CI [-0.79 to 1.24]). This suggests that differential performance in this therapeutically relevant discounting task is more heavily influenced by students' experiences of the distress related to social barriers.

Additional analyses will further explore the relationship between social goals and barriers in relation to this discounting task.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Sociology, Anthropology and Criminology

Lisa deRamos
Dr. Kristine Ajrouch
African American College Students' Usage of African American Vernacular English: Social Identity and Academic Experiences
African American Vernacular English (AAVE) is an American English language variety that has set phonological, morphological, syntactic, semantic, and lexical patterns, with some regional variance. Linguists argue AAVE is a highly systematic language variety spoken by, but not limited to, African Americans, and posit that AAVE is spoken by 80% of African Americans and Blacks, at least some of the time. AAVE has been referred to by numerous other terms over the years, such as "African American English," "Black English," "slang," "jive," and, most commonly, though sometimes pejoratively, "Ebonics." Through in-depth, one-on-one interviews with African-American college students at EMU, this master's thesis project seeks to bridge the gap between linguistics and applied sociology in order to explore and understand attitudes towards and awareness, perceptions, and usage of AAVE, and the potential socio-political implications for its speakers. Their awareness of the language variety, and their views on how, when, and with whom to use or not use AAVE, impact their relationships in social, academic, and professional settings and how they are perceived within greater society. Moreover, their usage of AAVE versus Standard English (SE) may influence their social- and self- identities and their academic experiences and/or academic success.
Oral Presentation: Room 302, 9:00 - 10:15 am

Matthew W. Hanger
Dr. Solange Simoes
The World Bank, Poverty Reduction Strategy Papers, and the Feminization of Poverty
This project reviews the role of gender mainstreaming within the Poverty Reduction Strategy Paper (PRSP) framework implemented by the World Bank and International Monetary Fund as a response to criticisms of Structural Adjustment Policies (SAPs). The neoliberal reforms present in SAPs resulted in extremely poor outcomes for

women, and such reforms are still a major component of PRSPs. Although PRSPs focus on bringing NGOs and civil society groups into the development discussion, they often fail to include women. PRSPs are also argued to flatten the voices and identities of civil society participants by casting them as apolitical individuals within Western-oriented neoliberal policy conceptualizations, and subjecting these groups to new forms of social control by lenders who use the element of participation to legitimize continued liberal economic reforms. The result is a failure to acknowledge women as anything other than social victims of poverty, prone to falling behind men in education and health outcomes, and subject to increased domestic violence. Women are not seen as economic agents, and their unequal access to household resources and stable employment is not considered. The few gendered policies included in PRSPs have often been undermined by a lack of budgeting, oversight, and formal target indicators.

Oral Presentation: Room 320, 1:15 - 2:30 pm

Geraurd Paschal
Dr. E. Cerroni-Long
Cultural Heritage Collections on the Web: Use of Open Source Software for 3D Imaging.
This project examines the application of open source software for 3D capture and web posting of selected cultural artifacts from a small museum. Readily available tools can be used to expand public access to small museum collections. The frameworks of the necessary digital workflow will be outlined, and the advantages and limitations of the available technology will be discussed.

Oral Presentation: Kiva Room, 9:00 - 10:15 am

Ashley Wiegand
Dr. Roger Kernsmith
Exposure to Sexually Explicit Material on Mental Health and Delinquency during Adolescence
Data for this study were collected as part of a three-year CDC-sponsored project to explore the risk and protective factors of intimate partner violence among youth. Findings will be presented from data collected from a sample of 1,300 students in 19 middle and high schools. This paper explores delinquent activity and negative mental health consequences in relationship to pornography consumption during adolescent years. More specifically, the paper will go into detail addressing dating violence perpetration and victimization as it relates to exposure to adult explicit material. Existing social science research has studied the effect of pornography consumption and mental health relationships. Furthermore, Mitchell, Finkelhor, and Wolak (2003) indicate that youth were very or extremely upset by unwanted exposure to sexual content via the internet. The study extends on past research by examining the method

of first exposure as well as the age of first exposure to pornography on delinquency and dating violence.
Oral Presentation: Room 300, 2:45 - 4:00 pm

Women's and Gender Studies

Amalina Dave
Dr. Abby Coykendall
Schrodinger's Virgins: Post-Virginity in John Cleland's Fanny Hill and Oscar Wilde's Picture Of Dorian Grey
This paper focuses on the performance and internalization of the state of "virginity," as is depicted in the novels Memoirs of a Woman of Pleasure or Fanny Hill (1748), by John Cleland, and The Picture of Dorian Gray (1890), by Oscar Wilde. The novels share a similar process wherein the main character embodies and performs the part of "purity" or "virginity," while knowing it to be an act. In Fanny Hill, "virginity" has an explicit definition and several "instances" of virginity; in Dorian Gray we see a more complex interaction, made symbolic by the internal-external divide of Dorian and his portrait. This paper discusses the two meta-performances and exposes them as unstable truths–where the actor is both aware of the fiction, as well as deeply invested in its reality. The question asked is "How is their virginity?"–how is it articulated? How is it gendered? How is it performed? How are the bodies it defines created? And rather than asserting that one is or is not a virgin, I propose that a body is both a virgin and not a virgin, that we are inscribed with meanings so tenuous that we cannot help but be and not be.
Oral Presentation: Room 301, 2:45 - 4:00 pm

Mark Doebler
Dr. Elizabeth Currans
"Mora's Vows – 'Now and Forever'": Skyrim's Performativity of Marriage, Gender, and Sexuality in Relation to Queer Gaming "Failure"
Video games allow for an interesting insight into the performative nature of behavior beyond the bounds of "reality." Skyrim, a fantasy role-play game, embodies interesting aspects of performance in relation to gender and queerness. Utilizing queer theoretical literature, particularly J. Jack Halberstam's queer failure and Adrienne Shaw's queer video game failure, this study examines the performative

nature of relationships within the Skyrim world through its interaction with the system of marriage. The study additionally considers the discussion of queerness of video games for potential enactment of José Muñoz's work on queer futurity and utopia. The study considers ethnographic and auto-ethnographic observations of computer video game modification, or "modding" communities, in relation to contemporary queer theory, thus adding to the literature of queerness and its critique to heteronormative structures.

Oral Presentation: Room 300, 1:15 - 2:30 pm

Christa Jiamachello
Dr. Margaret Crouch
Canonocity: Short-Sighted Phallo-Centrism or Epistemic Agnotology? Or Both?

This project looks at the historical practice of exclusion from the canon of marginalized writers. While this is particularly true for all marginalized groups, I look specifically at the exclusion of women's writing. I focus on these exclusions within the literary and philosophical canons. My inquiry is attentive to the writings of a selection of women authors from the 14th to 19th centuries. Their writing ranged from letters to philosophical treatises; nonetheless, their work was deemed less valuable for academic pursuit or edification than that of their male contemporaries. Their works are being taken up in recent times sporadically for inclusion in college classes, most oft in a cursory manner or as secondary texts. This continued exclusion from the canon leads me to postulate that the determination of canonicity is one that, once made, allows for a willful, systematic cultivation of cultural or epistemic ignorance. It is this perpetuation of ignorance and its impact on higher education, the students, and ultimately the view of the feminine that will be examined in this inquiry.

Oral Presentation: Room 300, 1:15 - 2:30 pm

Jacquelyn Odum
Dr. Solange Simoes
Ideal Victims: Migrant Farm Workers and Rape

The estimated percentage of undocumented female farm workers who are victims of sexual assault, often by employers or supervisors/foremen, is as high as 50-60%. Undocumented workers face specific and numerous barriers to reporting these crimes, ranging from language and communication problems to sociocultural factors and local and state laws. U.S. policies are a major impediment, including current immigration policy and the lack of citizenship rights and protections extended to migrant farm workers, especially those who are undocumented. Yet the agricultural output and a large share of the economic profit in many states, particularly those in the Southwest, depends on the cheap labor provided by undocumented female agricultural workers. The problem is found, however, throughout the nation. Some groups are making attempts to bring cases into the legal system, but this is a fragmentary approach.

Ultimately, federal policy adjustments in immigration and law will be needed to curtail the epidemic sexual assault of undocumented female migrant farm workers.
Oral Presentation: Room 320, 1:15 - 2:30 pm

Megan Petersen
Dr. Solange Simoes
Taking a Closer Look at The International Association for Women's Mental Health
"The demands of professional careers and the unrealistic expectations of beauty, success, and perfection placed on women by the media may pose special dangers to young women unless societies can collectively build environments where the distribution of opportunities and rewards is not determined by criteria such as conforming to a bodily stereotype or belonging to a certain class or gender. The impact of the social determinants of health is discussed from the perspective of promotion of mental health and the prevention of disease. Stress at work, inequality in access to health care, the multiple roles and burdens of women and the demands of globalization all have a role in determining how much a woman realizes her right to health" (IAWMH, n.d.). The International Association for Women's Mental Health (IAWMH), a non-governmental organization (NGO), aims to improve the mental health of women throughout the world, expand the fund of knowledge about women's mental health, promote gender-sensitive and autonomy-enhancing mental health services for women, and advance collaboration between societies. This analysis will identify why IAWMH is considered a transnational feminist organization, the globalization processes that it addresses, and the potentials and limitations that it has as an organization.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

World Languages

Alyssa Anders, Kimberly Specht and Richard Lysogorski
Dr. Zuzana Tomas
Check-It-Out: Encouraging Autonomous Learning in Adult ESL Students
Despite extensive resources for international students to optimize their university library use, largely in the form of libguides, very little exists in the southeastern Michigan area for adult English Language Learners (ELLs) who may benefit extensively from using a public library. In an effort to study how ELLs can be encouraged to use

this resource, this study addressed the possibility of motivating autonomous learning through use of ESL curriculum about the library. This research was aimed at measuring the change in the motivation of adult beginning-to-intermediate ELLs to visit and use the public library after being presented with curriculum. The curriculum, in the form of videos, was aimed at beginning level ELLs and included specific steps, information, and vocabulary necessary to become acquainted with frequent library use. The students were surveyed before and after watching the videos; in addition, their teacher was surveyed to gather observational information. The students were spilt into two groups, one who watched the videos on their own, and one who watched the videos guided by a teacher. The results of the two groups were compared to see if any changes in motivation occurred, and if changes varied according to the method of presentation.
Oral Presentation: Room 320, 10:30 - 11:45 am

Adam Kavetsky
Dr. Zuzana Tomas
Your Phone can Teach You to Talk: Mobile Applications for Pronunciation
The relevance of mobile learning applications is recognized by teachers who see their students use this ubiquitous technology. However, teachers may feel overwhelmed by the large variety of available applications. Ally et al. concluded that there is benefit to mobile learning: autonomy and convenience is afforded to busy people trying to learn English. Uther et al. established the value of mobile learning for speech/audio language training. After presenting the general guidelines for selecting effective apps, I will describe the most effective existing apps and offer ideas for using them in a variety of in-class and out-of-class activities in different ESL/EFL teaching and learning contexts. The purpose of this session is to help teachers with the selection and use of mobile apps in their teaching of pronunciation and speaking. Because technology is an ever-changing monster, the applications suggested might be outdated soon. Thus, this presentation will outline general guidelines for selecting apps to use in or out-of the classroom. There will also be guidelines for selecting apps specific to teaching pronunciation. This portion of the presentation will raise awareness of important factors in using applications as well as help teachers become more autonomous in their selection and implementation thereof.
Oral Presentation: Room 350, 1:15 - 2:30 pm

Adam Kavetsky and Jared Bentley
Dr. Kate Pantelides
The All-Purpose Mage: Video Games and Literacy
Since their inception, video games have been devalued in the academic community as a waste of time or possibly detrimental to the intellect. However, video games have grown into a literary medium with a high level of connectivity to our "born-digital"

age. Game theory can be paralleled with process writing pedagogy in that it is often based on exponential skill growth. James Gee's book, What Video Games Have to Teach us About Learning and Literacy, carefully examines how video games can be used to help build an individual learner's arsenal of learning skills. Gee parallels the theory of learning in "good" video games to the theories of learning in cognitive science. In our "born-digital" age, technology is growing increasingly more linked to pedagogy. Video games may be a powerful medium for teachers to activate latent interest in literature and the advancement of student's literacy. Whether games are used in class, as an interconnective learning tool or academically played with guided encouragement, the acknowledgement of the new literacy of the video game can provide empowerment to students and teachers. This issue will be presented in the form of two five-minute lightning-style talks with visual support.

