

3-23-2009

Graduate Research Fair Program, 2009

EMU Graduate School
Eastern Michigan University

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Welcome to the Graduate Research Fair

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

We have a new record: There are 215 graduate student presenters this year! This represents a 20% increase over last year's participation. Hard to believe that 50 students began this event's journey 11 years ago.

There are 104 faculty mentoring these unique educational endeavors!

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

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

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

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

At the end of the day, 6 p.m. in the Student Center Auditorium, we look forward to the 2009 Sigma Xi speaker, Dr. Norman Hord. He is a nationally renowned scholar, who will share his research findings and other current discoveries regarding dietary and lifestyle interventions to prevent cancer. This disease has certainly touched many of friends, our families, and us.

EMU is proud of its graduate programs and the distinctive professional advantages they offer our graduate students. Enjoy the diversity and quality of the student work exhibited today. On behalf of the Graduate Council, a University committee that plans and implements this event, we appreciate your participation and support.

Deb de Laski-Smith, PhD
Dean (Interim)
Graduate School

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College of Arts and Sciences

Department of Art

Ashley Ray

Professor Ellen Schwartz

Dissecting Architectural Styles: The Case of Governor Warner's Mansion

The researcher investigated the architectural style of Governor Warner's Mansion, a historic house built in 1867 in Farmington, Michigan. The house is listed as an Italianate style house on the United States Register of Historic Places. However, through archival research and the use of architectural style field guides, the researcher determined that while the house was originally Italianate, it had its style changed twice, first to Queen Anne and then American Classical Revival through the careful replacement of certain elements of the house. The researcher was also able to determine approximately when these style changes may have taken place.

Room 208, 1:15 p.m.

Department of Biology

Layla M. F. El-Sawy

Professor David Kass

Technical Development for Analyzing Retrotransposons Based DNA Alterations Associated with Tumor Progression

Retrotransposon sequences comprise roughly 40% of the human genome. These mobile elements are proposed to be suppressed by DNA methylation. Altered DNA methylation patterns have been associated with tumor progression. DNA hypomethylation may be associated with retrotransposon activity. This could lead to the jumping of retrotransposons and their integration into new sites in the genome, causing insertional mutagenesis. We are developing a simple yet informative anchored-PCR strategy that we anticipate will allow for the identification of specific DNA sites of altered methylation as well potentially recognizing retrotransposon integrations by contrasting paired normal and tumor tissues. We predict this technique will decipher specific genetic alterations associated with different cancers.

Room 301, 2:45 p.m.

Jacob Job

Professor Peter Bednekoff

Wrens on the Edge: Do Humans Help Carolina Wrens (*Thryothorus ludovicianus*) Survive at the Northern Edge of their Range?

Northern populations of Carolina wrens (*Thryothorus ludovicianus*) have undergone drastic population changes during the last half-century. It is widely accepted that understanding winter survival is the key to explaining these changes. Historical climactic and wren data (1959-2007) for Ann Arbor, Michigan, were analyzed to determine which aspect of winter

weather is most detrimental to Carolina wren populations. It was found that snow cover duration was the best predictor of population change. Following up on these findings, we surveyed Carolina wrens on 21 transects. Human influence was hypothesized to be the main factor in population trends. Urban warmth and supplemental feeding were measured and analyzed against winter survival. Carolina wrens survived when they had access to winter bird feeders, regardless of temperature. Winter feeding by humans may help to further increase Michigan Carolina wren populations.

Room 302, 4:15 p.m.

Jennifer Miller

Professor Stephen Francoeur

Phosphorus Composition in Urban, Rural, and Agricultural Tributaries of the Middle Huron

Phosphorus in streams and rivers can be a limiting nutrient that controls plant and algal growth but can also be detrimental in excessive concentrations. Three tributaries of the Huron River draining areas with differing land uses were sampled repeatedly for total phosphorus and discharge. A Friedman Two-Way Analysis of Variance test was used to test for significant differences between the streams. Malletts Creek had the highest total phosphorus concentrations and was significantly different from Mill and Fleming Creeks. Mill Creek had the highest discharge and total phosphorus load and was significantly different from Fleming and Mill Creeks. Mill Creek has the highest impervious area and acreage and also drains a large amount of agricultural land. Together, this suggests that impervious surfaces and pollution from fertilizers and other agricultural inputs could be adversely affecting at least one local waterway.

Poster Presentation: Room 310, 4:00 p.m.

Craig Rockey

Professor Allen Kurta

Bat Activity at Different Heights at a Proposed Wind-Power Development

As part of a pre-construction survey for bats at a wind-power development in Michigan, we acoustically monitored bat activity at heights of 2, 35, and 55 m on two meteorological towers. We recorded calls made by the eastern red bat (*Lasiurus borealis*), hoary bat (*L. cinereus*), Myotis, and big brown/silver-haired bat (*Eptesicus fuscus/Lasionycteris noctivagans*). No species or group was equally abundant at all heights. Red bats, Myotis, and big brown/silver-haired bats were most commonly recorded at 2 m. Hoary bats, however, showed most activity at heights within the rotor-swept zone, with 62% of its calls at 55 m and 29% at 35 m.

Poster Presentation: Room 310, 4:00 p.m.

Tennille Senn

Professor James VandenBosch

Human Decidual Macrophages Recognize and Phagocytose *Clostridium sordellii* through Class A Scavenger Receptors

Decidual macrophages (DMs) defend the pregnant uterus from infection. *C. sordellii*, an anaerobic Gram positive rod, is an uncommon but lethal cause of uterine infection after delivery. Little is known about the pathogenesis of *C. sordellii* infections and how innate immune cells interact with this pathogen. Class A scavenger receptors (CASRs) are receptors implicated in the phagocytosis of the related bacterium *C. perfringens*. We asked whether DMs express CASRs and are involved in *C. sordellii* phagocytosis. CD14⁺ DMs were isolated from human uterine tissues obtained from surgical abortions. CASR gene transcription was analyzed using real time PCR in DMs. Phagocytosis assays were performed using CASR inhibitors and fluorescently-labeled *C. sordellii*. mRNA transcripts for CASRs MARCO and SRAI/II/III were detected. Phagocytosis of *C. sordellii* was inhibited by CASR blocking agents. We newly reveal the presence and importance of CASRs in the phagocytosis of *C. sordellii* by DMs. *Poster Presentation: Room 310, 4:00 p.m.*

Shane Sergent, Rae Labadie, Robert Loepp III, and Saedeh Sepehri

Professor Daniel Clemans

Phylogenetic Analysis of Aquatic Communities in Representative Huron River Tributaries

The Huron River watershed comprises three primary defined land usages: agricultural, urban/suburban, and natural. A representative Huron River tributary, dominated by each defined land usage, was selected and contrasted using phylogenetic analysis. Genetic material was derived from three sources: streambed sediment, natural rock scrapes, and artificial substrata. It was hypothesized that by using genetic analysis, temporal trends could be identified that correlate land use to the microbial community composition. Primary data demonstrate unique genetic fingerprinting of microbial communities for each of the three sampling tributaries.

Poster Presentation: Room 310, 4:00 p.m.

Suchithra Seshadrinathan

Professor David Kass

Investigations to Identify a SINE Master Gene

SINEs (short interspersed DNA elements) are a class of retrotransposons that amplify non-autonomously in the genome via an RNA intermediate. These elements compose more than 8% of the mouse genome. We identified an actively "jumping" family of SINEs in the mouse genome we refer to as MMIDL. Based on a consensus sequence, RT-PCR results, and a genetic database search, we estimate 33 candidate genes as a potential master gene, responsible for generating new copies of this SINE family. This provides a unique opportunity to find a master gene, as there is only one known presumptive SINE master gene. We are

incorporating both RT-PCR utilizing unique sequences that flank the SINE but precede the RNA polymerase termination signal and a C-RACE technique to potentially identify the MMIDL master gene. Identifying a true master gene would provide invaluable insights to understanding retrotransposons. *Room 301, 3:05 p.m.*

Alexis Stein

Professor Aaron Liepman

Determining the Function of Arabidopsis and Oryza sativa CSL Genes through Heterologous Expression in the Moss Physcomitrella Patens

Plant cell walls are dynamic structures composed of cellulose, hemicelluloses, pectins, and proteins that provide structural support and protect against pathogens and mechanical injury. *Cellulose synthase-like (CSL)* genes are proposed to encode glycan synthases that polymerize the backbones of non-cellulosic cell wall polysaccharides. Evidence supporting this hypothesis includes *CSLA* genes encode mannan synthases and *OsCSLF* and *AtCSLC* genes have been implicated in mixed-linkage beta-glucan and xyloglucan synthesis, respectively. This study further investigates this hypothesis by expressing members of the *Arabidopsis CSLB*, *CSLE*, and *CSLG* gene families and *Oryza sativa* (rice) *CSLH* and *CSLF* gene families in the moss *Physcomitrella patens*. The expression of *AtCSLB3*, *AtCSLE1*, *OsCSLF2* and *OsCSLH1* proteins has been detected by immunoblot analysis. Results of cell wall composition analysis using Comprehensive Microarray Polymer Profiling (CoMPP) indicate perturbations in carbohydrate compositional profiles in several transgenic lines.

Room 302, 4:35 p.m.

Catherine Wiesner

Professor David Kass

The Influence of Transcription Levels on Copy Numbers of Non-autonomous Retrotransposons

SINEs (short interspersed DNA elements) are families of non-coding regions of DNA that amplify within genomes via an RNA intermediate, therefore referred to as retrotransposons. These elements mobilize using other proteins and therefore are non-autonomous. It has been demonstrated that the 3' A-tail is an important contributor to successful amplification, and sequence plays a role as well. We propose that the level of germ-line transcription of SINE "master genes" is a primary factor in their successful mobility and vertical transmission. By RT-PCR, the GPIDL SINE family appears to be active in the guinea pig germ-line. Since copy numbers of different SINE families are known to be highly variable in genomes of various rodent species, a relationship germ-line transcription level, determined by real-time PCR, would support our hypothesis. Additionally, this analysis may provide insights as to whether inherited SINE integrations are more likely to occur in oogenesis or spermatogenesis.

Room 301, 3:25 p.m.

Department of Chemistry

Renee Ann Beardslee

Professor Heedel Evans

An Investigation of γ -Tubulin, a Centrosome Protein, using Expression in *E. Coli*

The multifunctional protein CAD catalyzes the initial steps in mammalian *de novo* pyrimidine biosynthesis. There is a strong correlation between the rate of *de novo* pyrimidine biosynthesis in the G1/S phase of the cell cycle and the rate of cell growth. The activation of the pathway is necessary for proliferation of neoplastic cells. Our recent work suggests that CAD may have novel functions, unrelated to the supply of pyrimidine nucleotides. We found that CAD associates with γ -tubulin at the centrosome during the early stages of mitosis. The centrosome is the major microtubule organizing center of the cell that plays a role in many cellular functions, including entry into mitosis, the transition between G1 and S phase, and DNA damage repair. To study CAD- γ -tubulin interactions, we have expressed in soluble form the human γ -tubulin protein in *E. coli*.

Room 301 1:35 p.m.

Reza Eizadkah

Professor Maria C. Milletti

Structural and Electronic Characteristics of Human Islet Amyloid Polypeptide (hIAPP) Leading to Aggregate Formation

Aggregation of the human form of IAPP is thought to cause membrane disruption in pancreatic β -cells, while rat IAPP does not undergo the same process. Aggregation of IAPP and subsequent fibrilization to form amyloid deposits is associated with Type II diabetes. Structural studies of hIAPP have shown that the 20-29 segment of this peptide plays an essential role in the aggregation process. In this work we use Density Functional methods to compare the structural and electronic characteristics of the 20-29 segment of human and rat IAPP to determine which features lead to aggregation.

Poster Presentation: Room 310, 4:00 p.m.