Oral Presentation: Room 350, 10:30 - 11:45 am

COLLEGE OF BUSINESS

<u>Accounting and Finance</u>

Yu Qiao
Dr. Lijyun Hwang
Hidden Risks in the Stock Market: Shares that Pledged for Personal Margin Accounts
Trading on margin is a risky method of investment that allows investors to purchase securities through borrowing partially from the brokerage company. Some of the top managers who trade on margin pledge their companies' shares in personal margin accounts as collateral. Their companies' stock prices drop dramatically when these top managers sell the collateral to meet brokers' maintenance margin requirements. Companies, minor shareholders, and retail investors are the ones that bear such huge losses. In order to get the public's attention of this hidden risk in the stock market, this paper examines the current disclosure regulations and auditing rules regarding the shares that are pledged in the personal margin account. By discussing the public expectations and comparing the rules and regulations on a global basis, a suggestion based on existing rules and regulations is made in a hope that the regulator will be aware of such risk and be able to provide rules that can better perform in disclosing risks to the public and regulating the market.
Oral Presentation: Room 330, 9:00 - 10:15 am

<u>Computer Information System</u>

Soliman Almahmoud
Dr. Chong Oh
Predictive Analytics in the Financial Context
The use of predictive analytics in the financial context, especially in stock investing, is challenging, as the stock market is driven by countless factors. This study examines future stock market movements in relation to historical stock information through the approach of data mining. Specifically vast amounts of financial data from Oct 2013 to August 2014 are collected for selected companies including open, close, high, and low stock prices, as well as traded stocks volumes and both NASDAQ and Dow Jones indices. Subsequently, different data mining algorithms are trained to identify key predictors in influencing future stock market movements. The study finds the existence of significant predictive power of historical stock market information in predicting future stock market movements. This finding is relevant to researchers and practitioners in better understanding of stock market trends and monitoring of stock investments.
Oral Presentation: Room 330, 9:00 - 10:15 am

WenBin Yang
Dr. Chong Oh
Social Media Information Diffusion and Economic Outcomes: Twitter and Box Office Revenue

This study demonstrates how social media information diffusion affects economic outcomes. Specifically, we examine characteristics of Twitter information diffusion surrounding movies and their relationships to each movie's first weekend gross revenue. To measure how movies diffuse through social media network structures, we collect retweets about movies and extract three metrics of Twitter diffusion: speed, scale, and range. A total of 8,945,355 tweets for 116 movies from January to June 2014 are collected. By analyzing retweeting behavior, we are able to identify diffusion characteristics that are highly correlated with first weekend movie gross revenue. This study has two important contributions. First, it provides intuitions to practitioners in improving their social media marketing strategies. Second, it presents inferences to researchers in understanding the different characteristics of information diffusion in relation to performance outcomes.

Oral Presentation: Room 350, 10:30 - 11:45 am

<u>Management</u>

D. Kay Jarrell
Dr. Susan Gregory
"Comparison of Feedback Methods for post-Millennial Customers in a Dining Hall Setting"

A longitudinal online survey of university residence dining hall population was compared to written comment cards received during the same time frame to assess the types of feedback and response choice. Only limited research into the emerging post-Millennial or "Gen Me" generation college students' impact on consumer research methods has been conducted. The characteristics of surveys and comment cards and returns and value of each method will be assessed with management implications.

Oral Presentation: Room 301, 1:15 - 2:30 pm

Miguel Ortiz
Dr. Giri Jogaratnam
Six Sigma and Kaizen in the Hospitality Industry

Continuous improvement is an important concept in the hospitality industry. Hospitality firms implicate continuous improvements to stay current and competitive in the market as trends and technologies are ever changing. The Western philosophy of continuous improvement, Six Sigma, delivers business excellence by satisfying customers and increasing profit. It does this by finding solutions for everything from

small glitches to large projects using statistical standards, which aim for zero defects. Though introduced nearly two decades ago, Six Sigma is not quite applicable in the hospitality industry yet, as the service industry has many limitations. The Japanese philosophy of continuous improvement, known as Kaizen, is derived from taking something apart and putting it back together in a better way. Kaizen aims to involve everyone associated with the firm to improve their standards with action-focused management techniques. This concept brings success, as well as difficulties, as the "philosophy of life" can be interpreted differently from firm to firm. These two models have been shown to be successful worldwide in several industries; however, their applicability in the hospitality industry is still questionable. Overall, the two models can be implemented in the U.S. hospitality industry to achieve success when implemented with proper understanding.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Sumalee Punpruk
Dr. Giri Jogaratnam
The effect of Price promotions and food quality on perceived value, customer satisfaction and customer loyalty in the restaurant industry
This study investigated the influence of price promotion and food quality on perceived value, customer satisfaction, and customer loyalty. Price promotion is a marketing strategy that is used as a means to attract price-conscious customers. However, applying price promotion comes with costs and some negative impacts on the restaurant. It is critical that restaurant managers are knowledgeable about the impact of price promotions on perceived value and customer satisfaction and loyalty. This study used a survey method and a self-report questionnaire to collect data. Although the study didn't find a significant relationship between price promotion and perceived value, the study found significant statistical relationships among food quality, perceived value, and customer satisfaction and loyalty.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Holly Wesener
Dr. Tierney Orfgen
Food Additives and Institutional Food Service in Schools: An Exploration of Food, Budget and the Increasing Health Concerns in Children
Additives are included in much of the food that consumers purchase and eat every day. Many are added to processed foods and are used to enhance color, flavor, and shelf life. These additives account for many health problems facing the United States today. In a country laden with disease such as cancer, heart disease, and diabetes, food additives should be considered. Nitrites and nitrates are put into processed

meats to prevent growth of harmful germs and bacteria and also give that familiar pinkish hue. When these are fused with amino acids, they produce carcinogenic compounds that are harmful to the body and are known to cause migraines. Yellow no. 5 has been linked to hyperactivity in children and is thought to be a root cause of ADHD. The FDA has put consumer information on their website; however, unless a consumer truly wants to know about the dangers, it is unlikely it will be sought out. Those with compromised immune systems, such as young children and the elderly, are more susceptible to sickness and disease that is associated with the increased consumption of food additives and processed foods. The quality of the food that is being served to these populations is consistently declining in an effort to make more food with less money.

Oral Presentation: Room 300, 10:30 - 11:45 am

<u>Marketing</u>

Cynthia Kazanis
Dr. Shiri Vivek
Understanding Student Academic Engagement in the New Environment
Students and professors discuss the same phenomenon across the country: The relationship dynamics that define a college education are not what they once were. Students behave more like critical consumers of higher education than anything else. Some professors are surprised to find the relevance of their classes and teaching methods called into question. Part of the problem might be in the several factors that distract the students from being totally involved in their academic development. To engage students academically while accepting the reality of the new context, faculty need to explore what engages them in a purely academic pursuit and adapt academic strategies to enhance those elements. However, exploring the topic of student engagement begins with a definition, which we have achieved by an extensive analysis of qualitative surveys from diverse students. This is the first step of many and will be the key to unlocking student engagement for the benefit of both higher education consumers and providers.

Oral Presentation: Room 350, 9:00 - 10:15 am

COLLEGE OF EDUCATION

Leadership and Counseling

Dahlia Afr
Dr. Ronald Flowers
Maintaining Religiosity in Private Muslim, Jewish, & Christian Schools
The purpose of this proposed study is to understand how parochial schools of different faiths maintain their religiosity. Due to the separation of Church and State, parochial schools in the U.S. have been established to socialize a community's children into their own religious and/or cultural belief systems. The importance of these programs is in assisting parents in developing their children's religious identity. This study endeavors to apply Institutional and Cultural Theories to examine private Muslim, Jewish, and Christian schools' efforts to do so via participant observations, surveys, interviews, and the assessment of policies, curriculum, and other relevant data.
Oral Presentation: Room 330, 1:15 - 2:30 pm

Carlton B. Bell
Dr. Ella Burton
Access Granted: Digital Literacy and it's Impact on Identity and Achievement of Black Males
Scholars and researchers have spent much time over the last few decades trying to figure out why there is a lack of achievement among many students from at-risk populations (specifically Black males) when compared with their white counterparts. Conversations surrounding equity, culturally competent teaching methods, and policies such as the No Child Left Behind Act provide some insight on how to increase academic achievement among this group, but there is still no definitive evidence or clear picture as to the obstacles that hinder the achievement among students in this group. In an increasingly technological society, one in which students are expected to compete not only nationally but globally as well, students of color are lacking technological/digital literacy skills needed in order to compete with their peers. How these students see themselves in the scheme of education, future professions, and academia is important to the development of their self-perceptions. This study is expected to reveal data that provide validity to the circumstances of the life and identity of the Black male students, which can give insight into combating these obstacles.
Oral Presentation: Room 330, 2:45 - 4:00 pm

Jamie Brooks

Dr. Ella Burton

What type of behavior transforms a toxic school climate into a positive school Environment

When I joined the school team as the assistant principal, I felt a level of uneasiness from the staff. The staff did not seem to be comfortable with the day-to-day decisions of administration. Also, the teachers did not appear to be motivated to challenge the students academically. A large number of students are not friendly, nor are they excited to be in school. I decided to administer a survey to the staff and students. The staff survey questions are designed to identify concerns the teachers may have with administration, students, and parents. The student survey questions are designed to identify concerns the students may have with teachers, administrators, and their fellow students. The results of the survey indicated that the high school lacked caring and commitment. The lack of trust teachers had for administration made it difficult for them to do their best in the classroom. The survey also revealed that students did not feel that staff cared about their wellbeing. I learned that effective communication between administration and staff is paramount in increasing student achievement. I also learned that once students feel cared about and appreciated, they perform academically at much higher levels.

Oral Presentation: Room 330, 1:15 - 2:30 pm

Kerri Burchill

Dr. Gary Marx

A View into Faculty Development

Little is understood about the processes and practices novice professors use to develop the pedagogical skills needed to deliver quality education. The current literature regarding professional development in higher education provides ample insight into effective facilitation, yet comparably little, if any, into the activities novice professors identify as helpful in developing their pedagogical skills. Recognizing a gap in the professional development literature, Kreber and Brook (2002) assert " . . . actual examples of educational development activities are harder to find than suggestions on how to conduct them" (p. 99). Through a deeper understanding of the processes and practices that novice professors use, mentors, leaders, educational developers, and others helping novice professors may become more effective at providing support. This presentation will discuss historical approaches to faculty development, depict novice professors' stages of development, and leave audience members contemplating the ways in which they and their colleagues develop.

Oral Presentation: Room 320, 10:30 - 11:45 am

Nick Ceglarek
Dr. William Price
Investigation Between MDE's School Ranking System and the School's Percentage of Economically Disadvantaged Students

Beginning in 2010, the Michigan Department of Education (MDE) developed and implemented a new accountability system. In response to the U.S. Department of Education's "Race to the Top" program, the MDE began rank-ordering every qualifying school building based upon that building's achievement index, improvement index, and gap index in all subjects and grade levels tested. This "Top to Bottom" ranking has become the definitive measurement of a school building's effectiveness, with significant sanctions placed on schools that find themselves at the bottom of the list. Many question the connection between a school building's ranking and poverty. During this presentation, analysis will be   shared displaying that a statistically significant relationship exists between a school building's "Top to Bottom" ranking and that school's percentage of economically disadvantaged students. Additionally, a new model will be shared that factors in a school building's ranking when comparing similar school buildings with the same percentage of economically disadvantaged students. This new model allows state policymakers to identify an acceptable level of correlation between a Michigan's school's "Top to Bottom" ranking and the school's percentage of economically disadvantaged students.
Oral Presentation: Room 301, 1:15 - 2:30 pm

Jordan Clark, Quentrese Cole and Erica Ogburn
Dr. Jaclynn Tracy
Educational Investment for Minority Students (E.I.M.S)

Blacks/African Americans, Asian Americans, Hispanics, and Native Americans are some of the commonly identified minority groups, but do you consider women as a minority group also? All students are faced with challenges that arise in higher education, but contemporary literature and many longitudinal studies report that minority students in particular have unique needs across campuses and are facing challenges acclimating to post-secondary education systems. Academic preparation, financial support, inclusion, and continuation are a few of the challenges faced. It is imperative for student affairs professionals to provide student programming, resources, and support for these students. Creating a program centered on the needs of minority students can help students become acclimated to campus life and develop professionalism. The student is not responsible for making this adjustment alone; it is the task of everyone who is connected to the University to promote student success. Therefore, we propose the implementation of a student minority-mentoring program entitled Educational Investment for Minorities Students (E.I.M.S). E.I.M.S is an opportunity for professionals within campus to guide new, transfer, and international minority students towards their educational achievement. Our main thrusts will promote minority success and readiness.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Matthew Dick
Dr. John Dugger
The potential application of a career counseling model to address dissatisfaction in romantic relationships.
The Theory of Work Adjustment (TWA) is a trait factor career-counseling model that addresses the degree to which an individual is a good fit within an employer's workplace. If the person and the work environment are a good fit, they are described as being in correspondence. If the fit is less than ideal, a state of discorrespondence exists, and the employee or the employer may act to attempt to correct the dissatisfaction through adjustment behaviors. The process model of the TWA identifies four separate adjustment styles used by employees and employers to resolve the discorrespondance. This article details a potential application of the TWA process model to the field of couples and family counseling in which the adjustment styles of flexibility, activeness, reactiveness, and perseverance may adequately correspond to perceived dissatisfactions by individuals in a relationship. The concluding implication of this article is that additional research is warranted to examine the accuracy of this application of the model.
Oral Presentation: Room 320, 1:15 - 2:30 pm