Nadine Chahine El-Ayache

Professor Cory Emal

Design and Synthesis of Aryl Sulfonamides as Inhibitors of Plasminogen Activator Inhibitor-1

Plasminogen activator inhibitor-1 (PAI-1) is a serine protease inhibitor and is involved in the inhibition of urokinase- and tissue-type plasminogen activators. It has been shown that abnormally high plasma levels of PAI-1 are linked to diseases such as deep vein thrombosis, type 2 diabetes, and atherosclerosis, and that the inhibition of PAI-1 leads to a mitigation of the pathological processes in thrombosis and atherosclerosis. A variety of aryl sulfonamides were synthesized and their respective potencies as PAI-1 inhibitors were measured. An early-stage structure-activity relationship model has been developed based on the results of this research.

Room 301, 1:15 p.m.

Roshini Fernando

Professor Heedel Evans

Probing the Mechanism of Activation of Dihydroorotase by Aspartate Transcarbamoylase in *Aquifex Aeolicus*

Aquifex aeolicus is an ancient, hyperthermophilic eubacteria that thrives at temperatures close to the boiling point of water. The enzymes that catalyze *de novo* pyrimidine biosynthesis are associated in multifunctional complexes. The activity of one of these enzymes, dihydroorotase, is specifically and entirely dependent on the formation of a complex with aspartate transcarbamoylase, another pathway enzyme. To shed light on the mechanism of dihydroorotase activation by aspartate transcarbamoylase, several techniques were used including site-directed mutagenesis, gel filtration, affinity chromatography, and enzyme kinetics. We (1) identify critical residues in a loop that normally occludes the dihydroorotase active site and is displaced in the presence of aspartate transcarbamoylase, (2) show that the enzyme requires one zinc for catalysis, (3) probe the aspartate transcarbamoylase and dihydroorotase coupling reactions and identify the hydrophobic regions necessary for protein-protein interactions, and (4) determine association of the carbamoyl phosphate synthetase components with aspartate transcarbamoylase and dihydroorotase.

Room 301, 1:55 p.m.

Charles Harrison

Professor Steven Pernecky

GC-MS Characterization of Fatty Acids and their Derivatives in Cecal Material

Probiotic bacteria in the human colon that produce C₂ – C₄ short chain fatty acids (SCFA) and *Lactobacillus* that produce lactate in addition to SCFAs are known to have positive health benefits. These organic acids were extracted with ether from murine cecal material (from Dr. Gary Huffnagle, University of Michigan) and derivatized for quantitative measurement by gas chromatography-mass spectrometry. Antibiotic-treated animals gavaged with *C. albicans* had a lower level of cecal butyrate relative to untreated animals but a higher level of butyrate when treated mice were also administered *Lactobacillus johnsonii*. More recent studies have demonstrated a butyrate-lowering effect of antibiotic-/*C. albicans* treatment relative to antibiotic or *C. albicans* treatment alone, but a corresponding increase in the level of lactate. It is proposed that the steady state levels of small organic acids provide a marker of human health and disease.

Poster Presentation: Room 310, 4:00 p.m.

Anitha D. Jayaprakash

Professor Deborah Heyl-Clegg

Synthesis and Analysis of hIAPP 1-19 Region, a Peptide Involved in Membrane Disruption

Human Islet Amyloid Polypeptide (hIAPP) has been widely studied since its role in the development of type II diabetes has been suggested. Capable of forming amyloid fibers and membrane disruption, this 37-amino acid peptide can cause the death of β -cells in type II diabetic patients. In this study, we show the activity of the hIAPP 1-19 region to be similar to the activity of full-length hIAPP 1-37 in causing disruption of lipid vesicles in a model membrane system. These results indicate that the N-terminal 1-19 region of hIAPP can be used as a model in drug target studies, in place of the expensive and synthetically challenging full-length hIAPP.

Room 301, 2:15 p.m.

Srikanth Reddy Konda

Professor Deborah Heyl-Clegg

Role of Aromatic Pi-stacking on Aggregation of Human Islet Amyloid Polypeptide

Human islet amyloid polypeptide (hIAPP) is secreted in the β -cells of the pancreas, which also secretes insulin. In type 2 diabetes mellitus, hIAPP undergoes self-aggregation, forming fibrils. This self-aggregation is cytotoxic and is thought to be linked to type 2 diabetes mellitus by causing β -cell membrane destruction. The N-terminus of hIAPP (1-19) contains a binding site (residues 14-18) for self-aggregation. Aggregation is thought to be mediated by pi-stacking interactions between phenylalanine residues of hIAPP. In this study, the hIAPP 1-19 sequence was modified by replacing phenylalanine with alanine to study whether the removal of the aromatic side chain decreases aggregation and membrane destructive activity. The activity of the modified hIAPP sequence was tested against differently charged lipids, using a fluorescent dye leakage assay. The modified hIAPP sequence was found to be less active than the actual hIAPP, as well as hIAPP (1-19).

Poster Presentation: Room 310, 4:00 p.m.

Ranadheer Reddy Pesaru

Professor Deborah Heyl-Clegg

Synthesis and Analysis of Insulin-Based Inhibitors of Human Islet Amyloid Polypeptide

Human islet amyloid polypeptide protein (hIAPP) is secreted in the pancreas along with insulin and is assumed to play a role in pathological development of type II diabetes. Amyloid is formed due to misfolding of the protein, which is cytotoxic to beta cells in the pancreas of type II diabetic patients. The presence of amyloid deposits is also a characteristic feature of a number of other diseases like Alzheimer's and Parkinson's. Since insulin has been reported to interact with hIAPP and block amyloid formation, fragments of insulin were synthesized and the inhibitory effects were studied against an hIAPP analog in the presence of phospholipid vesicles. While these sequences might inhibit amyloid

formation, preliminary results indicate that they actually enhance membrane damage, as measured by the increased leakage of carboxyfluorescein dye from the vesicles.

Poster Presentation: Room 310, 4:00 p.m.

Rohini Sidhu

Professor Steven Pernecky

Triphenylphosphine Promotes Production of 12-HETE during COX-1 Dependent Metabolism of Arachidonic Acid

Reactions catalyzed by cyclooxygenase (COX-1) are significantly influenced by lipid hydroperoxides. Commercial preparations of arachidonic acid (AA) contain lipid hydroperoxides that can be separated from AA by thin layer chromatography and readily reduced to alcohols using triphenylphosphine (TPP). A new metabolite, identified by GC-MS as 12-HETE, was produced by incubation of TPP-treated COX-1 with TPP-treated AA. When COX-1 was heat-inactivated prior to reacting with TPP-treated AA, no 12-HETE was produced. 12-HETE was not produced when the same experiment was conducted with tributylphosphine (TBP) or the oxidized product of TPP or diphenylphosphine. These results suggest that TPP stimulates a lipoxygenase activity in COX-1, which may be supported, at least in part, by the catalytic function of TPP.

Poster Presentation: Room 310, 4:00 p.m.

Department of Communication, Media, and Theatre Arts

Rebecca Archer

Professor Jessica Alexander

Last Born: Giving Voice and Testimony to Those Born Last

"Last Born" is an original performance that connects the traits of being last born with both the infamous and less infamous. It is noted that last-born children are defined as creative and persistent followers of the stars. Regardless of where one is in the birth order, this performance gives insight into the impact of birth order on career choices, on personality, and on interpersonal relations. This performance was created for the CTAO "Narrating the Self" class in Fall 2008, as part of the presenter's coursework for the MA in Drama/Theatre.

Room 104, 2:45 p.m.

Malisa Hinderliter

Professor Michael Tew

Did (Fill in the Blank) Just Say That? The Balancing of Self-Disclosure in the Graduate Teaching Assistant Realm

Graduate teaching assistants, with some helpful guidance, are given the duty to instruct students on how to fulfill course objectives. With public speaking at the top of hate lists and at the bottom of to-do lists, GTAs are then afforded the opportunity to create a memorable and worthwhile learning experience. Learning can be divided into three categories:

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affective, behavioral, and cognitive. This research will utilize an auto-ethnographic lens to explore self-disclosure efforts between graduate teaching assistants and the students to create a safe and valuable learning environment, with emphasis on affective learning. The research also explores interpersonal communication, pedagogy, how research has been used to evaluate the past semester, and how this research has the possibility to affect the future.

Room 104, 4:15 p.m.

Yi-Hsin Lu

Professor Jessica Alexander

The Power of Performing Self: Using Autobiography to Present Life Experiences and Address Cultural Issues

Should an international actor perform oneself censoring his or her own the background and culture? Can American audiences see an international self-narrative performance without a cultural lens? The purpose of this performance is to demonstrate the power of personal narrative performance and its ability to enlighten the audience on complex cultural issues. The solo performance, entitled "Interior Marathon," focuses on the history and colonial experiences of Taiwan, specifically how its social systems and contexts have deeply shaped its citizens. The presenter discusses the struggle and difficulty of performing self to foreign, non-Taiwanese audience.

Room 104, 3:05 p.m.

Yuri Mano

Professor Jessica Alexander

Always Japanese: Performing Self in a Foreign Land

Auto-ethnography is one of the approaches within contemporary performance which uses self or life experience as performance subject. Throughout one's creative process of writing, rehearsing, performing, and even post-performance, aesthetic distance between the performer and his/her work is required to make the work more objective and more universal in meaning. Focusing on her auto-ethnographic performances, the presenter explores the process of her work and development and how her cultural identity impacted the performances and the audience perception regardless of the performances' intent.

Room 104, 3:25 p.m.

Melissa Masserant

Professor Michael Tew

You're Good Enough, You're Smart Enough, and Gosh Darnit Your Students Like You: Social Support in the Graduate Teaching Assistants Office

The relationship between social support and self-efficacy was observed in Graduate Teaching Assistants (GTAs) teaching the Basic Speech Course at Eastern Michigan University. First- and second-year GTAs communicated social support through guidance, intimate support, instrumental support,

reliable alliance, and reassurance of worth. The skills, behaviors, and attitudes developed among the GTAs influenced self-efficacy and confidence in the classroom.

Room 104, 4:35 p.m.

Gina Morris-Cicalo

Professor Christine Tanner

The Implementation of Dramatic Arts Activities in the Academic Curriculum

The researcher investigated the use of dramatic arts activities as a teaching/learning strategy across the elementary and secondary curricula. Data revealed that the implementation of dramatic arts activities has a positive effect on both academic performance and standardized test scores. Moreover, the researcher facilitated a professional development workshop in order to further investigate the significant gap between the value and application of dramatic arts activities in the classroom.

Room 104, 1:55 p.m.

Katie Musick, Eric Davingracia, and Courtney Fitzpatrick

Professor Susan Booth

AMPLifying the Arts: Sustainability Plan for AS-L Project

Several graduate students in the CTAR 452 Arts Management course transformed the class Academic Service-Learning (AS-L) Project, AMP, into a student organization. AMP is a two-day university arts marathon, which connected 25 student organizations and individual artists with more than 3,000 EMU students and community members in 13 campus venues. It became apparent in the process of evaluating AMP through class forum, small group discussions, and individual journaling that there was a need to (1) sustain AMP as an annual festival and an identifying arts event of EMU, (2) strengthen collaboration of artists and arts organizations in the University and surrounding community in support of the arts, and (3) connect Arts Administration students to professional networking opportunities. These needs gave rise to the founding of the student organization, AMPLifying the Arts at EMU.

Room 104, 2:15 p.m.

Meriah Sage

Professor Anita Rich

Ashes and Hope: The 1967 Detroit Riots

The presenter will discuss her community-based applied research and script development focused on the 1967 rebellion in Detroit. This presentation will include an ethnographic and personal narrative performance based on memories of six then-members of the Detroit community through the lens of a current Detroit resident.

Room 104, 1:35 p.m.

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Jenny Sawtelle-Koppera

Professor Jessica Alexander

The Creation and Development of the Educational Theatre Collaborative at Eastern Michigan University

The presenters created the Education Theatre Collaborative at EMU in order to provide a place where theatre artists collaborate, inspire, and encourage risk taking and art for art's sake. Every week in the ETC Incubator, an ensemble of artists and educators work collectively on a given topic associated with educational theatre, such as space, lighting, scale, and paper. ETC is a safe environment for our group to risk, re-juice, become inspired by the topic and each other, challenge each other, innovate ideas, find intersections between disciplines, and create art for art's sake. The Incubator empowers our group to achieve our artistic aspirations and the highest quality of work possible in educational theatre. This presentation will highlight the philosophy, history, and goals of ETC. Graduate student Meriah Sage contributed to this research.
Room 104, 3:45 p.m.

Adam Sheaffer

Professor Craig Dionne

“Very Tragical Mirth”: Ritual Death in Shakespeare’s *Midsummer Night’s Dream*

The researcher undertook an investigation of what one scholar called “the point of ritual death” in Shakespeare’s *Midsummer Night’s Dream*. This study offers an interpretation for the function of the famed “play within the play” as it relates to the idea, purpose, and history of ritual death within the genre of comedy. Primary resources included scholarly assessments and interpretations of the play, theoretical works pertaining to the history of comedy, and, most important, the play itself. The conclusions of the researcher support the notion of ritual death in *Midsummer Night’s Dream* as a “comic catharsis,” allowing audience, player, and reader to experience a purgation of the leaden thoughts associated with death and disaster.
Room 204, 2:15 p.m.

Lisa Storc

Professor Pirooz Aghssa

Homebody/Kabul – A Study Guide

Homebody/Kabul – A Study Guide is a compilation research project about the play *Homebody/Kabul* by Tony Kushner. This study guide was created for college students studying this work. Subjects included are Tony Kushner, the structure of the play and its production history, language, a history of Kabul, common themes, the Taliban, and what it means to be a refugee.
Room 104, 1:15 p.m.

Cara Williams

Professor Michael Tew

“Let’s see how this goes” and the Conversations Thereafter: Pedagogy by Trial and Error

Great teachers demonstrate content expertise and a strong understanding of effective pedagogical strategies (Hardre, 2005; Worley, Titsworth, Worley, & Cornett-Devito, 2007). Committed to her role as a graduate teaching assistant (GTA), the author explores her journey to identify and develop ideal teaching methods. Through research, collaboration, experimentation, and reflection, the author’s pedagogy evolves by trial and error. Conversations among the speech GTAs play a fundamental role in this process, as they discuss pedagogical concerns and generate innovative teaching strategies in their communal office space. While the GTAs embrace different instructional philosophies and styles, the novice instructors are united by a desire to learn to teach effectively. This desire lays the foundation for student learning. In her search for the ideal, the author concludes there is no ideal teaching method, only ideal teachers.
Room 104, 4:55 p.m.

Emily Winderman

Professor Michael Tew

What’s Yours is Mine and What’s Mine is Ours: The Self-disclosure of Classroom Management Techniques between First and Second-Year Graduate Teaching Assistants

Each year, as new graduate teaching assistants prepare to teach public speaking, the inevitable question arises: “How can I possibly make this content interesting?” This presentation is based on an evocative narrative focusing on the discourse between first-year and second-year graduate teaching assistants as it relates to the sharing (and not sharing) of pedagogical and classroom management strategies.
Room 104, 5:15 p.m.

Department of Computer Science

Hande Bakir

Professor Ben Keller

A Plug-in for Visualization of Attributes of Biological Networks Using Cytoscape

The researcher has implemented a plug-in to provide different visualizations of different attributes of biological networks for Cytoscape, which is a well-known bioinformatics tool. The plug-in allows life scientists to collect textual and numeric node-attributes data from Cytoscape node-graphs and return the values related to the attributes on interactive two-dimensional charts. The plug-in lets the users see, select, and group numeric and/or textual attribute data on the charts and reflects user selections on Cytoscape node-graphs by highlighting nodes. The researcher used Java as the implementation language of the plug-in, and the charts generated by the plug-in are implemented by using the JFreeChart library. The user interface that has the interactive two-dimensional

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charts generated by the plug-in will be used in a study that aims to prove that interactive charts will provide life scientists a more user-friendly interface for visualizing the node attributes.

Poster Presentation: Room 310, 4:00 p.m.

Department of English Language and Literature

Abdulhamit Arvas

Professor Elisabeth Däumer

Loss of Metanarratives in the Postmodern World of *The History of Love* and *The PowerBook*

Postmodernism, a popular and controversial term in literary, cultural, political, social, and philosophical studies, has been used to describe the epistemological and cultural challenges of the contemporary world. Celebrated by some and condemned by others, postmodern novels have achieved unexpected popularity, since they enable readers to enter the text freely as writers of their own texts and thus pull readers into the active play of writing. This paper analyzes two contemporary novels, *The PowerBook* by Jeanette Winterson and *The History of Love* by Nicole Krauss, in terms of their celebration of postmodernity and the deconstruction of such transcendental concepts as center, authority, authorship, patriarchy, reality, and meaning.

Room 300, 1:15 p.m.

Teresa Asiain

Professor Annette Wannamaker

“Not my daughter, bad witch”: Loss of Meaning in the Translation of the *Harry Potter* Series into Spanish

This paper examines the loss of meaning that occurs when translating fantasy from the original language to another target language. Taking as example the translation of the *Harry Potter* series, I describe the problems faced by the four different translators when translating J. K. Rowling’s books into Spanish. The task of translating a text is not an easy one, and working with fantasy creates some added challenges. Although some great translation solutions can be found in the texts, in general, the translation of the *Harry Potter* series into Spanish lacks risk and is, in many cases, unwise. Shades of meaning are lost, probably because of the urgency to publish the works as soon as possible. For instance, the failure to translate the abundance of invented names of people and places implies a loss of the sense of humor. Overall, the general result of the translations is a more boring, less playful text, designed for an older audience, where many humorous meanings are lost.

Room 208, 4:35 p.m.

Allison Marie Fuhrman

Professor Annette Wannamaker

Finding Neverland: The Adult’s Impossible Journey to Childhood

This paper analyzes how J. M. Barrie’s *Peter Pan* and Geraldine McCaughrean’s authorized sequel *Peter Pan in Scarlet* illustrate the difficulties both children and adults face when confronting their own child- and adulthoods. *Peter Pan* was written almost a century ago, but the interpretations of childhood and adulthood are still relevant today. One cannot establish a clear age line between children and adults; adults are constantly reworking their identities in terms of who they are as adults by re-imagining who they were as children. While Wendy’s flight to Neverland depicts children’s inner turmoil upon learning they must grow up, the sequel’s return to Neverland reminds adults that their nostalgic visions of the past do not always coincide with the reality of childhood.

Room 208, 2:45 p.m.

Sarah Goletz

Professor Annette Wannamaker

Power, Patriarchy, Resistance: A Feminist Apologia of “Cinderella”

With good reason, the many variations of “Cinderella” have long been critiqued by traditional feminist critics as everything from offensively anti-feminist to destructively misogynistic. However, deconstructive theory asserts that an interpretation of a text is impossible without its opposing interpretation simultaneously present in the text; Peter Hollindale asserts that every text has both a surface ideology and an underlying ideology that may run counter to the surface; and Foucault asserts that power and resistance are inseparable force relations. Thus, within a folktale whose surface ideology is so apparently steeped in patriarchy, we may find, just as strongly present, a counter-ideology of feminine resistance to patriarchal hegemony—a survival, within the gaps of male-transcribed and -revised folktales, of female voices speaking from the essentially feminine tradition of oral storytelling. My paper re-examines “Cinderella” using these theories to reveal evidence of proto-feminist resistance in the variations recorded by Perrault and the Grimms.

Room 208, 3:05 p.m.

Fatima Ijaz

Professor Helen Aristar-Dry

Bivocality in Durrell’s Text: “Outremer”

The researcher investigated the linguistic techniques, specifically of Free Indirect Discourse and Grice’s Maxims in Lawrence Durrell’s text: “Outremer, Monsieur.” “Bivocality” was identified as the recurrent theme in Durrell’s work, and it was used to study the writing style of the novelist. Data proved that the novelist used this technique to enhance the unreliability of the narrator as well as to create an eerie connotation about the inhabitants of Avignon, the city where a suicide had taken place. The

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researcher also looked at the haunting effect “memory” plays in this text. The linguistic papers by Helen Aristar-Dry on “Free Indirect Discourse,” Anne Waldron on “Characterization,” and Levinson on “Conversational Implicature” were consulted.
Room 300, 4:35 p.m.

Jessica Paula DeYoung Kander

Professor Annette Wannamaker

Curious Critters: Queer Subtext in Three Picture Books

This paper explores the development of queer subtexts in children’s literature drawing on textual examples. Two main questions are presented as the foundation of this discussion: why queer subtexts exist and how queer subtexts are developed. Research reveals that queer subtexts exist in children’s literature because of the threat posed by the sexual child on adult identity and culture. Books with queer subtexts are a way to establish a space for LGBT children to experience meaningful dialogue regarding non-heteronormative identity in a non-threatening way. Queer subtexts in children’s literature are developed in both the creation and reception phases of a text, allowing for agency on the part of a child reader. Ultimately, queer subtexts are an important yet under-researched part of children’s literature.
Room 208, 3:25 p.m.

Ania Kubisz

Professor Beverley Goodman

A Comparative Study of Devoicing of Word-final [d] in Polish, German, and Aave

The aim of this project is to compare and describe occurrences of voice neutralization in word-final [d] in German, Polish, and Aave. Three subjects participated in this experiment, each a speaker of one of the three languages. First, duration of voiced and neutralized stops is examined. Next, a short examination and comparison of duration of vowels preceding stops across the three languages is provided. Finally, the process of devoicing is examined. The samples were constructed for /ud/, /od/, /ed/, /id/ and /ad/ as word final segments. Furthermore, each of the cases is investigated in re-voicing and devoicing environment to see whether the expected processes in fact occurred and if there are any differences in realization of /d/. While there are differences between the degree of neutralization for Polish and German, Aave goes further. Some of its speakers devoice syllable finally, while others delete the final consonants in their speech.
Room 300, 3:45 p.m.

Ferdinan Okki Kurniawan

Professor T. Daniel Seely

Verb-initial Word Order of Non-action Verbs in Jakarta Indonesian

It has been argued that non-action verbs encounter a serious problem in agent identification examination. This is due to the lack of absolute agent role, which is referenced with these verbs such as *know* and *like*

(Gordon 1996). Two different underlying meanings of non-action verbs, when the logical actors involved are animate-human arguments, may surface in the same word order in Jakarta Indonesian. The predication process in non-action verbs defines significantly more abstruse, unachievable, and subtle mental states than the predication process in the action verb (Scholnick and Hall 1991). Since action verbs are less abstract than non-action verbs and more easily perceived by the speaker’s perceptual function, the predication process triggers constraint to be active. In Jakarta Indonesian, the constraint fails to be active in non-action verbs because the predication process in non-action verbs is conceptually more difficult for the human cognitive system to grasp.
Room 300, 3:05 p.m.

Angela Laginess

Professor Annette Wannamaker

“Click, Clack, Moo Cows that do as They Choose: A Critical Analysis of Doreen Cronin’s *Click, Clack, Moo Cows that Type*”

Doreen Cronin’s popular children’s book, “Click, Clack, Moo Cows that Type,” like most literature for the young, is typically viewed as an innocent and fun-loving book meant only to entertain children with lively colors and rhyming words. This paper seeks to prove the complexity behind both the narrative and illustrations of Cronin’s “Click, Clack, Moo,” and show that even a children’s book can be revolutionary and Marxist in nature. The lessons in this text explicitly teach readers to fight for causes they believe in, while implicitly teaching them the power of the written word in challenging authority and uniting for change, and that children, although oppressed by adults, can still make a difference in the world.
Room 208, 3:45 p.m.

Matthew Lahrman

Professor Helen Aristar-Dry

LL-MAP: Synthesizing SE Asia Language Maps

LL-MAP is a project designed to integrate language information with data from the physical and social sciences by means of a Geographical Information System (GIS). For this project, a team of graduate students at the Institute for Language Information and Technology has developed a geo-database of language information, which relates geographical information on the area in which a language is or has been spoken to data on resources relevant to the language. We have digitized and geo-referenced maps containing information on topography, political boundaries, demographics, vegetation, and wildlife to provide a basis upon which to build hypotheses about language movement across territory. This presentation will focus on how existing language data can be brought together and synthesized to create new maps, with a specific focus on the Miao and Yao families in Southeast Asia.
Room 300, 4:55 p.m.