Linda Foran
Dr. Barbara Blayaert
Principals' Perceptions and the Law
For a final doctoral study of principals' perceptions regarding the implementation of the Michigan School Reform Law, a questionnaire was sent to Michigan principals in 2014. Three themes, identified from a 2013 qualitative study, were used to drive item design in the questionnaire. A final open-ended question led to additional coding and supported two of the previously identified themes, as well as identifying two additional themes. Examining the newly identified themes determined though the open-ended question, questions regarding the additional perceptions by Michigan principals began to surface. Was there a relationship between the new themes and the items designed in the questionnaire? Was additional research required to explain the results? The purpose of this study is to identify and develop an understanding of the relationships between the perceptions of principals regarding the Michigan mandatory evaluation policy and job satisfaction, self-efficacy, and stress as principals navigate the roles of building manager, instructional leader, and policy stakeholder. This research study is culminating with additional insights into the challenges and rewards Michigan principals experience daily and suggestions for future research on the role of the principal as a policy implementer and stakeholder.
Oral Presentation: Kiva Room, 2:45 - 4:00 pm

Megan Gore
Dr. Ronald Flowers
The Digital Self: A Qualitative Approach to Studying Female College Students Use of Social Media
The purpose of my proposed study is to understand how female college students use social media and its relationship to identity development. As a faculty member and aspiring educational leader, I value the importance of understanding how social media plays a role in students' lives. Researching social networking use pertaining to college students' identity development may give us a richer understanding of how students consume social media. Many studies have been conducted about how broadcast forms of media influence people, with the importance of needing to become critical consumers of the various media. With the continuously changing social media platforms, there is little research that sheds light on social media use among female college students. My goal is to conduct a qualitative research study that examines college students' social media use by studying social media patterns, routines and rules. In the preliminary stages of research, I am considering an exploratory case study to provide a framework for understanding social media use among female college students pertaining to identity development.
Oral Presentation: Room 300, 1:15 - 2:30 pm

Cory R. Hamilton
Dr. Liz Broughton
Work & School: The Effects of Employment on Undergraduate Success in College
The cost of higher education continues to rise, and students are working more hours to make ends meet. As increased numbers of undergraduate students choose to work while in college, it is important to know the effect that employment has on their academic success. Surprisingly, college faculty, staff, researchers, and students indicate mixed results for working during college. The purpose of this presentation is to review the literature, identify factors that influence academic success for working students, and propose a study to investigate the policies, programs, and practices that lead to academic success for working students.
Oral Presentation: Room 301, 1:15 - 2:30 pm

Matthew Hancock, Janelle Fosler and Christopher Van Wasshenova
Dr. Benita Goldman
Healthy Horizons: Addressing New Issues in Student Wellness Abroad
There is a disconnect between what universities provide to study-abroad participants and the actual issues they now face in a more globalized world, where health and safety adapt much more quickly than university approaches to this topic. Further, the

destinations attracting US students have shifted from Western Europe and Oceania to developing countries, where health issues and common infections are vastly different. As the concern of college student safety while abroad continues to re-surface in media headlines, it has become a priority at the national level.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Robert Howard
Dr. Jaclynn Tracy
Does Reader's Workshop Positively Affect High Stakes Testing?
The purpose of this study is to evaluate the effectiveness of Tucker Elementary Reader's Workshop program on the NWEA "high stakes" assessment. In assessing the effectiveness of the Reader's Workshop model, this causal comparative study examined 100 kindergarten students in two consecutive years. The first year was not taught with the Reader's Workshop model, while the second year was taught using the Reader's Workshop model. The first year students were taught using the Reading Street reading series published by Scott Foresman. The second year was taught using the Reader's Workshop model. Each group was given a NWEA pre-test at the beginning of the year and a post-test at the end of the year. Findings indicate that kindergarteners taught using the Reader's Workshop model outscored those using the Reading Street series across the span of this study.
Oral Presentation: Room 330, 1:15 - 2:30 pm

Sharon Irvine
Dr. Ronald Flowers
District Consolidation as a Viable Financial Alternative: Ypsilanti Public Schools and Willow Run Community Schools
Michigan public schools are in financial crisis. The state is exploring many different ways to handle this crisis. One of these ways is the consolidation of two districts by constituent vote. The purpose of my study is to understand the Ypsilanti Public Schools and Willow Run Community Schools consolidation that happened on July 1, 2013. This historical case study will examine the historical, institutional, and organizational elements that led to the consolidation. It will also examine how the consolidation was managed and the impact that it had on the community. This qualitative study will include document review, interviews, and historical text. This research should provide valuable information that will help decision-makers evaluate consolidation as a viable financial alternative.
Oral Presentation: Kiva Room, 2:45 - 4:00 pm

Maria A. Jackson-Smith
Dr. Ella Burton
Black Men in Exile: The Relegation of the African American Male to the Outskirts of Higher Education - An Excerpt
This research project is an excerpt from a qualitative study centered on nine African-American males between the ages of 26 and 49 who were raised in an urban environment. The larger study evaluates their life experiences from early childhood to the present and the life choices of three men in their middle to late 20s, 30s, and 40s. One subject in each group completed at least a baccalaureate degree during the traditional college age years of 18 to 25, one attended a selective institution but did not matriculate during the college age years, and one decided to forego college attendance altogether. This research project focuses on the subjects in each age group who completed a baccalaureate degree by age 25. Subjects participated in an hour-long interview and answered open-ended questions regarding four periods of life: early years, school age years, college age years, and current life. The findings, which include links between family structure, educational experiences, and personal goals of all three subjects, will help to identify a success model for parents and educational leaders to follow in an effort to provide resources that help to increase the admission and matriculation of African-American males at selective American high education institutions.
Oral Presentation: Room 330, 2:45 - 4:00 pm

Bo Young Jun
Dr. Yvonne Callaway
History, Pedagogy, and Theory of Online Learning and Future Trends in K-12 Classrooms
Technology has become an important component in different parts of human life, including education. Computers, projectors, record players, and other media have been used in the classrooms for decades, and the presence and the usage of advanced technology is no longer seen as a breakthrough. In fact, online classes have already become a part of school curriculum and one of the means of earning credits in schools. Still, many educators are uncertain about the effect of online learning compared to the traditional classroom learning. This project will explore and present the history, pedagogy, theory, and the trend of online learning in K-12 classrooms.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Julie M. Kissel
Dr. Ronald Flowers
Community College Support Structures: Facets and Functions
The purpose of this proposed study is to understand the academic support structures and processes available to students at a community college. This qualitative study may

consider conceptual frameworks by Scott, Thompson, Parsons, and Schein to define the normative values and structures that create, stabilize, and legitimize these institutional structures. Using a case study approach, I will investigate the four centers and/or departments at Washtenaw Community College: Writing Center, Academic Skills Center, Math and Science Center, and Learning Support Services. Understanding the academic support structures goes to further the knowledge of the role the community college, both historically and presently.
Oral Presentation: Room 350, 9:00 - 10:15 am

Courtney Lewis
Dr. Ronald Flowers
Athletic Training Education Reconsidered
The purpose of this proposed study is to understand how athletic training students perceive their clinical and classroom experiences. Athletic training education is experiencing a time of change with a new standard set forth by the Commission on Accreditation of Athletic Training Education centered around a first-time pass rate of the certification exam, as well as a push for undergraduate bachelor's programs to convert to entry-level master's programs. While this study is in the preliminary stages, it is my goal to use the SECI model by Nonaka and Takeuchi to understand how athletic training students create tacit knowledge, and to understand the preparation of students to become certified athletic trainers.
Oral Presentation: Room 352, 2:45 - 4:00 pm

Cheyenne Luzynski
Dr. Ronald Flowers
"Remember the Ladies" A Historical Analysis of Women's Emergence into Intercollegiate Athletic Leadership
The notion of an invisible barrier often referred to as a glass ceiling, inhibiting women from intercollegiate athletic leadership, head coaching, and administrative positions, has been explored in recent years. The discrepancy between male and female intercollegiate coaches and administrators has engendered a conversation on equity and leadership. The purpose of this proposed research is to understand the historical development of intercollegiate athletics as it relates to women's leadership as coaches and administrators. This study seeks to identify and understand the institutional structures that have evolved over time and have shaped, and continue to shape, the role of women in college sports. In the initial stages, this study will use qualitative methods to understand the socio-historical and cultural context to the phenomenon. This research fills a void in the literature by approaching the problem using conceptual frameworks derived from the field of institutional and cultural theory.
Oral Presentation: Room 302, 2:45 - 4:00 pm

Linda Mills
Dr. Ronald Flowers
Sabbatical Utilization Study
The purpose of my proposed study is to develop an understanding of the types of activities that architecture faculty members choose to undertake while on sabbatical leave of absence. Sabbatical leaves have been a higher education practice since the 1880s; how faculty members conceptualize the sabbatical leave and utilize the absence is a largely unexplored area of research. Architecture is a professional multidisciplinary field that embeds mechanical-technical and design-artistic expertise. A review and analysis of the existing literature on architecture education and sabbaticals, as well as documents, reports, or artifacts produced by architecture faculty members, will be undertaken using a constructivist grounded theory approach. Conclusions based upon this analysis may highlight how current sabbatical practices of architecture faculty members reflect a synergistic alignment with the needs and interests of each faculty member and may form the basis of a theory of sabbatical utilization.
Oral Presentation: Room 320, 10:30 - 11:45 am

Michael Parise
Dr. David M. Anderson
Coping Strategies of Female Student Veterans: Collegiate Transitions and Persistence
A qualitative study of female student veterans, their role conflicts, and coping strategies during their collegiate transition and persistence while utilizing VA education benefits.
Oral Presentation: Room 330, 2:45 - 4:00 pm

Michelle Ruh
Dr. Ella Burton
During Times of Uncertainty the Need for District Vision and Collaboration Are a Priority
With student enrollment decreasing in the past five years, a decreasing fund balance, and a new superintendent, the school district being studied was faced with the decision to continue in survival mode or to find creative ways to reinvent itself. The school board created a plan to close one school building and redesign the school district with a new grade configuration and reassigned staff positions. With the challenge of redesigning the district, the school board moved forward with a bond proposal. Administrative staff and teaching staff were reassigned, grade levels were relocated, and the focus on a district vision became the priority. Administrators and the school board collaborated on recreating the district and focusing on rigor,

relevance, and relationships. Staff members participated in training on the 3 R's and were rejuvenated with a fresh start and a new focus.
Oral Presentation: Kiva Room, 2:45 - 4:00 pm

Quatez Scott
Dr. Raul Leon

From Cell Blocks to School Jocks: A Service-Learning Program of College Athletes Working with Incarcerated Juveniles
The purpose of this service-learning program is to develop a constructive athletic camp used to show incarcerated youth alternatives to the current behavior they have displayed and ways to increase their thinking patterns to make better choices in the future. The purpose in choosing athletics is three pronged: 1) to engage a subpopulation of students on campus with a service-learning opportunity that engages them in their own interest; 2) to create a bridge that connects delinquent adults, not only with young men and women close in their age range, but ones who primarily come from the same neighborhoods as many of them; and 3) to help convey life skills learned in sports to this specific interest group from mentors who experience these learning curves on a daily basis. An athletically-engaging service learning also provides key skills that are influential in the development of students and young men and women alike, such as critical thinking, ethics, civic engagement, an understanding of one's self, cultural competence, and knowledge of the world around them and how they fit in that picture.
Oral Presentation: Room 352, 2:45 - 4:00 pm

Adrienne Seeley and Kathryn Watson
Dr. Irene Ametrano & Diane Parfitt

Self-Reflection and Peer Mediation
Based on literature that supports the effectiveness of self-reflection on student learning, the authors discuss the implementation of a peer mediation training program that engages students in self-reflection. The authors discuss results, limitations, and suggestions for future evaluation.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Lauren Shackleford and Simon Dixon
Dr. Cheyenne Luzynski

Pilot to Permanent: Developing Meaningful Programming for Our Students
The poster presentation will discuss various phases of the development, execution, and evaluation of the Brown Bag Series program that is run through the Women's Resource Center. The purpose of the Brown Bag Series is to provide women-identified faculty, staff, and students with education and resources on a broad spectrum of

issues relevant to their individual lives. Topics include women of color, slavery, equal pay, women in politics, eating disorders, and many others. The series will provide women a safe space to discuss these issues. Additionally, the program is intended to help connect our campus with workshops, speakers, and activity that will empower women-identified individuals to be more knowledgeable and engaged citizens of our community. As the Brown Bag Series comes up on its third semester, our poster will address its progress as a program constantly working to address the needs of our women-identified individuals on campus. My predecessor for the program, Simon Dixon, will provide the most current update on the Brown Bag Series and what direction it is taking.