Hunter Thompson Lockwood

Professor Helen Aristar-Dry

From Paper Maps to GIS: A Case Study at the Alaska Native Language Center

Maps of language areas, toponyms, and other types of geolinguistic documentation, while of great ethnographic interest, have traditionally been epiphenomenal to endangered language documentation and linguistic research. As such, vast amounts of geocoded linguistic data (in the form of annotated paper maps) reside within archives otherwise dedicated to preserving field notes and sound recordings. With the rise in popularity of Geographic Information Systems, maps that once languished in obscurity can gain new life in the digital realm. In August 2008, as part of the LL-MAP project, two EMU linguistics students travelled to the University of Alaska in Fairbanks to examine the map catalogue of the Alaska Native Language Center, where we geocoded nearly 3000 toponyms in four Alaskan languages. Here we focus on the digitization of maps relating to Gwich'in, an endangered Athabaskan language spoken in northern Alaska, addressing challenges that will be met in any geolinguistic digitization program.

Room 300, 5:15 p.m.

Alison Marie Malburg

Professor Melissa Jones

The Transaction of Abjection and Agency in Aemilia Lanyer's *Salve Deus Rex Judaeorum*

Aemilia Lanyer's poem exposes women's potential for independence and power while highlighting women's vulnerability and the agency they obtain during the act of writing and during the act of sharing their written works. Through the interconnected abjection of Christ and his mourners, the female literary legacy Lanyer is establishing in "*Salve Deus Rex Judaeorum*" is, also, partaking in Christ's abjection. The shared abjection in Lanyer's work is further explored through the gaze of the women mourners in the poem, through Christ gazing at his mourners, and through the voyeuristic experience of Lanyer's readers. Consequently, this analysis establishes Lanyer's intent to create a place for women within the public spaces of men and provides an avenue to analyze women's potential role within the early modern period.

Room 302, 1:35

Patrick Manning

Professor Christine Neufeld

Under your yerd: Power, Martyrdom, and Free Will in Chaucer's "The Clerk's Tale"

In Geoffrey Chaucer's *The Canterbury Tales*, when the Host asks the Clerk to tell a tale, the Clerk submits to the Host's authority and agrees to follow the rules of the game: the question of power and authority pervades *The Canterbury Tales*. In "The Clerk's Tale," Chaucer expands this theme through a discussion of power, free will, and storytelling. Using hagiographic tropes and a meta-fictional structure, the

Clerk's tale negotiates, explicates, and complicates the power relationships between story-author, author-audience, man-woman, and divine-human. Drawing from diverse sources like Michel Foucault, Jacques Derrida, and early Christian hagiography, I will explore how the Clerk's tale undermines authority—from textual to divine—to demonstrate the impossibility of locating authority within an individual origin. The inability to highlight the text's origin reflects Chaucer's own anxiety over being the single authority of *The Canterbury Tales*, a position that he actively questions and challenges.

Room 208, 4:55 p.m.

Maria Montagnini

Professor Christine Neufeld

Sovereignty or Submission: "The Wife of Bath's Tale" and the 18th Century Sublime

Chaucer's heroine of the "Wife of Bath's Tale," a folkloric figure called the "Loathly Lady," is a character who defies stereotypes. The authority she exercises over her husband at the Tale's outset portrays her as possessing the sovereignty she alleges women desire. Yet this sovereignty appears lost by the Tale's end when the Lady freely promises submission to her husband. In this complex dynamic of power, Chaucer explores a topic that 18th century philosophers Edmund Burke, Immanuel Kant, and Friedrich Schiller term "the sublime and the beautiful." In the authority she commands, Chaucer's Loathly Lady exemplifies the physicality of the sublime as defined by Burke. Her submission, rather than causing a diminution of power, elevates her to Kant and Schiller's moral sublime. Examining Chaucer's Loathly Lady through the lens of the sublime serves to illustrate the authority consistent in her character throughout the Tale.

Room 208, 5:15 p.m.

Sarah Nolen

Professor Sheila Most

An Examination of Male Friendships in Myth

By looking at three male friendships in myth, we can see several similarities. When the friendships between David and Jonathan in Hebrew mythology, Gilgamesh and Enkidu in Mesopotamian mythology, and Achilles and Patroclus in Greek mythology are analyzed, the following similarities can be noted: One friend is adopted into the other's family; all of these friends are warriors; one friend is a mentor to the other; the friendship is sealed by a bond or oath; and, last, one friend must die for the other. There are many ideas as to why similar themes can be found among the mythologies of different cultures. These similarities can best be explained by the theory of "elementary thoughts" that says there are similarities in the human mind and also by the theory of "migration" or "borrowing" of ideas among cultures.

Room 302, 1:15 p.m.

Jui Pagedar

Professor Elisabeth Däumer

Benjamin's Alienated Individual in Fictional Communities

I use Walter Benjamin's concepts of "aura" and "alienation," articulated in his essay "The Work of Art in the Age of Mechanical Reproduction," to re-examine the relationship between individual and community. Benjamin posits that the mass proliferation of art desensitizes individuals and eventually alienates them from their own human condition. I argue that the modern individual's self-alienation is preceded by his alienation from the pseudo-real community or communities he belongs to. The individual and community share a synecdochical relationship. The community, however, is a construct of the machinery of powerful industries such as, quite topically, Nation, religion, MNCs, and so on. The community as a spawn is subservient to the interests of its progenitors.

Room 300, 1:35 p.m.

Kayti Purkiss

Professor Annette Wannamaker

Women in Video Games: From Stereotypical Representations to Experimentation in Personae

My presentation will apply children's literary criticism and game theory to a discussion of female stereotypes in video games. Studying representations of gender in video games is essential because children and adolescents spend large amounts of time playing games, which must influence their perception of females and their own gender identities. Since so few games feature women, the few that do bear the burden of being tokens for the gender: the few women represented are shallow depictions that "[reproduce] the law binding femininity to the body" (Deuber-Mankowsky 47).

Room 208, 4:15 p.m.

Evelyn Richter

Professor T. Daniel Seely

The Acquisition of Prefix Verbs and Particle Verbs in German: Evidence from CHILDES

The behavior of German particle verbs has fascinated morphologists and syntacticians for a long time. However, little research has been done on the acquisition of particle verbs. This paper serves as a pilot study by using German child language data from CHILDES to determine the time and order of acquisition as well as which errors children make and, almost more important, which errors children do not make. The results from this pilot study clearly indicate that children know there is a difference between prefix verbs and particle verbs. First, the time of acquisition is shown to be different for particle verbs and prefix verbs. Second, while children do make various types of errors, they never make the same errors for both particle verbs and prefix verbs.

Room 300, 3:25 p.m.

Sheryl Ruskzkiewicz

Professor Elisabeth Däumer

A Glimpse of the Past in the Future: Mina Loy and the Crab Nebula

At an early age, Mina Loy developed a strong interest in the skies and heavenly bodies. Described as a Futurist, her fascination with technology and scientific advancements proliferate in her poetry. Specifically, the poem "Crab-Angel" gains its title from the Crab Nebula, which is visible to the naked eye in the night sky. From the content of this poem, it is clear that Loy is referring to this particular astrological phenomenon. Surprisingly, there is a correlation in terminology between Loy's poem and scientific discoveries of the Crab Nebula after her death. By looking into the past of the Crab Nebula (since light has a far distance to travel), Mina Loy looks into the future and finds identity in a complex and mysterious celestial body.

Room 300, 1:55 p.m.

Nicole Guinot Varty

Professor Doug Baker

"The Smart One": Untangling the Social Web of Literacy Practices for Dyslexic Readers

The researcher conducted a case study examining the social and academic contexts, and consequences, of literacy practices for a college student with severe dyslexia. The concepts of social literacy, multiple intelligences, and differentiated learning styles were the primary theories used throughout this study. Through literature review, observation, and interview, the researcher constructed a case study for a college student with severe dyslexia, while also applying thematic analysis to determine the effects of social definitions imposed on students with LD.

Room 302, 2:15 p.m.

Kate Stephanie Williams

Professor Elisabeth Däumer

Sylvia Plath: A Modernist Poet?

My thesis seeks to understand where to place twentieth-century women writers in modern and post-modern literary tradition by asking, is there such a thing as a separate women's modernist movement with its own canon? In order to explore this question, I will focus on the poetry of Sylvia Plath, whose writing represents a pivotal change in women's writing during the twentieth century. She is often labeled as a confessional poet, yet I want to explore her poetry further and argue that beyond writing from her own life experience, she writes from the modernist tradition and creates a new breed of modernism. The two movements of women's literature and modernism collide in the poetry of Sylvia Plath, who acknowledges and incorporates each into her own work to create a unique voice in women's poetry. The question remains where and how we should place this voice in the canon of English and American poetry.

Room 300, 2:15 p.m.

Graduate Research Fair 2009

Sara Williams

Professor Christine Hume

Migraine and the Migraineur

The writer/researcher developed a lyric essay (an amalgamation of creative- and research-oriented expressions of language) based on migraine and pain research from myriad genres: medical, historical, philosophical, political, and psychological texts; journalistic memoir; and case studies. The essay's theoretical and factual explanation and analysis of migraine/migraineurs is juxtaposed with artwork, excerpted essays, poems, and creative works by prominent migraineurs such as Hildegard von Bingen, Joan Didion, Virginia Woolf, and Emily Dickinson. The writer/researcher also draws from her own experience suffering from migraine for the past 12 years, especially in the creative portions of the essay. Through the process of synthesizing diverse sources through both classical essayistic and creative means, the writer/researcher will present an original and thought-provoking illustration of migraine and the experience of the migraineur.

Room 302, 1:55 p.m.

Andrew Winckles

Professor Elisabeth Däumer

“My Own Eyes Are Not Enough”: T. S. Eliot, C. S. Lewis, and the Christian Theoretical Tradition

The conversation between Christianity and literary theory has become deadlocked. Faced with an academy that is perceived as hostile to religious views on secular texts, Christian scholars have too often confined themselves to their own sphere, breaking off conversation with other literary scholars. On the other hand, secular academics have dismissed Christian scholarship as reductive and confined by a rigid set of moral beliefs. If the conversation between Christianity and literature is to flourish in the twenty-first century, a new paradigm must be created that fosters dialogue between these camps. Both T. S. Eliot and C. S. Lewis addressed this divide between Christianity and literary scholarship in their criticism. By examining Eliot's *After Strange Gods* and Lewis's *Experiment in Criticism*, I will point to a way toward a dialogue between scholarship and Christianity that is mutually beneficial and will help establish the parameters of a Christian literary theory in the twenty-first century.

Room 300, 2:45 p.m.

Kate S-H. Wu

Professor T. Daniel Seely

Constraints on Double-Gapped Restrictive Relative Clauses in Mandarin

In this talk, we report on research in first language acquisition. In the sentence “Shiung chaotao ei mai ex de tutze,” “The bear found the bunny that was bought,” an empty pronoun *ei* can be assigned to either the matrix subject “the bear,” or free in referent “someone else other than the bear.” We demonstrate, using a Truth Value Judgment task, that children as young as four years old have the same linguistic

constraints as adults and that they are able to deal with ambiguous embedded verbs, assigning the appropriate referents to the null subjects in a double-gapped restrictive relative clauses in Mandarin. This may suggest that the child's language-processing system is essentially the same as that of an adult.

Poster Presentation: Room 310, 2:15 p.m.

Department of Geography and Geology

Tracy Aris

Professor Dan Bonenberger

Prefabricated Housing of the 20th Century: Lustron Home Construction Principles

The researcher assessed the construction techniques of the “Lustron Home,” a mass-produced structure of prefabricated metal and porcelain enamel “panels” built in the U.S. from 1948-1950. Named for “luster on steel,” the Lustron home created a new building opportunity for affordable housing in the post-WWII economy by applying mass production principles to traditional housing construction practices. Like many mid-20th-century buildings, the Lustron home reflects the enduring characteristics of post-war architecture: a progressive intent, an unusual mix of materials, and a divergence from traditional construction methods. The analysis included a review of the structure's prefabrication techniques and delivery systems to determine their contribution to its appeal and ongoing preservation efforts.

Poster Presentation: Room 310, 2:15 p.m.

Adam Cook

Professor Norman Tyler

Celebrating 100 Years of Urban Planning: Chicago vs. Detroit

In 1909, Daniel Burnham published his *Plan of Chicago*, signaling the beginning of urban planning as a major profession in the United States. Burnham's *Plan* sought to remake Chicago according to City Beautiful principles and was implemented to an extent that permanently redefined the city as it grew during the coming century. Fifty years later, Charles Blessing, head of the Detroit City Plan Commission, had a vision of remaking his city on the same scale, only a small portion of which was implemented. Blessing's plans for Detroit included the substantial rebuilding of the city within West Grand Boulevard, though in a style influenced by the realities of the automobile age. This presentation will explore the important similarities and differences between the grand plans for these cities and how each reflected its era in the history of twentieth-century urban planning.

Room 208, 2:15 p.m.

Graduate Research Fair 2009

Brenna Moloney

Professor Ted Ligibel

Documenting the DeYoung Farmstead Mill House

The student outlines the process through which she and her team surveyed and documented the Mill Wheel Building on the DeYoung Farmstead near Traverse City, Michigan, in October 2008. The presentation will include a discussion of Historic Structure Reports and the role of a charette in the Historic Preservation Planning process. In addition, the student will discuss the historic significance of the mill building and the DeYoung Natural Area to the community.

Room 208, 1:35 p.m.

Deborah Deacon Odette

Professor Ted Ligibel

Glimpses into Another World: Decoration of the Oak Room at Cranbrook House

Cranbrook House, the Albert Kahn-designed home of the Scripps-Booth family, was completed in 1908. Soon thereafter, the home was enlarged and the "Oak Room" was added on. The room featured oak paneling throughout in a linenfold pattern, and each bay was topped with an oval cartouche. Beginning shortly after the room was completed, the Booths' son Henry began painting the cartouches with designs commemorating important events in the life of the family. For nearly 100 years, cartouches have been painted in this fashion. There are now approximately 50 painted cartouches. Each encapsulates a moment in the past, full of humor and memory. Together they form a record of the unique history of the family, the house, and the wider Cranbrook Educational Community.

Room 208, 1:55 p.m.

Meghan Schafbuch, Veronica Robinson, and Jody Chansuolme

Professor Ted Ligibel

Speaking Objects: Artifact Analysis in a Museum Setting

Museums are not graveyards for objects. The museum is a place where objects thrive and share their stories through the creative and careful analysis of museum professionals. Through its form, function, use, and creation, the object reveals significant insight into cultural beliefs, values, and attitudes. As products of their time, objects are the manifestation of past societies in tangible form; they are clues to cultural legacy. Through the preservation and interpretation of these artifacts, we can piece together the very human aspects of past cultures and better facilitate the education of a museum's constituents. The case studies presented in this group poster aim to display and explain the process of reading objects and interpreting the stories they tell to better depict past and contemporary cultures for today's museum visitors.

Poster Presentation: Room 310, 2:15 p.m.

Anne Stevenson

Professors Henry Aldridge and Ted Ligibel

The Michigan Theater Project

The researcher will work on chronicling the history of the Michigan Theater by compiling and expanding on a database of materials pertaining to the productions and presentations of the Theater since its opening in 1928. The database will serve to assist Dr. Henry Aldridge with a overall project of writing about the history and success of the Michigan Theater as a major Ann Arbor venue and historical location.

Poster Presentation: Room 310, 2:15 p.m.

Department of History and Philosophy

Marcus Karl Adams

Professor Ronald Delph

Profiting from Prostitution in Renaissance Florence

Given the general opposition to prostitution by Florentine society, the city government, and the Catholic Church, why did the city fathers of Florence establish three municipal brothels as an acceptable solution to this recognized evil? My research will show that the reason prostitution was officially condoned in Renaissance Florence was that the Catholic Church and Florentine government understood that regulating prostitution was more useful and profitable than its elimination.

Room 304, 1:15 p.m.

Wilson C. Blythe, Jr.

Professor Walter Moss

Overcoming Resistance to Killing: America's Military in the 20th Century

The twentieth century was a time filled with numerous bloody wars. Despite unparalleled technological progress, war still depends on the willingness and ability of men to kill other men. An enduring question is why soldiers were willing to kill and how militaries were able to make them into efficient killers. This paper, which will focus on American ground forces, will show that militaries were able to turn citizens into soldiers through immersing them in a distinct culture of war during initial training designed to ensure that the new recruits would possess martial values, training their soldiers to kill (i.e., giving them necessary skill sets and breaking down psychological barriers), and building cohesive teams for mutual reinforcement.

Room 304, 4:35 p.m.

Graduate Research Fair 2009

Karen Widger Caldwell

Professor Ronald Delph

For Better or Worse?

The researcher investigated the effect of the Protestant Reformation on the role of women in marriage in Germany. Research sources included the New Oxford Annotated Bible, Martin Luther's sermons and letters, and the works of prominent historians. Research revealed that the status of women did not significantly change because their primary social and economic roles did not change with the elevation of marriage.

Room 304, 1:35 p.m.

Peter W. Cherlet

Professor Kathleen Chamberlain

California Gold Rush 1848-1855: The Chinese and their Departure from Mining

Thousands of Chinese immigrants flooded into San Francisco, 1848-1855, to participate in the California Gold Rush. Despite extreme discrimination and unjust taxation designed to force them out, they found unprecedented economic opportunities in their own businesses and journeying to other gold strikes across the American West. This paper analyzes the experiences of Chinese immigrants who fled poverty and repression in their home country and found a degree of prosperity in California and the American West. I argue that the Chinese demonstrated determination and an entrepreneurial spirit that helped them to succeed against all obstacles.

Room 204, 4:55 p.m.

Aaron Dougherty

Professor John McCurdy

"These Fellows Intend Mischief": Tecumseh, the United States, and the Climax of Indian Nationalism

Few Indian wars have had such dramatic effects on the American experience as Tecumseh's Indian rebellion. Tecumseh's Confederacy engulfed the tribes of the Old Northwest territory and attempted to woo the southern Choctaws, the western Sioux, and other, lesser tribes into one allied force. However, Tecumseh recognized that a pan-Indian union was unlikely to succeed if based upon nativist principles. He turned to ethnic and nationalistic appeals as a motivation for the unification, and a major inspiration for this nationalistic streak was the young American Republic. It would take Tecumseh's recognition of the potential of the American model of nation-building to spark his quest for a similar goal. The course of Indian nationalism was accelerated to the point that the Confederacy began to more closely resemble the new nation upon which it was modeled.

Room 304, 4:15 p.m.

Pamela German

Professor Ronald Delph

English Witchcraft: A Gender and Geographical Issue

Witchcraft fever was rampant in post-Medieval Europe. This paper will explore why the English female population was targeted more often than their male counterparts and examine why, when accused of witchcraft, English women were less likely to face the same punishment as continental European women. As the role of women in England was evolving, English society was encouraging the pursuit of witches, predominantly women, and meting out their punishment as a means of re-establishing control and balance in a changing society. Continental European women, however, did not find their role in society changing as dramatically; thus, their punishments were more harsh, not meant to control but to destroy.

Room 330, 5:15 p.m.

Joseph E. Pfeifer III

Professor Joseph Engwenyu

The 81st and 82nd West African Division in World War II during the Burma Campaign

The 81st and 82nd West African divisions were expansion units from the Royal West African Division that served in Burma during World War Two. The divisions were made of West African soldiers and were commanded by the British military. Faith in the Africans was minimal until they were put into battle; they performed magnificently, better than military officer would have expected. The 81st and 82nd were vital to the operation in Burma to help fight the Japanese enemy out of the area.

Room 304, 1:55 p.m.

George Royce

Professor Joseph Engwenyu

Diamonds in Angola: Funding UNITA's War

The researcher explored Angola's diamond industry and its connection to UNITA's financial well-being during the country's civil war period from 1975 to 2002. Government and NGO security reports, books, and scholarly journals provided the majority of data for the project, and the diamond industry's linking with UNITA was examined from business, economic, political, geological, military, and cultural standpoints. The data examined showed a positive correlation between UNITA's success in occupying diamond-producing regions and their ability to finance military campaigns and daily operations. Furthermore, the removal of this source illustrated a financial strain on the organization before the end of the civil war.

Room 304, 2:45 p.m.

Graduate Research Fair 2009

Bridget Sekuterski

Professor Joseph Engwenyu

The United States' Support of the Dictatorship in Zaire

The researcher investigated how and why the United States supported Joseph Mobutu's dictatorship during the Cold War. In order to examine how the United States supported Mobutu, the research was completed and presented in chronological order of the Presidential administrations of the time period. The research revealed that the support of pro-Western Joseph Mobutu in Zaire was in line with the foreign policy of the United States during the Cold War. Mobutu's dictatorship was supported by Presidential administrations because it was thought to be the only alternative to Soviet expansion in central Africa.
Room 304, 3:05 p.m.

Michael Stout

Professor Joseph Engwenyu

French African Colonial Troops on the Western Front of World War II

The researcher investigated the history of African colonial troops serving the French during World War II from before the fall of France in 1940 to when the French began to "whitenize" their army in the winter of 1944 and sent the African troops home. The book *Soldiers of Misfortune* by Nancy Lawler and an article in *The Journal of African History* by Myron Echenberg were the primary resources used in this study. The researcher discovered that throughout the war, the African troops fought hard and often were noted as being superior fighters to their French brethren but still faced disrespect from the French leadership. At the end of the war the French leaders showed little gratitude – many Africans went home with small pensions and no promises of freedom.
Room 304, 3:25 p.m.

Amber Van Amburg

Professor Steven Ramold

Diaries from the Women of the Civil War

The researcher examined numerous diaries written by women during the Civil War. These diaries provided insight into the female Civil War experience. The researcher selected and examined diaries from women not only in the North and South but also from different periods during the war. Particular interest has been given to any political affiliations that the women indicated in their writing and any changes that occurred to that alliance over time. The researcher used a content analysis of the diaries to better understand the regional differences and similarities between the women of the Civil War.
Room 304, 5:15 p.m.

David Wagner

Professor Walter Moss

The Decline of Rust Belt Cities: 1945-1960

This presentation regards the presenter's research into the causes of the physical and economic degradation of industrial cities in the American Great Lakes and

Northeast. Research revealed that the urban decay ubiquitous throughout these cities was the result of already existing urban decline rather than a cause of it, and that the true impetus was a combination of demographic shifts, the failure of urban renewal, and the nationwide trend of deindustrialization. This study examines the effects of the above events, as well as how their convergence stunted or maimed the great Rust Belt cities that once served as the most convincing example of the "American Dream."
Room 304, 4:55 p.m.

Carly Willacker

Professor Joseph Engwenyu

The Socio-Economic Struggle of Ghanaian Women from Matrilineal Community to Patriarchal Society

The researcher examined the social and economic conditions of women in the former Gold Coast colony – present day Ghana – from pre-colonial structures to the present. The investigation is based on a number of studies done by prominent historians of African (and specifically Ghanaian) social, cultural, economic, and political histories. The study reveals that the combination of co-existing Matrilineal and Patriarchal traditions and persistent British colonial feminine ideology resulted in the continued struggle of Ghanaian women to gain social, political, and civic rights in Ghana's post-independent society.
Room 304, 3:45 p.m.

Department of Mathematics

Katherine Ballentine

Professor Jayakumar Ramanathan

Pólya's Urn and Martingale Convergence

In the basic Pólya urn model, we consider a jar that initially contains R red marbles and G green marbles. Once each second, a marble is drawn from the jar. It is then replaced and another marble of the same color is added, thereby increasing either R or G by one with each draw. We are interested in how the ratio of red to green marbles (R/G) changes with time. The martingale convergence theorem, an important result in probability theory, guarantees that R/G will almost surely approach a limiting value. Our computer simulations illustrate the behavior of the basic urn model and explore some open questions about more complex models. The investigation leads us to an examination of other types of martingales.
Room 301, 4:35 p.m.