Poster Presentation: 310 A and B, 1:15 - 2:45 pm

Patricia Sue Wanamaker
Dr. Ella Burton
Middle School Student Learning Connections
The purpose of this research is to determine the connection of different variables in a student's life to his or her learning. The research for this project involves what motivates students in these grades to learn and/or hampers their learning, through a variety of means such as surveys, personal interviews/conversations, and parent/teacher interactions. Other important variables researched included environmental conditions, family demographics, student study habits, and individual personality traits. Through this research, parents, teachers, and administrators will be able to assist students in recognizing these different variables and work with them to be successful. Students will also be able to identify how to move forward in their lives to be successful.

Poster Presentation: 310 A and B, 1:15 - 2:45 pm

Carol Weaver
Dr. Ella Burton
Stop the Hemmorage of DPS
Detroit Public Schools needs to create a 21st-century learning environment with the objective of winning back critical market share necessary to stabilize the district long term. This district must change or else risk the chance of becoming extinct. DPS must reinvent itself; following is a proposed plan of how DPS can change and win back market share.

Oral Presentation: Kiva Room, 2:45 - 4:00 pm

Special Education

Janine Bauer
Dr. Gilbert Stiefel
Identifying and Teaching Reading to Students with Dyslexia
Teachers are not prepared to identify or teach reading students to students with dyslexia. Misconceptions are common about dyslexia.
Oral Presentation: Room 350, 2:45 - 4:00 pm

Sharon Cook
Dr. Derrick Fries
Positive Effects of Exercise for Individuals with Asperger's Syndrome
Some individuals with developmental disabilities may engage in behavior that can present significant challenges and obstacles in an educational setting for both students and teachers. Such children display stereotypic or aggressive behavior that prevents academic engagement (on task behavior) as well as appropriate responding. This makes it difficult for the child to learn. Although there are a wide variety of treatment strategies available, there is no agreement to date as to which treatment modality is most effective in treating such behaviors. A specific intervention that is effective in reducing such challenges as well as improving academic behavior and social communication is exercise/physical activity used as an antecedent. Research has indicated that at least 10 minutes of vigorous aerobic exercise—while maintaining 60-80% of their heart rate—is needed to see reductions in challenging or stereotypic behavior. If individuals with Asperger Syndrome increase their physical activity levels, will their academic achievement as well as their ability to focus improve?
Oral Presentation: Room 352, 2:45 - 4:00 pm

Aisha Darnell
Dr. Linda Polter
How Does Auditory -Verbal Therapy Compare to Therapy in Public Schools?
The efficacy of Auditory-Verbal Therapy ® (AVT) has been proven over the years. This type of therapy focuses on teaching children to learn how to speak through listening. The therapist's job is to give parents the tools and techniques during therapy sessions so that they will be able to replicate the therapy in the home setting. It has been recorded that this therapy has improved the lives of families with children with hearing impairments. However, AVT is expensive and is not available to some children who would benefit from it. Children who do not have access to AVT receive therapy by a certified teacher of the deaf in public schools. The purpose of this study is to compare the speech therapy implemented by a certified Auditory-Verbal Therapist (AVT) to a

certified teacher of the deaf in the public schools. The researcher will question a certified AVT, two public school teachers, and a cochlear implant recipient regarding techniques, procedure, environment, and efficacy of the therapies. The participant with a cochlear implant will be asked to compare the therapy in public schools versus the therapy she is given from the Auditory-Verbal therapist.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Anna Hesson
Dr. Bill Cupples

An Investigation of the Language and Communication Characteristics Observed in Children with Smith-Magenis Syndrome

Smith-Magenis Syndrome (SMS) is a recently identified genetic disorder arising from the deletion or mutation of part of the 17th chromosome. Children with SMS exhibit deficits in communication and language, but systematic studies using objective measures are lacking. This qualitative study examined the speech and language needs exhibited by children with SMS through parent surveys and interviews, and established current speech language pathology intervention strategies being used. Results identified commonalities and differences in both language and communication among participants. Future research should continue to confirm precise language and communication needs of individuals with SMS that will help with the identification, intervention, and overall awareness.

Oral Presentation: Room 302, 10:30 - 11:45 am

Candice Marrin
Dr. Ana Claudia Harten

How Do Speech-Language Pathologists Select Apps for Use in Therapy?

High-technology learning modalities are becoming increasingly prevalent in people's lives and infiltrating the field of Speech-Language Pathology, particularly the apps. The existing knowledge base of downloadable apps for therapy is limited. This study will investigate which factors SLPs take into account when looking for apps for therapy, as well as specific apps characteristics they consider important when selecting apps. The data collected in this research will assist SLPs who are considering using apps in their practice by outlining factors that contribute to a successful use of apps in therapy.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Leah Miller
Dr. Christine Scott
Special education in Michigan: Are juveniles in detention being properly served?
This study is an investigation into Michigan juvenile detention facilities regarding staff awareness of and compliance with state and federal laws involving screening of and programs available to students with special needs. Directors and assistant directors of all detention facilities in Michigan were sent a survey with questions including demographic data, services available, staff qualifications, barriers to success, and ideas for improvement. Surveys returned revealed many limitations (quality of rehabilitation and education services, funding, qualifications of direct care staff, and family involvement), as well as many strengths (availability of special education programs and educators and training opportunities for teaching staff).
Oral Presentation: Room 350, 2:45 - 4:00 pm

Olivia Rhoades
Dr. Ana Claudia Harten
Acting on the Autism Spectrum: Using drama to promote social skills for children with autism.
This study explored the benefits of a weeklong drama camp on the socials skills of children with autism spectrum disorder (ASD), through the perspectives of eight parents and four instructors. Data collection included pre- and post-camp questionnaires and semi-structured interviews. The results revealed that daily intensive exposure to drama and theatre can be a viable option to promote the development of social skills among children with ASD. The activities seemed to promote particular gains in caregiver/peer interaction, adjusting to routines, eye contact, and social perceptions/cues. Additionally, results indicated that children with greater social communication needs and those with more extensive exposure to the arts seemed to make stronger gains in social skills. Finally, the results of this study suggest directions for future studies in the area of using theatre to develop social skills and highlight the importance of advocating for the inclusion of children with ASD in theatre arts programs.
Oral Presentation: Room 352, 1:15 - 2:30 pm

Jennifer Banks
Dr. Ethan Lowenstein
An Examination of the Experiences of African American High School Students in the Mathematics Classroom.
This presentation will focus on the experiences of African-American high school students in the mathematics classroom. The initial themes identified through student interviews are discussed. Research suggests that there is a significant achievement gap between African-American students and their White counterparts in the mathematics classroom. Martin, Gholson, and Leonard (2010) argue that in the 21st century, a conceptual and procedural understanding of mathematics is necessary in order to build social capital. This study will add the body of knowledge on African-American high school students' mathematics achievement. Preliminary reviews of the data indicate that student engagement and teacher-student relationships influence African-American high school students' achievement in the mathematics classroom.
Oral Presentation: Room 320, 9:00 - 10:15 am

Kristen Barnes-Holiday
Dr. Valerie Polakow
The Marginalization Experiences of Low-Income Female Adult Literacy Learners
Adult illiteracy constitutes a crisis in the U.S. society that has been historically ignored. The purpose of this qualitative life history-focused dissertation study is to explore the lives of low-income, female adult literacy learners and to understand the challenges and barriers that they have encountered in their lives. Situating literacy as the nucleus of this study, the educational matriculation of these women will be examined in conjunction with the life struggles that such women encounter as they attempt to move beyond the confines of illiteracy and poverty. This study also examines how specific public policies and practices have impacted their personal and educational goals. By investigating the intersections between female adult literacy learners' matriculation through adult basic education programs and the barriers that hinder such women from becoming upwardly mobile and self-sufficient, the goal is to gain a more in-depth understanding of how structural barriers and institutional policies and practices impact their educational pursuits. Emergent themes from this ongoing study include institutional and gender barriers, unmet child-care needs, family poverty, and lack of support services. By giving voice to the women, this study may contribute to a deeper understanding of the conditions that give rise to, and perpetuate, illiteracy.
Oral Presentation: Room 301, 1:15 - 2:30 pm

Sandra Becker
Dr. Alane Starko
Connecting Teaching Practice to Student Efficacy in Undergraduate Mathematics
Academic efficacy plays a critical role in student success in math learning at all levels due to its impact on persistence, motivation, and academic performance. This research aimed to connect student efficacy with key aspects of the instructional environment in six undergraduate math classes. Student surveys indicated significant differences in mean efficacy between classes, as well as significant differences in student perceptions of teacher behavior between the efficacy groups. Findings from observations revealed that instructors in higher efficacy classes tended to have more personal connections with students and used more positive and encouraging language, particularly in response to student errors. The research methods and additional findings will be discussed.
Oral Presentation: Room 320, 9:00 - 10:15 am

Sandra Becker
Dr. John Palladino
A Survey Study of Faculty Perspectives on Teaching and Working with Students with Disabilities
Students with disabilities in higher education often face a number of challenges, including the need to advocate for themselves with administrative offices and especially with faculty. Faculty attitudes and behaviors are of critical importance in order for students to gain access to knowledge and have fair opportunities to demonstrate their learning. This study aimed to develop a quick survey instrument to assess faculty dispositions and behaviors toward students with disabilities. The survey was completed by 127 faculty members, and the results included findings that faculty members with low teaching efficacy were less likely to endorse ADA-related items. The brief survey instrument, key findings, and implications will be discussed.
Oral Presentation: Room 350, 2:45 - 4:00 pm

Audrey Bernard
Dr. Valarie Polakow
Perspectives on Inclusion
The concept of inclusion is central to many special education laws, policy statements, and educational philosophies. However, a clear definition is not provided in any provision of the Individuals with Disabilities Education Improvement Act or Roles and Responsibilities of Speech-Language Pathologists (SLPs) in Schools, nor has a consensus of the definition of inclusion been established by scholars. Thus, speech-language pathologists must individually interpret this concept, leading to debate and division in the field of special education. Due to the lack of clarity and direction

provided on the topic of inclusion, this qualitative, ethnographic study sought to better understand how three clinical first-year SLPs employed in Michigan public schools understand, practice, and feel about inclusion. Themes that emerged from the interviews suggested a general support for inclusion that did not translate into practice due to lack of preparation in higher education, as well as a paucity of inclusionary experiences and models in the participants' education.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Nigora Erkaeva
Dr. Rebecca Martusewicz
Inclusive Education for Ecological and Social Sustainability
The question of what education is for and what kind of communities it needs to prepare students always stands acute. When there is a conversation about education, it is mostly about education taking place in a structured format within certain educational institutions. However, in this paper I will not look at education as a process within educational institutions but the education that takes place in everyday life and connects life experiences of every community member, human and non-human, to create an ecologically, economically, and socially healthy community. As Spring (2009) quotes the sentiment of First Nation elder, "The holistic quality of knowledge implies that isolating pieces of experience and trying to make sense of them apart from the environment that gave rise to them flies in the face of reality and is bound to lead to frustration" (p. 147). Thus, I argue that education needs to be connected to our everyday life and emphasize the interconnectedness of human and non-human world.
Oral Presentation: Room 330, 10:30 - 11:45 am

Kimberly Freeman
Dr. Robert Carpenter
Achievement or Opportunity Gap? How Systemic Factors Influence Inequity of Math Education
Disparities in math test scores attributed to race and socioeconomic status have existed for decades. Socially these disparities are often framed as an "achievement gap," which leads many to believe that the responsibility for learning rests solely on the shoulders of lower-performing students. However, given the extensive history of disparate scores, the focus of responsibility should include systemic conditions that directly impact students' ability or opportunity to learn. This presentation will explore four possible systemic factors that may contribute to the disparities in math scores: 1) teacher quality (identified by training, experience, efficacy, and perceptions of student ability); 2) cultural tracking practices which lead to the overrepresentation of African Americans in remedial math courses; 3) cultural incongruity between subject matter, teachers, and students; and 4) inadequate resources that create inequitable opportunities. I will review how these systems influence student math performance

and examine the gap of achievement through the lens of inequitable environments. Finally, I will discuss opportunities for success within urban schools and implications toward creating equitable educational systems.