Gary Brent Duma

Professor Jayakumar Ramanathan

A Formal Construction of Brownian Motion with Computer Simulations

Brownian motion has been widely employed in the scientific literature, modeling in a diverse range of fields from stock pricing in economics to particle displacement in physics. The scientists in these fields draw on the formal methods, results, and applications developed by working mathematicians and statisticians to make scientific implementation more

precise. To that end, we have been researching Brownian motion and will present several theorems that motivate the construction of its formal existence and convergence, and generating graphical simulations with the numerical computing software MATLAB. These results and their proofs will be outlined, and the graphical simulations will be presented and contrasted with graphs of stock prices in the stock market. The use of geometric Brownian motion in finance has been called into question recently due to economic turmoil, so statistics will be presented conveying the degree of confidence we have in modeling these stock prices with Brownian motion.

Room 301, 4:55 p.m.

David Lubke

Professor Andrew Ross

Low-Variance Retrial Times in a Multiserver Queueing Model

A retrial queue model arises often in analyzing call centers and cell-phone systems where there is no organized queue. If all servers are busy when a customer calls, the customer must try again after some length of time. We use general low-variance retrial time distributions in a multi-server retrial queue model of moderate size (10-60 servers). We compare the error in predicting system performance when approximating with an exponential distribution and examine a counter-intuitive pattern.

Poster Presentation: Room 310, 4:00 p.m.

Leigh Ann Soltis

Professor Andrew Ross

Grid Shapes for Sensor Placement in Two Dimensions for Distributed Signal Detection

We describe ways to place sensors in a two-dimensional region to detect some event (radio transmission, rare bird call, weapons test, etc.) that keep the probability of detection large, the false alarm probability small, and the power requirements small. Using MATLAB, we experiment with different numbers of sensors and different grid shapes (rectangular and triangular) to see the effects on the total required power.

Room 301, 5:15 p.m.

Christina Trombetta

Professor Xiaoxu Han

Software Development for RSA and AES Encryption and Decryption

RSA and AES are the most successful public key and private key cryptosystems. They are widely used in the daily Internet communication. In this work, we conduct software implementation for the two cryptosystems by Java and Matlab programming languages. We also propose our own version advanced encryption standard (AES) system: Eagle-AES, which achieves at least the same level encryption and decryption security.

Room 301, 4:15 p.m.

Department of Music and Dance

Rachel Zirk

Professor Daniel Foster

Sing, Move, and Play! A New Approach to Teaching Beginning Violinists Based on Music Learning Theory

Under the mentorship of Dr. Garik Pedersen, the researcher received training in teaching beginning piano students using Marilyn Lowe's Music Moves for Piano. She was amazed at the effectiveness of this cutting-edge approach and decided that it should not be limited to piano students. She fused her double concentration of piano pedagogy and music theory into *theory pedagogy*, developing an approach to teaching violin that would parallel Lowe's work. To research and develop the approach, she taught beginning violinists for eight years and is furthering the work by training teachers who specialize in other instruments in Music Learning Theory. She will relate how students responded to this style of teaching and will present some of her own compositions.

Room 204, 5:15 p.m.

Department of Political Science

Christopher A. Blough

Professor Joseph Ohren

An Analysis of Local Government Agreements Adopted Under Michigan's Conditional Land Transfer Act, PA 425

Over the past decade, several researchers have examined the extent, nature, and possible impact of Michigan's PA 425, the Conditional Land Transfer Act. Almost 300 such agreements have been negotiated and adopted in more than two decades under the law. Little research, however, has focused on the causal variables that might influence the adoption of such agreements. The research presented uses GIS and related quantitative techniques to test the impact of several possible variables on local adoption of PA 425 Agreements, including infrastructure capacity, annexation history, population growth rate, housing growth rate, workforce growth rate, and contiguity of previous 425 adoptions.

Room 352, 1:55 p.m.

Deliena Grantham

Professor Jeffrey Bernstein

Assessing Client Satisfaction of the Housing Bureau for Seniors and Tax Foreclosure Prevention Program

The purpose of this capstone project was to assess client satisfaction for the Housing Bureau for Seniors (HBS) Tax Foreclosure Prevention Program (TFPP) 2007 Tax Aid Program. Out of 225 calls made to participants, 37% (83) responded to the survey. Of those who responded, 94.7% were either very satisfied or satisfied with the program, staff, and volunteers. There are no real serious problems that this program needs to address immediately.

Room 352, 2:45 p.m.

Graduate Research Fair 2009

John N. Nelson

Greg O'Dell, Public Safety Director

Pursuit Policy: A Comprehensive Review for the Novi Police Department Including Recommendations for Policy Revision and Training

The Novi Pursuit policy and driving training were both reviewed and compared to the current knowledge base and legal decisions. "Model" policies, actual pursuit policies, and training were reviewed from municipal, county, and state agencies. Policies from the Michigan Commission on Law Enforcement Standards (MCOLES) and the International Association of Chiefs of Police (IACP) were also incorporated. Two surveys were conducted, one of police command personnel from Michigan police agencies and the other of members of the Novi Police Department. The results of this study showed deficiencies in both the Novi Directive and in the pursuit/driving training. The study resulted in two recommendations for Novi Police executives. The adoption of either recommendation will result in an increase in officer effectiveness and well-being while placing emphasis on the safety of the citizens.

Room 352, 1:35 p.m.

Ryan M. Stevens

Professor Raymond Rosenfeld

Interest Group Influence and the Impact of Legislative Lobbying in the Development of the Michigan Energy Reform Legislation

Twenty-four states and the District of Columbia have adopted Renewable Portfolio Standard (RPS) either through legislation, rule-making, or administrative judicial review. Recently, the Michigan State Legislature passed and the Governor signed similar legislation mandating that ten percent of electricity generated should come from renewable and alternative forms of energy. What started as RPS for energy development emerged as an analysis and evaluation of energy policy solutions for a complex set of energy problems, both present and future. While there were a number of elected officials, legislative staff members, and bureaucrats involved in shaping the legislation, the Michigan Energy Reform Legislation would not have passed in its present form without the input and close assistance of policy experts outside the halls of the state capitol and bureaucratic agencies. This case study provides a broader perspective on the impact of interest groups and lobbying on state policy-making.

Room 352, 2:15 p.m.

Susan Wyman

Professor James D. Ivers

The Effects of Unemployment on Hospital Utilization in the State of Michigan

This paper studies how unemployment affects hospital utilization. It looks at the rate of admissions to hospitals as well as the average length of stay of those patients, the percent of those patients categorized as private pay, the acuity of patients

admitted, and the birth rate per thousand populations. The empirical analysis is based on a comprehensive data set of the population of State of Michigan from 2001 through 2006. The primary data sets are the unemployment rate for the state of Michigan by county and the inpatient admission rate, the rate of private pay patients, the birth rate, the length of stay, and the case mix index. The conclusion of this study is that while unemployment has a positive direct impact on inpatient admission rates, average length of stay, percent of patients categorized as private pay, and the case mix index in some parts of the state, those relationships cannot be generalized to the entire state as a whole.

Room 352, 1:15 p.m.

Department of Psychology

Tiffany Abrego

Professor Carol Freedman-Doan

Sex Talk: Factors that Influence Parent-Child Communication about Sex

Research has shown that parents who participate more in religious services tend to talk less about sex with their adolescents than do parents who do not attend religious services (Regnerus, 2005). It has also been shown that the communication about sex that does take place is influenced by the parents' own beliefs and experiences. However, the specific experiences and beliefs and the quality of the communication between the parent and the child have not been identified. Therefore, the purpose of this study is to evaluate how parental beliefs and experiences influence their communication with their children about sex. The poster will present information about the factors known to correlate with different types of parent-child communication about sex.

Poster Presentation: Room 310, 2:15 p.m.

Sarah Ahlfs-Dunn

Professor Alissa Huth-Bocks

Social-Emotional Development in Very Young Children and Parenting Stress in Mothers Residing at a Domestic Violence Shelter

This poster will present data from an archival study of 68 women and their 86 children, aged 0 to 3, who previously resided at a domestic violence shelter. Children's social-emotional development and mothers' parenting stress were investigated through the use of the Ages and Stages Questionnaire for Social-Emotional Development (ASQ-SE) and the Parenting Stress Index (PSI). The following data will be presented: 1) The percentage of children with elevated ASQ-SE scores, indicating significant risk for later social-emotional problems; 2) The percentages of mothers with clinically significant PSI scores for their personal life and in regard to their children; and 3) The correlation of ASQ-SE scores for children with mothers' PSI scores. The need to assess early for and be aware of the impact of domestic violence on children and mothers will be highlighted.

Poster Presentation: Room 310, 2:15 p.m.

Lucy Allbaugh

Professor Alissa Huth-Bocks

Assessing Romantic Relationship Quality in High-Risk Pregnant Women

Romantic partner relationships have known effects for pregnant women. The present aim of this study is to assess romantic partner quality and evaluate the validity of one known measure of romantic partner relationships, the Marital Relationship Scale (MRS; Braiker & Kelley, 1979), in a diverse sample of high-risk pregnant women. Results from this investigation suggest that the original MRS subscales may not be acceptable for the current sample, and because this measure has been previously used in lower-risk, mostly married individuals, an exploratory factor analysis was conducted. Results suggest that the MRS is generally a reliable and valid measure for assessing relationship quality; however, a somewhat different factor structure may exist in more high-risk samples of women. Findings will be discussed in terms of how future researchers may incorporate this measure into studies with more diverse and heterogeneous samples. Graduate students Jari Billiot and Erin Gallagher contributed to this research.

Poster Presentation: Room 310, 2:15 p.m.

Jari Billiot

Professor Alissa Huth-Bocks

Domestic Violence during Pregnancy: A Field Study

Each year an estimated 1.3 million women experience domestic violence by an intimate partner; most involve women of reproductive age. The Eastern Michigan University Parenting Project has interviewed more than 100 primarily low-income women from the community who are in their third trimester of pregnancy. This poster presentation will report rates of domestic violence and will examine how the experience of domestic violence affects women's depression, self-esteem, and trauma symptoms for these mothers.

Poster Presentation: Room 310, 2:15 p.m.

Jillian Carey

Professors Flora Hoodin and Michelle Byrd

Correlates of Depression in Parents of Adolescents with Adolescent Idiopathic Scoliosis (AIS)

Adolescents' experiences of AIS are best understood within a family system. Parents report stress related to their adolescent's condition and treatment, and preliminary evidence suggests family relationships affect adolescents' adjustment to AIS. However, a direct association between adolescent adjustment to AIS and parental psychological functioning has not been demonstrated. This study sought to explore this relationship. Parents completed measures of depression and social support. Adolescents reported their AIS-related functioning. Hierarchical Multiple Regression analysis explained 28.6% of variance in depression scores. Ethnicity and adolescent functioning, in the first and second blocks respectively, contributed most to the final model,

suggesting minority parents of adolescents with reduced AIS-related functioning may be at higher risk for depression. Further investigation is recommended as parental depression, shown to affect child functioning in other chronic conditions, also warrants detection and treatment in its own right. Graduate students Lauren Hart, Elizabeth S. Kuhl, Teresa J. Lynch, and Kevin Alschuler are co-authors on this project.

Poster Presentation: Room 310, 2:15 p.m.

Chelsea Dean Cawood

Professor Steven Huprich

A Comparison of Borderline and Non-Borderline Self-Injurers

This study compares groups of self-harming (SH) college students who are or are not diagnosed with borderline personality disorder (BPD). One hundred seventy-six participants completed structured clinical interviews for BPD, as well as personality and acute psychological self-report instruments. Approximately 15% of participants reported SH ($n = 26$), and of the SH participants, 50% ($n = 13$) met criteria for BPD. The only significant difference between these groups was that SH participants who met criteria for BPD reported experiencing less positive affect ($t = 2.645, p < .05$) than those who reported SH but did not meet BPD criteria. Based on these findings, it was hypothesized that the ability to experience positive affect mediates the relationships between BPD and SH. The hypothesized mediation model was significant. These findings indicate that self-harming individuals with BPD features experience difficulty being mindful of and experiencing positive affect.

Poster Presentation: Room 310, 2:15 p.m.

Laszlo Erdodi

Professor Renee Lajiness-O'Neill

Neurophysiological Correlates of Developmental Trends in Working Memory: A Multiple Longitudinal Case Study

Working memory impairment is a reported deficit in most subtypes of learning disability (LD). Historically, this cognitive construct has been operationalized as scores on paper-and-pencil standardized tests. The current project will investigate the neural substrates of working memory in three age- and gender-matched children: one with an acquired LD, one with developmental LD, and a neurotypical child, each measured longitudinally at three different points in time.

Poster Presentation: Room 310, 2:15 p.m.

Erin Gallagher

Professor Alissa Huth-Bocks

The Impact of Mothers' Partner Relationship Quality and Parenting on School-Age Children's Relationships with Peers

This study examined whether parenting behaviors mediated the association between partner relationship quality and school-age children's social adjustment and assessed the longitudinal trajectories of partner

relationship quality and parenting behaviors. Participants included a subsample (n = 902) who took part in the NICHD Study of Early Child Care. Results indicated parenting behaviors partially mediated the association between partner quality in infancy and teacher-reported social behavior during 5th grade, adjusted $R^2 = .035$; $F(2) = 15.11$, $p < .001$. Two repeated measures ANOVAs revealed a main effect for time for partner quality, such that partner quality steadily declined overtime. Results showed no main effect for time for parenting, but a significant main effect for group, such that children with high social adjustment experienced more sensitive parenting than children with low social adjustment.

Poster Presentation: Room 310, 2:15 p.m.

Yarden Ginsburg

Professor Carol Freedman-Doan

Extreme Tattooing and Body Piercing: A Type of Self-Injury

The researcher will investigate the relationship between extreme tattooing and piercing and non-suicidal self-injury and will look at whether excessive tattooing and piercing, both forms of body modification, may also be considered a form of non-suicidal self-injury, and if so, whether both forms exist on a spectrum with other agreed-upon forms of non-suicidal self-injury such as cutting and burning. Additional research will consider the possible progression of people from excessive tattooing and piercing, socially acceptable forms of self-injury, to other self-injury forms that are socially unacceptable. The researcher will also look at whether skill deficits, lack of coping skills, and insufficient resiliency lead to non-suicidal self-injury behavior.

Room 204, 2:45 p.m.

Krupa Hegde

Professor Stephen Jefferson

Racial Differences in Long Term Care

Older African Americans (AA) have been found to use nursing homes less than older Non-Hispanic Whites (NHW) controlling for age, SES, and health status. AAs are also more likely than NHWs to live in poor quality nursing homes. These nursing homes provide poorer process of care as indexed by inadequate staffing, fewer resources, and higher rates of deficiency citations, which cause actual harm or immediate jeopardy to residents. One major advantage of this study is that it uses both NHW and AA participants of comparable SES. This methodology assists investigators in the disaggregation of the effects of race and socioeconomic status, two highly correlated and frequently confounding concepts. AAs had poorer performances on cognitive measures, greater behavioral disturbance, and higher mortality rates than NHW of comparable SES. These findings indicate that race is a major risk factor for illness and mortality above and beyond SES.

Poster Presentation: Room 310, 2:15 p.m.

Erin Henshaw

Professor Carol Freedman-Doan

Psychological Predictors of Treatment-Seeking for Symptoms of Depression during Pregnancy

Despite mother and infant health benefits associated with treatment for depression during pregnancy, few women seek it. Reasons for this trend are not currently well understood. The aim of this study was to utilize the Health Belief Model of help-seeking to explore psychological factors associated with perinatal mental health treatment-seeking. Pregnant women reporting elevated depressive symptoms (n = 110) were surveyed about their perceptions of depression and its treatment based on the Health Belief Model of help-seeking. Results indicate that previous treatment, perceived benefits of treatment, and cues to action were significantly related to treatment-seeking behaviors, partially supporting the Health Belief Model. The strong relationship between cues to action and treatment use suggests that social influence may play a significant role in women's treatment decisions. Understanding this relationship provides important information for the development of interventions to improve treatment use during the perinatal period.

Room 204, 3:05 p.m.

Nasreen R. Islam

Professor Alissa Huth-Bocks

Current Romantic Relationships: One Possible Resiliency Factor for Interrupting the Intergenerational Continuity of Child Maltreatment

Researchers have found a link between the potential risk for parents to perpetrate child maltreatment and parents' own abuse experiences as children. However, only a small portion of individuals who were abused or neglected go on to maltreat their own children. Therefore, it would be helpful to better understand what contributes to breaking this cycle of abuse. Researchers have found that positive interpersonal relationships play a very important role in interrupting the intergenerational continuity of child maltreatment. In this poster the presenter will review some of the literature that offers several possible explanations for understanding the continuity or discontinuity of child maltreatment.

Poster Presentation: Room 310, 2:15 p.m.

Valentina Ivezaj

Professor Karen Saules

Mediators of the Relationship between Weight Problem Perception and Binge Eating

Research has documented a relationship between Weight Problem Perception (WPP) and Binge Eating (BE); however, little is known about possible psychological mediators of this relationship. Thus, we recruited 524 college women to complete a web-based survey measuring disordered eating patterns, susceptibility to eating-related disinhibition, locus of hunger, eating-related cognitive restraint, and susceptibility to food cues. Results confirmed that

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WPP is strongly associated with BE outcomes. Disordered eating patterns, susceptibility to food cues, disinhibition, and hunger each mediated the relationship between WPP and BE behavior, but only disinhibition mediated the relationships between WPP and BE symptom, and WPP and BE disorder (BED). Results suggest that WPP may exert its influence on BE outcomes by adversely impacting eating behavior and related psychological processes. Furthermore, the finding that WPP is most strongly associated with the more pathological BED outcome supports that WPP is a highly salient risk factor for severe forms of BE. Graduate student Amy Collings contributed the data to this research.

Poster Presentation: Room 310, 2:15 p.m.

Kylene Krause

Professor Alissa Huth-Bocks

Predicting Child Abuse Potential during Pregnancy

The prevalence and increasing incidence of child maltreatment, along with the severity and chronicity of its negative consequences, is well documented. Predicting child abuse potential and taking steps to prevent maltreatment before it occurs is a promising resolution that has received less attention than post-incident models. The current study recruited a primarily low-income community sample of women between the ages of 18 and 40. Correlations revealed significant negative associations between mothers' perceptions of the quality of their childhood relationships with parents and child abuse potential as well as between perceptions of social support and child abuse potential. Unexpectedly, attitudes and expectations about becoming a mother were unrelated to child abuse potential. Results suggest that parenting may already be compromised in some women before their child is even born. Results have important implications for those working with pregnant women and for child abuse prevention efforts.

Poster Presentation: Room 310, 2:15 p.m.

Lauren McSweeney

Professor Dean Lauterbach

Sleep Problems among Persons with PTSD and a History of Other Psychiatric Disorders

Sleep problems are included in the diagnostic criteria for a broad array of mood, substance use, and anxiety disorders, including PTSD. Leskin et al. (2002), using the baseline National Comorbidity Survey (NCS) data, found that persons with PTSD suffered a greater proportion of sleep problems than persons with other frequently co-occurring disorders. The present study examined the separate and combined effects of a history of PTSD and six contrast disorders on sleep disorder symptoms. Results revealed that the PTSD group did not differ from the contrast disorders on difficulties falling or staying asleep. However, the PTSD group did differ from four groups on number of weeks in the previous year they experienced sleep problems. Additionally, the PTSD group reported

more frequent sleep difficulties than the contrast groups. Significant differences between the PTSD and contrast groups existed when testing for problems with sleep initiation, early morning waking, and daytime fatigue.

Room 204, 3:25 p.m.

Jenny Nerbonne

Professor Carol Freedman-Doan

Self-Injurious Behavior in Adolescents: An Exploration of the Experiential Avoidance Model

This study will examine Chapman, Gratz, and Brown's (2006) Experiential Avoidance Model of Self-Injurious Behavior that has been proposed theoretically to understand this behavior. This study will empirically test the model with high school and college student samples. A novel way of measuring the emotional response that a stimulus elicits through a paper and pencil measure of emotional responses to hypothetical situations will also be tested. I will present the theoretical model that my thesis is based on and explain how the constructs will be measured.

Poster Presentation: Room 310, 2:15 p.m.

Christopher Roberts

Professor Steven Huprich

Test-retest Reliability and Psychometric Properties of the Depressive Personality Disorder Inventory

The Depressive Personality Disorder Inventory (DPDI; Huprich et al., 1996) is a reliable and valid measure to assess for Depressive Personality Disorder. However, it has not been evaluated for its test-retest reliability, and it often correlates with measures of state depression. In this study, we assessed the psychometric properties of the DPDI. We found it to have good reliability (Cronbach's alpha = .93, test-retest correlation = .88). While evidence of convergent validity was strong, the discriminant validity was problematic, as the DPDI significantly correlated with the BDI and a self-report measure of DSM-IV Dysthymia. Nonetheless, the DPDI correlated as expected with measures supporting its construct validity. We conclude that while the DPDI exemplifies strong temporal stability, construct, and convergent validity, the measure is not particularly successful when attempting to discriminate between depressive trait and depressive mood state.

Poster Presentation: Room 310, 2:15 p.m.

Syreeta Scott

Professor Alissa Huth-Bocks

Relationship Characteristics and Support as Predictors of Maternal Prenatal Depression

This study aims to better understand what contributes to depressive symptoms in mothers who are pregnant and predominantly single and of low socioeconomic status. Maternal romantic attachment style, relationship conflict with a partner, and family support are examined as predictors of prenatal maternal depression. Using regression analysis, the

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full model explained 35% of the variance, revealing that depressive symptoms in these mothers increased with greater romantic attachment anxiety as well as with greater relationship conflict and lower levels of family support. These findings highlight the importance of studying predictors of mental health problems in vulnerable populations, such as low income and largely unmarried pregnant women in particular, as a number of adverse outcomes are known to be associated with prenatal maternal depression. Graduate students Nasreen Islam and Ana Tindall contributed to this research.

Poster Presentation: Room 310, 2:15 p.m.

Alisha Serras

Professor Karen Saules

Self-Injury and Associated Behaviors among College Students

This research examined four questions: 1) What is the prevalence of self-injurious behavior (SIB) among college students? 2) To what extent is SIB associated with different forms of substance use? 3) Do these patterns of co-occurrence vary by gender, academic level, and/or sexual orientation? 4) What are predictors of SIB? A probability sample of 5,689 students completed an Internet survey. Past year prevalence of SIB was 14.3%. There were no gender or racial differences; however, those who identified as GLBT had higher rates of SIB, and illicit drug use was associated with higher rates of all forms of SIB. Among self-injurers, those who used drugs had higher depression scores, prevalence of cigarette smoking, and rates of binge eating. In a regression model depression, cigarette smoking, gambling, and drug use were significant predictors of SIB. Information about those most at risk for SIB is critical for the design of prevention and intervention.

Poster Presentation: Room 310, 2:15 p.m.

Ana Tindall

Professor Alissa Huth-Bocks

The Relationships among Low Education Levels, Nicotine and Alcohol Use, Mental Health Issues, and Child Abuse Potential during Pregnancy

This study investigated the relationships among several risk factors such as low education, nicotine and alcohol use, and mental health issues during pregnancy and risk for perpetrating child abuse. One hundred women, age 18 to 40, participated in a comprehensive interview during their third trimester. A number of self-report questionnaires were administered to assess the variables of interest in this study. Findings will be discussed in terms of the implications for those working with high-risk mothers.

Poster Presentation: Room 310, 2:15 p.m.