Oral Presentation: Room 320, 9:00 - 10:15 am

Kristi J. George

Dr. Rebecca Martusewicz

An EcoJustice Analysis of Nursing Education

Nurses are educated within an ideological structure that is full of modernist discourses such as mechanism (the world is like a machine), androcentrism (man is at the "center" and superior and dominant over women), and anthropocentrism (humans holding the spot at the "center" where they are superior and dominant over all other beings). For example, Fawcett's nursing metaparadigm supports discourses that promote exclusivity to the human condition. By assuming that the discipline of nursing should focus care solely on humans, we separate ourselves from the more than human beings, as anything other than human is passive and unworthy of nurturing or reverence. This rationalization is dangerous to our own survival as we position ourselves above all others and naturalize violence and oppression toward the things that do not resemble the "all knowing" humans. Thus what is outside of human is present to serve human. By tracing the history of nursing education through an EcoJustice analysis and exploring the discourses of nurses who challenge the status quo in nursing education, the modernist discourses, along with the assumptions that support them, will be exposed in order to bring about transformation in nursing education.

Oral Presentation: Room 301, 10:30 - 11:45 am

Caleb Newman, Mike Seiler and Leanne Shultz

Dr. Michael McVey

Training Teacher Candidates to Teach in Online Learning Environments: An Analysis of Online Teaching Projects

The skills required to teach within an online learning environment are complicated, and at least one Midwestern state requires entry-level teachers to be competent in online classrooms. A teacher-training program in that state instructs teacher candidates to use a Learning Management Systems (LMS) to develop a thematic unit. This study investigated the effectiveness of preparing teacher candidates for online teaching. Through a survey, interviews, and a review of student projects, the researchers evaluated this aspect of the teacher-training program. Despite slight differences in how professors taught their classes, the researchers concluded that although the pre-service teachers believed they were ready to teach online after the course, the instructional effectiveness of the candidates' final projects was poor, which suggested they might not be ready to teach students online. They attributed this weakness to the lack of a prerequisite curriculum methods course.

Oral Presentation: Room 350, 1:15 - 2:30 pm

Heather Nicholson
Dr. Valerie Polakow
Voices of Zero Tolerance
Under the guise of school safety, zero tolerance policies were implemented under the Gun Free Schools Act (1994) and have had devastating impacts on students since then. Zero tolerance policies have resulted in the violation of students' constitutional rights and the increased militarization of schools. Accompanying zero tolerance policies has been the increasing number and disproportionate nature of suspensions, expulsions, and other forms of discipline issued to largely African-American youth, the beginning of what many have termed the School-to-Prison Pipeline. Given both the problematic nature of zero tolerance policies and the paucity of student voice on the subject, the purpose of this qualitative study is to create a counter-narrative in which students impacted by zero tolerance policies can tell their side of the story. Though much has been written on the impact of zero tolerance policies, the vast majority of the literature comes in the form of policy analyses, silencing the voices of those whom hegemonic policies impact the most: the students. As such, this study seeks to give voice to students and understand the impact of zero tolerance policies from the perspectives of our most vulnerable youth.
Oral Presentation: Room 300, 2:45 - 4:00 pm

Katja Robinson
Dr. Valerie Polakow
Child Care Needs Study
Eastern Michigan University has a large number of student parents, many of whom are low-income single parents for whom higher education is a critical pathway out of poverty. This study was conducted to address the neglected needs of this non-traditional student parent constituency, who confront many barriers and challenges related to affordable, accessible, and high-quality child care as they struggle to succeed academically while parenting their children. In order to investigate these challenges, a Child Care Needs Survey was conducted in September 2013 with follow-up focus groups and interviews with a sub-set of survey respondents. The findings illuminate the child-care crisis that EMU student parents face, and the academic and social costs incurred. In addition to extensive quantitative data, the open-ended survey questions, focus groups and individual interviews provide a window into the stressful and complex lives that EMU students encounter daily. Struggling to find affordable, flexible and high quality child-care students reported lack of study time, missed classes, failing an assignment, stress and financial concerns. The student recommendations emerged directly from the voices of student parents, and proposed action strategies provided the provost's office with a road map to create a more inclusive learning community for all students.
Oral Presentation: Room 330, 2:45 - 4:00 pm

Walter M. Seiler III
Dr. Joe Bishop

Instructors' perceptions of the benefits of students using primary sources in teaching history online

Using primary sources to teach history is a fairly well established teaching practice; however, few studies have been conducted on the use of primary sources in online learning. With the recent surge in online learning and the increasing emphasis on using 100 and 200 university level history classes to teach the critical thinking learning objectives for the curriculum, it is an area worthy of additional research. This research, which included interviews of four university instructors, revealed that some interesting trends are emerging. Students are less prepared for college due to their underdeveloped critical thinking abilities. Despite this, they are more motivated and are taking more of ownership of their educational experience. History teachers are moving away from textbooks and toward primary sources and Problem Based Learning (PBL) techniques in the classroom, but struggle to integrate primary sources and PBL online.

Oral Presentation: Room 350, 9:00 - 10:15 am

COLLEGE OF HEALTH AND HUMAN SERVICES

School of Health and Human Preformance

Kathryn Blaharski, Jaimie Howard, Kayleigh Nelson, Matthew Tiggelaar, Blake Brennan and David Trevisam
Dr. Frank Fedel
3D Printing and its application in expanding access to facial prostheses
Prosthetists can use the methods developed by this project to create an anatomically correct device for their unique appearance that is lower in cost than traditional methods.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Kortni Evans
Dr. Kay Woodiel
Antibiotic Resistance and The Social Ecological Model
The purpose of this study was to research antibiotic resistance and develop an intervention to address this public health concern. Antibiotic resistance is one of the world's most pressing public health problems, according the Centers for Disease Control and Prevention (CDC). To address this problem, an intervention targeting parents of children 15 years or younger was designed using the Social Ecological Model. This intervention aims to reduce the overprescribing of antibiotics to children 15 years or younger.
Oral Presentation: Room 302, 1:15 - 2:30 pm

Erica Smith
Dr. Andrew Cornett
Aging Elite Swimmers: Evidence of a Changing Sport
Maturational pace has been shown to influence motor performance during adolescence with a slower pace favored as the age of the population under consideration increases. The maturational pace of elite female swimmers—as determined by age at menarche—has slowed since the late 1960s. The purpose of this study was to determine whether the age of this population has also increased since this time. We calculated the mean age of all female competitors at each U.S. long course swimming championship from 1969 to 2012. Statistical analysis revealed a significant increase in the mean age of elite female swimmers from 15.77 years (95% CI, 14.73 to 16.80 years) to 19.13 years (95% CI, 18.93 to 19.33 years). Today, elite female swimmers represent a different, developmentally distinct population than they did four decades ago, and this change has affected the traits—such as maturational pace—associated with competitive success in swimming.
Oral Presentation: Room 352, 2:45 - 4:00 pm

Emily VanWormer
Dr. Kay Woodiel
The Spirit Inside: Strategies and suggestions for a suicide prevention program for AI/AN male youth
American Indian/Alaska Native (AI/AN) males have higher risk of suicide and socio-emotional issues such as bullying and substance abuse than their white cohorts. Overall, suicide is the second leading cause for 10-35-year-olds and is, on average, four times higher in males throughout their lifespan. The Indian Health Services identifies several underling societal issues that influence the risk of suicide such as poverty, lack of economic opportunity, limited educational alternatives, community breakdown, familial disruption, and stigma. Youth on and off the reservations face discrimination and lack strategies for coping. A holistic after-school program design using the social-ecological model was developed to address these concerns and target the 4th through 6th grade age group to instill intervention skills, resilience, and self-efficacy before young AI/AN males reach high school. A brief literature review focusing on cultural relevancy and health education theory was conducted, and a preliminary curriculum outline has been completed. Modeling after programs such as Girls on the Run, The Spirit Inside will use discussion-based learning, mentorships, physical activity and team building to develop skills and build community within the school and surrounding area for years to come.
Oral Presentation: Room 300, 10:30 - 11:45 am

Katie Wyman, Ibrahim Ellithy and Dave Rice
Dr. Frank Fedel
Anatomical Models Of Syme's Ankle Disarticulation For Advancement In Medical Education
This project advances educational use in the prosthetic field by creating the bony structure of a Syme's ankle disarticulation. Since approximately 1.8 million people live with limb loss in the United States, and amputation of the leg is the most common amputation, there is need for advanced education. The ability to experience what a Syme's is, without a patient model, is critical to learning. The creation of the bone structure of a Syme's can be used in addition to the silicone model project done by students last year. This bony structure addition to the silicone model would provide the ability to practice palpation of a Syme's on a model with a flesh-like cover, especially since palpation has high importance in proper socket design. The bones for this project will be made from a 3D printed version of a Syme's. After rectification, we will create a mother mold from the 3D print followed by a final casting of the bony structure. We will be building off past femur casting experience and refined techniques to create the most accurate, lifelike model. The desired result is to allow for kinesthetic and visual learning with the use of bony and flesh-like models.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Amanda Belanger and Cheryl Root

Dr. Abbey Marterella

An Exploration of Participation in Parkour: A Phenomenological Study

Parkour is a non-competitive occupation in which participants (or "traceurs") efficiently move within environments using unstructured movement sequences. Previous research primarily focuses on risk associated with participation and traceurs' interpretations of environments. To date, novel, community-based movement occupations receive little attention in occupational science (OS) scholarship. This poster communicates a qualitative investigation of traceurs' experiences with parkour participation via Interpretative Phenomenological Analysis (IPA). In-depth interviews were conducted with male (n = 7) and female (n = 2) participants. In accordance with IPA, investigators analyzed individual transcripts and compared across participants to uncover how participants made sense of engagement. Preliminary findings suggest that the meaning of engagement is connected to a) a sense of communal belonging, b) creating opportunities to alter public perceptions, and c) experiencing creative expression through movement. This study complements existing parkour research, offering new interpretations for consideration. Further, it supports a transactional view of occupation, an emergent concept in OS scholarship.

Poster Presentation: 310 A and B, 9:00 - 10:15 am

Kelly Beversdorf

Dr. Abbey Marterella

Live to dance: A phenomenological study of on line dancing for adults

This poster communicates a phenomenological study exploring the occupation of line dancing. While previous research recognizes multiple benefits of dancing for older women, occupational science (OS) scholarship lacks empirical evidence to support theoretical notions of dance as a transformative occupation. Three female participants were selected from a senior center to participate in in-depth interviews about their experiences with line dancing. Interviews were digitally recorded, transcribed, and analyzed using Interpretative Phenomenological Analysis, an approach designed to uncover how participants make sense of lived experiences. Preliminary findings suggest that the meaning of dance moves beyond health benefits. For these participants, dance served as an occupation that impacted other areas of daily life and acted as a social catalyst. These findings extend dance research and supplement theoretical work within OS, highlighting belonging as central to the meaning of experience. Additional research is needed to further understand dance occupations, particularly with older adults.

Rachael Bloch, Mandy McClain, Paige Scott and Breanna Snyder
Dr. Gretchen Dahl Reeves
Integrated play group program effects on social behavior in preschool children with developmental delays
The Integrated Play Group (IPG) model, developed by Pamela Wolfberg, has been shown effective in improving the play behaviors of children with autism. The IPG model incorporates "novice" and "expert" players to encourage healthy and developmentally appropriate behaviors, such as motivation to play, socialize, and form relationships with peers. The purpose of this study is to determine if this model is beneficial for children with developmental delays and whether improvements in the form and social nature of play are demonstrated within and outside of the playgroups. A single subject interrupted time series experimental design was employed. Two playgroups were conducted twice weekly with a total of three children with developmental delays and five typically developing peers. Outcomes varied for each participant. Generalization to classroom and playground settings was unsupported by data; however, the culminating results revealed gains in symbolic and social play dimensions during playgroups.

Larissa Chakarova and Lindsay Coursen
Dr. Abbey Marterella
Wilderness backpacking: Exploring the lived experience
Wilderness backpacking is a multi-day journey through the backcountry, involving hiking, carrying survival items, and camping overnight. While previous research has investigated the health benefits and concerns of backpacking, research examining the experiential aspects of backpacking is unaccounted for in current literature. This phenomenological study provides a holistic, in-depth understanding of the meaning of wilderness backpackers' experiences. Semi-structured interviews with five experienced backpackers were digitally recorded, transcribed verbatim, and analyzed using Interpretative Phenomenological Analysis (IPA). Preliminary findings resulted in five recurrent themes: escape from the modern world, the multifaceted battle, appreciation of nature, impact of personal perceptions on experience, and life lessons and personal impacts. Consistent with the IPA approach, preliminary findings are depicted through thematic categories, definitions of categories, and sufficient evidence via quotations across all study participants. The investigators suggest that for these participants, wilderness backpacking operated as a servant to achieving and satisfying important personal goals.

Laura Currie and Kerry Meggison
Dr. Abbey Marterella
Making it home: A qualitative inquiry of relocation within the United States
Relocation experiences impact participation in everyday life. Despite the increasing occurrence of relocation within the United States, local and state-to-state relocation remains an understudied area. The majority of knowledge on relocation stems from international perspectives, employee relocation, and involuntary moves resulting from natural disasters or age-related decline. This poster communicates a qualitative investigation of participants' relocation experiences within the U.S. as a starting point for developing a basic social process of relocation. Participant selection included eight women in a suburban area of the Midwest, and data generation and analysis occurred concurrently over the course of 20 weeks. In-depth interviews were analyzed in accordance with a constructivist grounded theory approach. Four interrelated preliminary findings are explicated, including a) being an outsider, b) breaking ties, c) connecting to place, and d) putting down roots. Preliminary findings are considered in the context of place integration discourse within occupational science and occupational therapy.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Callie Gavorek, RD
Dr. Anahita Mistry
Making Accommodations for Students with Food Allergies and Special Diets at Eastern Michigan University
The incidence of food allergies is on the rise in the United States. According to Food Allergy Research and Education, 1 out of 13 children have a food allergy. For parents of children with food allergies, anaphylaxis prevention is difficult but can be achieved through reading ingredient labels and eliminating allergen-containing ingredients from the household. Young adults living away from home are at greater risk for allergic reactions. This risk is noticeably present in the college campus setting, where many students depend on college dining services for their dietary needs. According to the Food and Culinary Professionals dietetic practice group, 40 out of 1000 college students have a food allergy. Of these 40 students, only 10 disclose their dietary needs with dining staff, and 16 will experience an allergic reaction within 6 months. In order to comply with the Americans with Disabilities Act and prevent allergic reactions in students who dine on campus, it's essential to have an allergen program in place. Eastern Michigan University (EMU) Dining Services accommodates individuals with food allergies, intolerances, and special diets through the Food Intolerance and Allergen Program (FIAP). This presentation will exhibit how FIAP makes accommodations for EMU students with special dietary needs.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Mary Kay Hamby
Dr. Irwin Martin
Evaluation of University of Michigan Health System Critical Bed Alert System on COPD 30-day Readmissions
University of Michigan Health System (UMHS) is currently assessing modifiable risks in discharge planning that contribute to 30-day readmissions.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Dayse Hinks, Megan Park and Zakiya Stokes
Dr. Abbey Marterella
A League of Their Own: An Ethnography of a League of Legends Club
Online gaming is a 21st-century occupation that receives widespread research attention, primarily in disciplines of computer science and psychology. Previous research suggests that engagement in online gaming promotes social interconnectedness despite the virtual context in which it occurs. However, there is limited research on the culture of specific gaming communities or on gaming as a meaningful occupation. This poster communicates an ethnographic research project in a Midwestern club for those who participate in an online role-playing game. Data were generated through participant observation at club events and subsequent writing of field-notes over a three-month period. After open and focused coding of field-notes, researchers collaborated on larger descriptive categories and themes regarding the culture and community of the club. Findings of this study suggest that participation in the club influences members' sense of belonging to the larger gaming community and that teamwork is a motivating factor in continued engagement.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Mary Hrabonz
Dr. Anahita Mistry
The Effectiveness of a Breastfeeding Class on Initiation and Duration of Breastfeeding with WIC Participants
The purpose of this study was to evaluate the impact on attending an antepartum breastfeeding class on the rates of initiation and duration of breastfeeding. One hundred and fifty women enrolled in the WIC program expressed an interest in breastfeeding and participated in this study. The control group was interested in breastfeeding but did not attend a breastfeeding class. The participants that attended the breastfeeding class breastfed for a significantly longer time than those who did not. The study also found that help at home and the infant not receiving a bottle or pacifier in the hospital had a significant impact on the duration of breastfeeding. The breastfeeding class had no impact on the initiation of breastfeeding. These results

demonstrate that increasing a pregnant WIC participant's knowledge of breastfeeding by attending a breastfeeding class significantly increases duration of breastfeeding.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Lindsay Portrey
Dr. Abbey Marterella
Live Action Role Play: An Occupational Science Ethnographic Investigation
This poster communicates an ethnographic investigation into a Live Action Role Play (LARP) community in order to build understanding of adults' fantasy-based occupations. Previous research suggests that involvement in LARP may offer an avenue for identity formation, development of skills, and a way to challenge social constructs. Despite the prevalence of LARP communities and their uses, such occupations are conspicuously absent in occupation-based literature. Participants included LARP group members in a suburban Midwestern community. Data included 144 pages of field-notes from participant observation and a researcher journal kept throughout the project. Data were generated and analyzed over the course of 20 weeks using ethnographic approaches and application of narrative concepts. Findings provide a structured description of a fantasy-based LARP to illuminate the occupation's sociocultural complexities. The investigator poses questions for consideration by the occupational science discipline relative to fantasy-based occupations and suggests therapeutic potential for LARP within occupational therapy.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Vanessa Riley
Dr. Abbey Marterella
Exploring the lived experience of female farmers
Despite the importance of work in daily life, work occupations receive little attention in occupational science and occupational therapy scholarship. This qualitative investigation on the lived experience of female farmers was designed to contribute to knowledge on work occupations and explore experiences of this underrepresented group in the farming sector. The majority of farming research is sourced from agricultural and business literature, focusing on agricultural practices and market trends. This poster depicts an Interpretative Phenomenological Analysis (IPA) of female farmers' experiences. Participants included four female farm owners in the rural Midwest. In-depth interviews were analyzed in accordance with the IPA approach. Preliminary findings center on resilience of farmers, desire to preserve farm heritage, commitment to a strict schedule yet appreciation for flexibility, and the value ascribed to a reciprocal relationship with customers. The author offers farming as an "ecopation" and highlights the importance of a disciplinary focus on work-related occupations.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

DeAnna Gapp
Dr. Tsu-Yin Wu
Exploring Factors of Mobile Device Acceptance in Students to Enhance Nursing Education
Mobile devices are evolving, not only in the make-up of the device itself but also in the way people live their lives. However, there is a digital divide based on technology access and use. This cross-sectional descriptive study compares nursing students who come from educationally disadvantaged backgrounds to those who do not with mobile device acceptance to enhance nursing education. The results were that there was no difference in mobile device acceptance. However, to support this population, educators may provide extra support and training with these nursing students on mobile device literacy to increase the acceptance for educational and health purposes.
Oral Presentation: Room 301, 10:30 - 11:45 am

Elaine M. Lloyd
Dr. Linda Myler & Kathleen Seurynck
Unfolding Case Studies and Simulation in Nursing Education
Education nursing reform is needed for unpredictable, rapidly changing health care environments for patients needing complex care. Current education focuses on what to teach, rather than how to teach. There is an urgent call to reform nursing education because 20th-century pedagogy does not prepare nursing students for what they will encounter as health care clinicians. Therefore, faculty must find ways that challenge everything present and absent in current approaches to nursing education and explore new possibilities for preparing future nursing students for a 21st-century health care system (National League of Nursing NLN, 2003).
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Tina Thornton
Dr. Tsu-Yin Wu
The Influence of Social Support among Male Nursing Students in a Baccalaureate Nursing Program
Even though there has been an increase in the number of men entering the nursing field, men still remain the minority in nursing, composing approximately 10% of registered nurse population within the United States. There are a number of challenges that many male nursing students face when entering the nursing program that may inhibit their desire to pursue a career in nursing. These challenges include educational, gender bias, and social support. To date there is very limited updated research examining the influences of social support among male nursing students. The goal of this study was to explore how the influences of social support from family,

peers, and faculty impact the male nursing student's performance and program experience. Consistent themes emerged from the narrative text, including supportive family environment, diverse job opportunities, peacemakers, male support system, lack of gender sensitivity, and academic differences.
Oral Presentation: Room 301, 10:30 - 11:45 am

School of Social Work

Allison Franck
Dr. Perry Silverschanz & Marilyn Wedenoja
Treatment Options for Post Traumatic Stress Disorder: Effectiveness and Application with Diverse Environments and Populations
Post-Traumatic Stress Disorder (PTSD) is a debilitating condition that impairs the daily functioning of millions of people. The most common causes of PTSD today are rape, physical and sexual abuse, childhood neglect, childhood abuse, and combat exposure. Symptoms can include re-experiencing the event, avoidance of things that can trigger memories, emotional arousal, depression, anxiety, and many somatic symptoms. There are many evidence-based treatment modalities available for the treatment of PTSD. Practitioners should not just be satisfied with any evidence-based treatment but should carefully appraise the effectiveness for the client. This project reviews the effectiveness of five evidence-based interventions for PTSD: Prolong Exposure Therapy, Dialectical Behavioral Therapy, Cognitive Behavioral Therapy, Seeking Safety, and Eye Movement Desensitization and Reprocessing. As a result of analyzing the effectiveness, the practitioner will be able to more effectively determine the most appropriate treatment to optimize the recovery for their clients with PTSD.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Michelle K York
Dr. Deborah Willis
Enhancing Quality of Life and Improving Quality of Care Among Minorities Utilizing Hospice of Lenawee Services
Minorities face poor quality of life without end-of-life care planning. No intervention now meets their needs. Diversity training for HOL staff may increase the number of Hispanic clients and quality of care/life.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

COLLEGE OF TECHNOLOGY

School of Engineering Technology

Pallavi Bapat
Dr. Vijay Mannari
Design of high performance hybrid coatings with Dual-cure mechanism
Significant advancements are being made towards the development of organic-inorganic hybrid coatings with improved performance for a myriad of end-use applications. The combination of inorganic and organic components at molecular level provides coatings with unique properties not achievable by conventional organic coatings. Among the challenges facing development of such hybrid coatings, incorporation and uniform distribution of inorganic domains into the organic matrix calls for novel approaches. In the present study, a novel organic photo-curable acrylic oligomer has been modified with tri-methoxy silane functions, using Michael-addition reaction. The coatings based on this novel oligomer were applied on metal substrates and cured by two distinct and independent cure mechanisms – dual curing. First, the wet films were photo-cured through their acrylate functions (radical polymerization) followed by their moisture curing through silane functions upon exposure to ambient atmosphere (sol-gel reaction). This poster will highlight design and characterization of the novel oligomer system, extent of cross-linking by each mechanism, as tracked using FT-IR spectroscopy, and improvement in film performance as function of cross-linking. Such dual-cure systems can be customized for many commercial applications.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Aaron T. Howard, Mahesh Nugaliyadde-Gedara and Wenbin Yu
Dr. Jonathon Lin
Converting Waste Vegetable Oil to Usable Biodiesel
Biodiesel is a renewable fuel source produced by converting organic matter into diesel fuel. The idea to use biodiesel has existed for about a century, but only in the last decade has it gained any traction as a usable fuel source. There are many methods to obtain a source fuel; however, the focus of this project will be to use waste vegetable oil (WVO) from a deep-fryer to create biodiesel. Recycling the WVO in order to produce fuel not only reduces the waste (that is normally removed at a premium) but also introduces an alternative source for energy, thus reducing the dependence on petrol diesel.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Mahshid Niknahad
Dr. Vijay Mannari
Development and Evaluation of Superhydrophobic Coatings
Superhydrophobic surfaces have attracted much interest for both fundamental research and practical applications such as contamination prevention, self-cleaning, and antifouling surface designs. Hydrophobicity can be provided by controlling topology (roughness) and surface energy of coatings; therefore, superhydrophobic surfaces are prepared employing two steps: roughening a surface and lowering its surface energy. Superhydrophobic coatings exhibit extreme water-repellency, with water droplets rolling off with high contact angles. In this study, hydrophobicity of the sol-gel coating modified with fluorinated side chains was compared to the coating incorporated with hydrophobic nano and micro silica particles in the matrix. The prepared films were characterized by Scanning Electron Microscopy (SEM), Atomic Force Microscopy (AFM) and static contact angle measurements. Mechanical properties were measured by nano indentation tests. The best hydrophobic property was observed for coatings with Tetraethoxysilane (TEOS) and Methyltrimethoxysiliane (MTMOS), at a molar ratio of 1:2 and incorporated with silica particles that are surface treated by polydimethyl siloxane. The surface morphological study showed distribution of silica particles on the substrate and contact angle measurement showed the static water contact angle as high as 150, indicating superhydrophobic behavior.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

School of Technology Studies

H. Ascani
Dr. Pam Becker
Applied Ethics and Ethical Conflict: Potential Success Factors for Biotech Startups in SE Michigan
The number of biotechnology start-ups that fail within five years of initial founding is staggering. Of the more than 1,800 U.S. biotechnology companies founded since 1980, fewer than 200 are generating revenues, and only six are profitable. To understand reasons behind the large number of failed biotech startups, it is important to examine potential factors that could have been early signs of failure or, alternatively, predictors of success. The biotech industry is increasingly competitive and, as a consequence, more dependent upon the success of small-startup initiatives. If research can show that long-term sustainability is affected by the consideration of applied ethics and the presence of ethical conflict within a biotech-startup team, one can identify whether ethics analysis in biotech startups may be used to predict the success or failure of the ventures. Specifically, examination of the role applied ethics fulfills within biotech startup businesses at various phases of establishment can verify the use of ethics analysis as a success factor. Identification of success factors can also

be used to propel local, regional, and national programs in support of specific biotech startups. More successful biotech startups may be a clear indicator of a healthy and growing economy.
Oral Presentation: Room 330, 10:30 - 11:45 am

Na Han
Dr. Shinming Shyu
Environmental Ethics and Sustainable Design: A Case Study on the Traditional Korean Residential Building Type
Originated in the realm of philosophy, environmental ethics takes into consideration the moral relationship between the human and non-human world. In light of the severe impact by human activities on this planet, environmental sustainability has become an extremely important issue that prompts building designers to perform in accordance with sustainable principles to create comfortable, eco-friendly space. Moreover, it is to be our obligation to preserve the environment for the future generations. This research studies environmental ethics and sustainability with a focus on sustainable ethics and strategies introduced in traditional Korean building design. It explores how renewable principles and materials were used in such a way that harmonizes the man-made with the natural environments. The paper argues that it is imperative to view environmental ethics as a universal value, and traditional Korean building design may provide some valuable lessons.
Oral Presentation: Room 330, 10:30 - 11:45 am

Mahdi Khobreh
Dr. Ali Eydgahi
A comparison between fifth edition of Project Management Body of Knowledge (PMBOK®) and its fourth edition
This paper presents the differences and changes that exist between the new edition of Project Management Body of Knowledge and its previous edition. Furthermore, this review shows the views of the Project Management Institute about the future of the project management knowledge, standards, and the type of factors influencing the success of a project.
Oral Presentation: Room 330, 9:00 - 10:15 am

Brandy Kramer, Julie Becker, Carl Braun and Janet Patton
Dr. Alphonso Bellamy
A review of leadership styles and the effectiveness for virtual teams.
With the current competitive global business environment, organizations are using virtual teams to cut costs, reduce development time, and increase efficiency. Technology has enabled the increased speed of communication. With international

corporate integration, global platforms are replacing regional product programs, thus requiring coordination, synergy, and cooperation of these teams. Virtual teams are emerging with this structural shift. In light of the increased usage of virtual teams, team leadership is an increasingly important factor in the viability of the global team. Leadership roles have changed over time. As work environments change, evolve, and re-form due to societal changes and with technological advancements in communication technology, the names and categories of leadership have also changed and evolved. Globalization, time zones, and geographical location all contribute to obstacles impairing competitive strategies for companies in the work culture of today. As the way people work is changing, the management of work must change. Project management, team management, focus teams, and virtual teams all surface as strategies that can help programs evolve and aid in successful corporate project completion in this digital age.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Brandy Kramer, Sadaf Ashtari and Mark St. Clair
Dr. Alphonso Bellamy
Factors Affecting Social Media Use
Social media are used to connect with others, build relationships and trust, and be available when people are ready to buy products and services. Social media continue to develop in their acceptance and use. This study examines the extent to which a person's self-esteem and locus of control affect their use of social media. This study further explores how the person's age moderates this relationship. Our findings suggest that there is no significant correlation between locus of control and social media use, and there is not a linear relationship between self-esteem and social media use. The results indicated that gender as a moderator variable does not have a significant effect on the relationship of locus of control and social media use. In addition, our findings indicated that gender has no effect on the relationship of self-esteem and social media use. However, the amount of change in the male sample was greater that of the female sample.
Poster Presentation: 310 A and B, 1:15 - 2:30 pm

Randy Short, James Sweet and Frank Fedel
Dr. Alphonso Bellamy
A Study of the Effects of Learner Technological Self-Efficacy on the Acceptance of Educational Technology Within a Higher Education Classroom
The challenge facing some educators is that in order to satisfy the educational needs of the millennium students, they may need to evolve their teaching philosophy and biases regarding "digital tools." These tools are not meant to replace the educator; they are designed to expand their reach and to facilitate engagement. Educators need to see these tools as a resource to help guide the main elements of theory into

the critical thought process of the learner. To effectively accomplish this in curricula, educators need to consider and indeed manage how technology is deployed. One aspect of this is that it should be as transparent to the end user as practical, since students are not all equally technologically adept. Further, belief in the ability to leverage the benefits of technology tools can impact the learner's willingness to use them, just as belief and confidence in an individual's abilities (self-efficacy) can impact their behavior.

Oral Presentation: Room 350, 1:15 - 2:30 pm

Celeste Stachurski

Dr. Denise Pilato

Piecing Peace's Pieces

The 20" x 24" acrylic mixed media painting on wrapped canvas and companion web site represent the images and symbols of the complex experiences of the first teenage generation of cryo children. The lack of regulation, ethics, and social responsibility in the fertility technology industry are responsible for spreading deadly genetic conditions to the population at large, accidental incest amongst siblings clustered in a geographic region, and the broken hearts of the nearly 5,000 cryo babies born every year. The artist seeks to tell the stories of the first generation of cryo teenagers who face the uncertainty of kinship, their link to their past, and the potential for embracing the future with their family. The painting and website seeks to answer the question: How are we to meet these technologies in the most ethically and morally informed way?

Arts Front: Kiva Room, 10:30 - 11:45 am

School of Visual and Built Environments

Nadia Arafah

Dr. Shinming Shyu

Designing Learning Environment for Children with Autism Spectrum Disorder

This research explores the role of interior design in enhancing the learning experience for autistic children, since they suffer from deficiencies in basic areas of development such as learning and interacting with others, in addition to sensory sensitivity. This study aims to gain understanding of the learning patterns and behavioral issues of autistic children and provide solutions in the classroom to create an ideal learning environment. It was hypothesized that designing an autistic-friendly learning environment would increase the learning development for children with autism spectrum disorder. The method of this study is based on observing autistic children's behavior and academic performance in the classroom, interviewing teachers who are in direct contact with autistic children, and evaluating the current classroom condition.

This resulted in creating an ideal integrated classroom for autistic children by suggesting general interior design solutions that enhance their learning development.
Oral Presentation: Room 300, 10:30 - 11:45 am

Jeanneare Hall
Dr. Subhas Ghosh
Creating Fashion with Fabric that Changes Color as the Surrounding Light Changes
Photochromic dyes/inks are part of a class of color-changing dyes known as chromics. When exposed to light or UV-light, photochromic molecules are rearranged, resulting in change color. However, their fatigue resistance after many fade cycles (opening and closing of the dye molecule) decreases; they are not able to change colors or the color is not as strong. The opening and closing of the dye molecule is what creates the color-changing property. If the fatigue resistance can be improved, the textile industry will able to mass-produce clothing with the photochromic color-changing property.
Oral Presentation: Room 302, 1:15 - 2:30 pm

David Kelly
Dr. William Moylan
Overdesign and Over-specification in Building Construction
The last ten years has seen a parade of new technologies and paradigms (e.g., building information modeling [BIM], integrated project delivery [IPD], lean construction, and sustainable [green] practices) brought forth with the goal of curing some of the construction industry's ailments; overdesign and over-specification is one such target ailment. Over-specification and overdesign rank high on surveys of industry problems. It has been estimated that overdesign adds 15 percent to building construction cost. What's more, overdesign is not sustainable; the industry produces millions of tons of construction waste each year resulting from over-specification of products and systems. The existing literature on overdesign and over-specification, within the context of building construction, is absent a conceptual framework for understanding the phenomenon as the product of an organization's social structure. Academicians can benefit through thoughtful consideration of the presented framework, as well as the recommended research agenda. Likewise, industry practitioners can benefit by gaining a greater understanding of the problem, its causes, uses, and potential remedies.
Oral Presentation: Room 350, 10:30 - 11:45 am

Arwa Noorsaeed
Dr. Shinming Shyu
Climate Change and Disaster Alleviation: Sustainable Design Solutions for Coastline Buildings
Climate change is a current undeniable phenomenon that intensifies the strengths of atmospheric movements and their capacities of conveying precipitation. This has been creating much more destructive natural disasters, such as hurricane Katrina in 2005, hurricane Sandy in 2012, and typhoon Haiyan in 2013. It is a drastic change the world is experiencing with pain and loss. While studying the causes of climate change, such as air pollution and greenhouse emissions produced by automobiles, industry, and buildings, this study investigates potential design solutions to protect people living along coastlines with long-term sustainable design strategies. Those include 1) elevating building foundation high enough along the coastlines to counteract flood; 2) using reinforced concrete structures to substitute lightweight wood frames; and 3) designing energy efficient buildings to reduce electricity consumption by using passive ventilation, solar panels, and thermal insulation.
Poster Presentation: 310 A and B, 9:00 - 10:15 am

Technology

Zachary Jones
Dr. Denise Pilato
Using Community Charrettes to Further Ecojustice Education and Ecological Intelligence in regards to GeoTechnologies
Teaching eco-justice at the community level to citizens and leaders of municipalities by educating them to become aware of deficit thinking and an overreliance on mechanism and scientism metaphors could help raise the ecological intelligence of a community and help a community make more democratic and eco-justified decisions when it comes to the use of GIS platforms and other similar technologies. This paper begins to develop the framework necessary to build a body of knowledge in order to develop a best practice in creating technology plans as part of a master or comprehensive plan for municipalities.
Oral Presentation: Room 330, 10:30 - 11:45 am

Presentations by Location and Time

Oral Presentation Session 1: 9:00 – 10:15 a.m.

Room 300: *Ecology of Animals and Plants that Eat Animals*
Giorgia Auteri
Biology, 9:00
Kyle George
Biology, 9:20
Joseph Hill
Biology, 9:40
Katie Nolan
Biology, 10:00

Room 301: *Mental Health Measurements & Methods*
Meagan Carr
Psychology, 9:00
Adam P. Natoli
Psychology, 9:20
Sharon Nelson
Psychology, 9:40
Aimee Sohnleitner
Psychology, 10:00

Room 302*: Language: Communication and Culture*
Mansour Altamimi
English Language and Literature, 9:00
Doug Brinker
Communication, 9:20
Lisa deRamos
Sociology, Anthropology and Criminology, 9:40
Sarah Al Motairi
English Language and Literature, 10:00

Room 320: *Math Gap. Influences, Strategies and Studies*
Jennifer Banks
Teacher Education, 9:00
Sandra Becker
Teacher Education, 9:20
Kimberly Freeman
Teacher Education, 9:40

Room 330: *Start-Ups, Market Trends & Trades*
Soliman Almahmoud
Computer Information System, 10:00
Jigyasa Bhagat
Mathematics, 9:00
Mahdi Khobreh
School of Technology Studies, 9:20
Yu Qiao
Accounting and Finance, 9:40

Room 350*: Higher Education: Innovations, Engagement & the Institution*
Cynthia Kazanis
Marketing, 9:00
Julie M. Kissel
Leadership and Counseling, 9:20
Kevin Merrill
Leadership and Counseling, 9:40
Walter M. Seiler III
Teacher Education, 10:00

Room 352: Africa: Colonialism & Transformation

William Daniels
English Language and Literature, 9:00
Tabatha LM Keller
History and Philosophy, 9:20
Zeinab Moughnia
History and Philosophy, 9:40
Lauryn Tidwell
Africology and African American Studies, 10:00

Kiva Room: Museums and Monuments

Melanie Parker
Geography and Geology, 9:00
Geraurd Paschal
Sociology, Anthropology and Criminology, 9:20
Kristin Rheinheimer
Geography and Geology, 9:40
Scott Roy
History and Philosophy, 10:00

Poster Session A: 9:00 – 10:15 a.m., Room 310 A & B

Jeanette Bailey
Biology

Dlivya Ganti and Hala Almutawa
Chemistry

Samanthi Herath Gedara
Chemistry

Naga Pooja Kanneganti
Chemistry

Michael John Martin
Chemistry

Ailing Zhou and Samanthi Herath Gedara
Chemistry

Jordan Clark, Quentrese Cole and Erica Ogburn
Leadership and Counseling

Matthew Hancock, Janelle Fosler and Christopher Van Wasshenova
Leadership and Counseling

Bo Young Jun
Leadership and Counseling

Adrienne Seeley and Kathryn Watson
Leadership and Counseling

Xingbei Ye
Leadership and Counseling

Justin Hodges
Physics and Astronomy

Ana-Mercedes Flores, Tiffany Andersen, Casey Swick, Ryan Goodcase, Kaitlyn McFarlane, Susan Bowyer, Jon Brennan and Loulia Kovelman
Psychology

Daniel Henley
Psychology

Karla Maschalko and Patrick Weaver
Psychology

Kaitlin Oswald
Psychology

Cory Stanton, Lauren Ostarello and Thomas Waltz
Psychology

Aaron T. Howard, Mahesh Nugaliyadde-Gedara and Wenbin Yu
School of Engineering Technology

Katie Wyman, Ibrahim Ellithy and Dave Rice
School of Health Promotion and Human Preformance

Amanda Belanger and Cheryl Root
School of Health Sciences

Kelly Beversdorf
School of Health Sciences

Rachael Bloch, Mandy McClain, Paige Scott and Breanna Snyder
School of Health Sciences

Laura Currie and Kerry Meggison
School of Health Sciences

Callie Gavorek, RD
School of Health Sciences

Dayse Hinks, Megan Park and Zakiya Stokes
School of Health Sciences

Lindsay Portrey
School of Health Sciences

Elaine M. Lloyd
School of Nursing

Allison Franck
School of Social Work

Brandy Kramer, Julie Becker, Carl Braun and Janet Patton
School of Technology Studies

Arwa Noorsaeed
School of Visual and Built Environments

Aisha Darnell
Special Education

Candice Marrin
Special Education

Audrey Bernard
Teacher Education

Oral Presentation Session 2: 10:30 – 11:45 a.m.

Room 300: *Childhood: Additives, Syndromes & Spirit*
Nadia Arafah
School of Visual and Built Environments, 10:30
Ketrin Lengu and Tristan Nyman
Psychology, 10:50
Emily VanWormer
School of Health Promotion and Human Preformance, 11:15
Holly Wesener
Management, 11:30

Room 301: *Educating Nursing. Nursing Education.*
DeAnna Gapp
School of Nursing, 10:30
Kristi J. George
Teacher Education, 10:50
Traci Ruszkiewicz
Economics, 11:15
Tina Thornton
School of Nursing, 11:30

Room 302: *Language: Culture & Construction*
Saja Albuarabi
English Language and Literature, 10:30
Anna Hesson
Special Education, 10:50
Lindsay Stefanski
English Language and Literature, 11:15
Stephanie Walla
English Language and Literature, 11:30

Room 320: *Educational Shifts: Global to Local*
Alyssa Anders, Kimberly Specht and Richard Lysogorski
World Languages, 10:30
Kerri Burchill
Leadership and Counseling, 10:50
Linda Mills
Leadership and Counseling, 11:15
Eunkyung "Nana" Oh
Communication, Media and Theatre Arts, 11:30

Room 330: *Sustainability*
H. Ascani
School of Technology Studies, 10:30
Nigora Erkaeva
Teacher Education, 10:50
Na Han
School of Technology Studies, 11:15
Zachary Jones
Technology, 11:30

Room 350: *Digital Age*
Adam Kavetsky and Jared Bentley
World Languages, 10:30
David Kelly
School of Visual and Built Environments, 10:50
Rachel Sienko
Psychology, 11:15
WenBin Yang
Computer Information System, 11:30

Room 352: *Community: From Land to Leadership*

Mozhde Aminmadani
Mathematics, 10:30

Julie Helber
Leadership and Counseling, 10:50

Daryl Holman Jr.
Political Science, 11:15

Matthew McKernan
Geography and Geology, 11:30

Arts Front Session 1: 10:30 – 11:45 a.m., Kiva Room

Crystal S. Campbell
Communication, Media and Theatre Arts, 10:30

Jennifer Lickers
Art, 10:50

Kellie Nadler, Nathan Gehoski, David Boeving, Julia Eussen and Yma Johnson
English Language and Literature, 11:15

Celeste Stachurski
School of Technology Studies, 11:30

Oral Presentation Session 3: 1:15 – 2:30 p.m.

Room 300: *Role Play: Gender & Media*
Mark Doebler
Women's and Gender Studies, 1:15
Megan Gore
Leadership and Counseling, 1:35
Christa Jiamachello
Women's and Gender Studies, 1:55
Kayla Krahn
Communication, Media and Theatre Arts, 2:15

Room 301: *Educational Impacts: Work, Literacy, Food & Testing*
D. KayJarrell
Management, 1:15
Kristen Barnes-Holiday
Teacher Education, 1:35
Nick Ceglarek
Leadership and Counseling, 1:55
Cory R. Hamilton
Leadership and Counseling, 2:15

Room 302: *Coatings, Genomes & Dyes*
Brian Colson
Physics and Astronomy, 1:15
Kortni Evans
School of Health Promotion and Human Preformance, 1:35
Jeanneare Hall
School of Visual and Built Environments, 1:55
Megan Scott
Biology, 2:15

Room 320: *Employment, Poverty & Society*
Robert Canell
Economics, 1:15
Matthew Dick
Leadership and Counseling, 1:35
Matthew W. Hanger
Sociology, Anthropology and Criminology, 1:55
Jacquelyn Odum
Women's and Gender Studies, 2:15

Room 330: *Education: Environment, Consolidation & Vision*
Dahlia Afr
Leadership and Counseling, 1:15
Jamie Brooks
Leadership and Counseling, 1:35
Robert Howard
Leadership and Counseling, 1:55
Kyle McMillen
History and Philosophy, 2:15

Room 350: *At the Intersection of Technology and Education*
Adam Kavetsky
World Languages, 1:15
Caleb Newman, Mike Seiler and Leanne Shultz
Teacher Education, 1:35
Randy Short and James Sweet
School of Technology Studies and School of Health Promotion, 1:55
Mehmet Ali Yilik
Leadership and Counseling, 2:15

Room 352: *Art, Drama & Transformation*
Kristin Danko
Communication, Media and Theatre Arts, 1:15
Cathy Johnson
Communication, Media and Theatre Arts, 1:35
Olivia Rhoades
Special Education, 1:55
Chartonay 'Cece' Sumpter
Communication, Media and Theatre Arts, 2:15

Poster Session B: 1:15 – 2:30 p.m., 310 A & B

Nouf Alyami
Chemistry

Shane Canaday
Chemistry

Reshmi Bhavana Gopagani
Chemistry

Shaimaa Fatani
Communication, Media and Theatre Arts

Marisa Laderach
Geography and Geology

Lauren Shackleford and Simon Dixon
Leadership and Counseling

Patricia Sue Wanamaker
Leadership and Counseling

Miguel Ortiz
Management

Sumalee Punpruk
Management

Nathan Richards
Mathematics

Morgan Bolen and Natalie Morris
Psychology

Rachel Kentor
Psychology

Lauren Ostarello and Cory Stanton
Psychology

Jerrica L. Pitzen and Jessica L. Riggs
Psychology

Sarah Rice and Lauren Harrison
Psychology

Pallavi Bapat
School of Engineering Technology

Mahshid Niknahad
School of Engineering Technology

Kathryn Blaharski, Jaimie Howard, Kayleigh Nelson, Matthew Tiggelaar, Blake Brennan and David Trevisam
School of Health Promotion and Human Preformance

Larissa Chakarova and Lindsay Coursen
School of Health Sciences

Mary Kay Hamby
School of Health Sciences

Mary Hrabonz
School of Health Sciences

Vanessa Riley
School of Health Sciences

Michelle K York
School of Social Work

Brandy Kramer, Sadaf Ashtari and Mark St. Clair
School of Technology Studies

Megan Petersen
Women's and Gender Studies

Arts Front Session 2: 1:15 – 2:30 p.m., Kiva Room

Sarah Erlewine
Communication, Media and Theatre Arts, 1:15

Yma Johnson
English Language and Literature, 1:35

Alan Keskitalo
History and Philosophy, 1:55

Andres Sanchez
English Language and Literature, 2:15

Oral Presentation Session 4: 2:45 – 4:00

Room 300: *Childhood: Faith, Tolerance & Affection*
Katherine Guyon-Harris
Psychology, 2:45
Heather Nicholson
Teacher Education, 3:05
Elizabeth Terrasi
Communication, Media and Theatre Arts, 3:25
Ashley Wiegand
Sociology, Anthropology and Criminology, 3:45

Room 301: *Literature: Witches, Tricksters and Virgins*
Amalina Dave
Women's and Gender Studies, 2:45
Aleesa Millet
English Language and Literature, 3:05
Christopher Stuart
English Language and Literature, 3:25
Colleen M. Walter
History and Philosophy, 3:45

Room 302: *Gender, Equality and Activism*
Lyudmila Austin
History and Philosophy, 2:45
Cheyenne Luzynski
Leadership and Counseling, 3:05
Shelly Neitzel
Geography and Geology, 3:25
Meghan Radosevic
English Language and Literature, 3:45

Room 320: *The World and War*
Samantha Kies
History and Philosophy, 2:45
Ann Christiansen Remp
History and Philosophy, 3:05
Bradley Watkins
History and Philosophy, 3:25
Christopher S. Yelonek
History and Philosophy, 3:45

Room 330: *On the Edge: Advocating for the Education of the Marginalized*
Carlton B. Bell
Leadership and Counseling, 2:45
Maria A. Jackson-Smith
Leadership and Counseling, 3:05
Michael Parise
Leadership and Counseling, 3:25
Katja Robinson
Teacher Education, 3:45

Room 350: *Special Education, Disabilities and Justice*
Janine Bauer
Special Education, 2:45
Sandra Becker
Teacher Education, 3:05
Alison Colbert
Psychology, 3:25
Leah Miller
Special Education, 3:45

Room 352: *Athletes, Aging and Juvenile Justice*
Sharon Cook
Special Education, 2:45
Courtney Lewis
Leadership and Counseling, 3:05
Quatez Scott
Leadership and Counseling, 3:25
Erica Smith
School of Health Promotion and Human Preformance, 3:45

Kiva Room: *Education and Funding*
Linda Foran
Leadership and Counseling, 2:45
Sharon Irvine
Leadership and Counseling, 3:05
Michelle Ruh
Leadership and Counseling, 3:25
Carol Weaver
Leadership and Counseling, 3:45

INDEX

THANK YOU!

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

Graduate Research Conference Room Moderators & Paper Reviewers

Amelia Parnis	Brittany Motkya	Jesse Kauffman	Claudia Petruscu
Chong Oh	Kate Pantelides	Annette Wannamaker	Ella Burton
Ron Flowers	Bill Cupples	Ramona Caponegro	Susan Campbell
Joseph Engwenyu	David Crary	Katie Greenwald	Abbey Marterella
Allen Kurta	Michael McVey	Ana Claudia Harten	Joe Ramsey
Nicole Richards	Darlene Leifson	Jenny Kindred	Ron Delph
Ben Spedoske	Lindsay Salinas	Stephanie Newell	David Kass

GRC Workshop Facilitators

Donald Ritzenhein, *CMTA*

Doris Fields, *CMTA*

Michael McVey, *Teacher Education*

Nina Brennan, *CMTA*

Diane Lawrence, *IT, Halle Library*

Phil Rufe, *Technology Transfer*

Celeste Stachurski, *Technology Studies*

GRC Lunch Speakers: Former EMU Graduate Students

Sarah Ginsberg   Laura Schultz Pipis

GRC Coordination and Communications

Jessica 'Decky' Alexander, *Faculty Associate, Graduate School*

Fara Di Noto, *Graduate Assistant, ORDA*

Marissa Magill, *Graduate Assistant, ORDA*

Chelsea Grossmann, *Graduate Student, Graduate School*

Ryan Dixon, *Coordinator, Digital Inclusion*

Jermaine Dickerson, *AS-L Student Worker & Graphic Design Major*

Lee Schwinghamer, *Graduate Assistant, Graduate School*

Lisa Walters, *Graduate School*

Micala Evans, *GA, Office of AS-L*

Graduate Research Conference Planning & Visioning Committee

Julia Nims, *Halle Library*

Keith Stanger, *Halle Library*

Peter Bendekoff, *Biology, Graduate Council Representative*

Abbey Marterella, *Occupational Therapy, Graduate Council Representative*

Samir Tout, *Technology Studies*

Joe Ramsey, *Teacher Education*

Zachary Jones, *Doctoral student, Technology Studies*

Sonia Chawla, *Director, Office of Research Compliance*

Betty Stremich, *EMU Foundation*

Jeff Kentor, *Associate Provost & VP of Graduate Studies*

Special Thanks to: Rich Maygar, Susan Anderson, Ron Woody, Carl Powell, Rocky Jenkins, Susan Gardner, Susan Anderson, Wendy Kivi, James Turner, Darcy Gifford, Margie Dargo, PromoIntelligence, Jack Bidlack and the Office of Academic Service-Learning.