Jacqueline Titus

Professor Carol Freedman-Doan

Acceptability of Parent-Child Interaction Therapy

Disruptive behavior disorders are a growing problem for families, constituting the most common reason for referral of young children to mental health services. Parent-Child Interaction Therapy is a commonly used, efficacious treatment for these disorders. However, minority families tend to prematurely drop out of therapy, preventing them from maximizing the benefits of PCIT. Cultural differences in parenting styles may translate to differing perceptions of treatment relevance and lower acceptability of PCIT for African American families. This study investigated the impact of mothers' parenting styles on their expectations for PCIT, their judgments of the parenting behaviors required by PCIT, and, ultimately, their willingness to participate in PCIT. Significant differences were found between groups such that African American mothers held more authoritarian beliefs, which led them to judge PCIT more negatively than Caucasian mothers. However, both groups were equally willing to participate.

Poster Presentation: Room 310, 2:15 p.m.

Sarah Wice

Professor Alida Westman

The Influence of Adult Attachment Styles on Coping with Bereavement

Participants who experienced a death answered questionnaires about their relationships, coping styles, religious beliefs, and grief experiences. Those who were more secure in relationships experienced less stress and depression, but there was no effect on the level of anxiety or grief experienced. Participants who were either preoccupied by relationships or who tried to avoid intimacy showed more distress but not more grief. Dismissive relationships were not related to self-reported distress but were associated with trying to form a quality relationship with a substitute attachment figure. More religious people turned to a divine being for comfort. Secure individuals engaged in more problem-focused coping and spent more time in the comforting presence of others. People afraid of intimacy tended to worry about their emotions and to distract themselves, and people preoccupied with their interactions tried to keep their minds off the cause of their grief.

Room 204, 3:45 p.m.

Ashley Wiedemann and Amy Collings

Professor Karen Saules

Interactions between Smoking and Weight Status on Body Image and Cognitive Processes Related to Eating Behavior

Compared to non-smokers, cigarette smokers have elevated weight concerns, yet little is known about how these factors might differentially relate to smoking for overweight versus non-overweight smokers. We hypothesized that overweight smokers may differ from their non-overweight counterparts on body image and cognitive processes related to eating

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behavior. Participants included 619 undergraduate college women who completed a web-based survey. A 2 (Weight Status) X 2 (Smoking Status) ANOVA was conducted to explore differences on body image and cognitive variables. Significant interactions emerged suggesting that the combination of being overweight and smoking is associated with reduced emphasis on appearance but dramatically increased scores on the PFS and TFEQ Disinhibition and Hunger, and significantly lower scores on Restraint. Consistent with our hypothesis, results suggest that overweight smokers may be smoking in an effort to manage high levels of susceptibility to food cues and preoccupation with weight related cognitions.

Poster Presentation: Room 310, 2:15 p.m.

Department of Sociology, Anthropology, and Criminology

Matthew Klepac

Professor Robert Orrange

The Sociological Significance of Tattoo Practices: (Re)-constructing Social Attitudes within the Dynamics of Discourse, Interaction, and Symbolic-Value

Using participant observation, in-depth interviews, and survey questionnaires, the researcher examines changes in social attitudes toward contemporary tattoo practices in Western societies. Tattoo practices are defined as a set of social practices that tattooed individuals necessarily engage in by virtue of being tattooed. Tattoo practices include designing, acquiring, displaying, and concealing tattoos; interacting with other tattoo practitioners; and the art of tattooing. While participation in tattoo practices is still the exception rather than the rule, the remarkable increase in the popularity of tattooing over the past three decades is indicative of dramatic transformations in social attitudes concerning tattoo art as well as the art form's future sociological relevance as a marker of social/self-identity.

Room 352, 3:05 p.m.

Barbara Steer

Attitudes of First-Year Physician Assistant Students towards Older Adults

Objective: To determine the attitudes of first-year physician assistant (PA) students towards older adults. DESIGN: Two questionnaires presented a single time. PARTICIPANTS: 36 of 37 enrolled physician assistant students at Western Michigan University. MEASUREMENTS: A modified version of Polizzi's 2003 Aging Semantic Differential (ASD), and custom-made fill-in Likert-scale questions regarding relationships and contact with older adults. RESULTS: The mean ASD score was 2.53 (mildly positive). Regression analyses revealed no significant correlation between mean ASD score and student sex or age. Weekly socialization with older adults was significantly associated ($p=.043$) with a more positive ASD score (beta $-.330$), while yearly socialization

was significantly associated ($p=.050$) with a more negative score (beta $.319$). CONCLUSION: This research suggests that first-year PA students with more socialization with older adults had more positive attitudes towards them.

Poster Presentation: Room 310, 2:15 p.m.

Women's and Gender Studies Program

Nicole April Carter

Professor Paul Leighton

The Implications of Silence on Survivors of Sexual Assault in the African-American Community

African American women have historically been forced into silence surrounding their sexual identity and exploitation. Today, this forced historical silence has perpetuated the naiveté surrounding acquaintance rape in the black community and has normalized the image of the black woman as an over-sexualized female who yearns to be violated. This research proves that the negative sexual experiences of women within the black community are complex in nature. Therefore, a multifaceted program that addresses the historical silence surrounding the rape of the black woman, while allowing her to tell her personal story, is obligatory. Various alternative programs have been examined to explore their success in dealing with black rape survivors. The implementation of similar programs should be considered when dealing with the issues of black women across college campuses. This study will aid in providing a framework for future programs that will help these women deal with and prevent acquaintance rape.

Room 204, 4:35 p.m.

Dave Endresak

Professor Gary Evans

The Birth of Venus: A History of Women in Simulations and Electronic Games

The researcher compiled historical contributions of women in the fields of computer programming, simulations, and electronic games as well as the representations of female characters in game software products. A special focus on the global scope of the gaming industry was adopted in order to compare and contrast cultural elements found in East Asian and Western European markets. The researcher created a display of female characters from Japanese, American, and European gaming products that have been offered from the 1980s to the present day. Primary sources included consumer market research conducted by data analysis companies and reported by the Entertainment Software Association, interviews and books by various people within the industry, and academic research conducted by scholars such as Dr. Matt Thorn, Associate Professor at Kyoto Seika University, and Masami Toku, Ed. D., California State University, Chico.

Poster Presentation: Room 310, 2:15 p.m.

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Chris Lezotte

Professor Denise Pilato

Women and Car Culture in Cyberspace: Empowerment and Car Talk on the Internet User Group

The automobile has a central place in male culture. The car as a symbol of masculinity is perpetuated through the arts and popular culture. While car ownership is nearly equal between women and men, women's participation in car culture remains unexamined. However, evidence of such participation is found online. Women-only and mixed-gender car groups enable like-minded individuals to converse on an infinite variety of automobile-related topics. Women in public spaces are often silenced or disparaged, especially in areas such as car culture, where they are assumed to have neither experience nor expertise. The online car group, a private space, offers women a non-threatening and non-hierarchical environment in which to talk and learn about cars. Through observation, survey, and a little feminist theory, I investigate what interactions within particular Internet groups reveal about women's relationship to the automobile and how such groups enable, influence, and/or empower women to participate in car culture.

Room 204, 4:15 p.m.

Department of World Languages

Mikyung Kim

Professor Wendy Wang

Discovering the Hidden Value: Non-native English-Speaking Teachers' Strengths

As the world is becoming increasingly globalized, Koreans are making tremendous efforts to improve English language education. Many Koreans, however, still embrace the idea that native English speakers are best qualified to teach English and have not fully recognized non-native English-speaking teachers as a valuable resource. In this presentation, I will discuss the strengths of non-native English-speaking teachers and how they could be effectively utilized.

Room 204, 1:35 p.m.

Polly Ricciardo

Professor Carla Damiano

Bernhard Schlink: Coming to Terms with the Crimes of a Nation

In 1999, Oprah's Book Club gave the following review of Bernhard Schlink's novel, *The Reader*: "A parable of German guilt and atonement and a love story of stunning power, *The Reader* is also a work of literature that is unforgettable in its psychological complexity..." In 2008, director Stephen Daldry brought this novel back into the spotlight with a film starring Kate Winslet. Reviews over the movie version are much less enthusiastic. One declares: "Morally devastating but not emotionally involving enough to attain instant masterpiece status..." What has occurred over the past ten years to warrant this change of popular opinion? Have we reconciled our

emotions over Nazi Germany? Are we tired of hearing about it and are looking for emotionally-involving love stories? My presentation explores the current dialogue on German guilt through examples in both the literary and filmic versions of Bernhard Schlink's *The Reader*.

Room 204, 1:55 p.m.

Judith Sachs

Professor Wendy Wang

Native Speaker Listening: The Other Language Skill

Globalization and technology have dramatically increased communication between speakers of many different languages. The researcher conducted a pilot study to determine the extent to which non-native speakers of English assume responsibility for being understood by American monolingual speakers of English. Additionally, subjects were asked for their suggestions on how native speakers could improve their ability to understand non-native speech. Interviews were conducted with six non-native English speakers. The results indicated that non-native speakers assumed the majority of responsibility for making themselves understood by native speakers regardless of the extent to which they reported their accent affected a native speaker's ability to understand their speech. Further findings confirmed earlier research suggesting that native speakers' understanding could be enhanced through exposure to non-native speech, cross-cultural knowledge, and a more empathic attitude toward non-native speakers.

Poster Presentation: Room 310, 2:15 p.m.

Kay Stremler

Professor Wendy Wang

English as an International Language: What Culture and How?

English has become an international language (EIL) used to negotiate meaning and achieve common understandings in cross-cultural interactions. Understanding the characteristics and use of English by non-native speakers in bilingual communities is a key area for additional second language acquisition (SLA) research and design of teaching goals. Further, a "Think Globally; Act Locally" perspective on defining teaching materials and approaches that includes local and international cultures is needed to understand how differences may influence cross-cultural encounters. Learning about culture is an integral part of the EIL curriculum, but key questions deal with what culture is taught and how. This research paper evaluates survey data on effective EIL teaching approaches and the influences of the teacher's and textbook cultures in the context of Expanding Circle countries where English is a foreign language.

Room 204, 1:15 p.m.

Graduate Research Fair 2009

Lisa Wharton

Professor Wendy Wang

Alarmingly Apathetic Adolescents: Motivational Variables and Implications for the Foreign Language Classroom

Why are so many teenagers apathetic about learning another language? How can a secondary instructor effectively increase motivation among foreign-language learners? The answer to these salient and perplexing questions is proposed in the corresponding field study and analysis of motivational variables within the foreign-language or second-language (L2) classroom. Drawing on pertinent and contemporary research regarding motivation and language learning, the construct of motivation is considered from the perspective of the researcher's demographically diverse adolescent students of Spanish. Suggestions for approaching language learning and teaching in a manner that promotes motivation, increases students' sense of comfort and security within the classroom, and facilitates language acquisition are also discussed. *Poster Presentation: Room 310, 2:15 p.m.*

College of Business

Department of Management

Chevetta Burton

Professor Crissie Frye

Emotional Intelligence and the Leadership Practices of Female Middle Managers

The relationship between two dimensions of emotional intelligence (EI), Interpersonal EI and General Mood EI, and two leadership practices, Inspire a Shared Vision and Enable Others to Act, were empirically investigated in a sample of 99 female middle managers. Data analysis revealed that both Interpersonal EI and General Mood EI predict the aforementioned leadership practices. Age was examined as a potential moderator of these relationships but was not found to operate as one. Future research that investigates additional dimensions of EI and other leadership practices, as well as race and gender, is encouraged. *Poster Presentation: Room 310, 2:15 p.m.*

Jason Mancini

Professor Mary Vielhaber

The Presidential Campaign Communication Strategies and Messages of John McCain

The 2008 presidential campaign will go down as one of the most historic campaigns in history. In my paper, I examine the campaign communication strategies and messages of John McCain, the Republican presidential nominee, by providing an analysis of which messages were successful and which messages failed. I also use research to identify best practices of successful campaigns to determine what best practices the McCain campaign used effectively. I conclude why John McCain was unsuccessful in his attempt to win the 2008

presidential election and close with several recommendations that would have given McCain a better chance to become the 44th President of the United States.

Room 352, 4:15 p.m.

Andrea Raftery

Professor Mary Vielhaber

A Case Study of Organizational Communication in a Japanese-American Joint Venture

This case study examines the communication structure of an automotive supplier located in Tennessee. The manufacturing facility, which is an international joint venture between an American seating company and a Japanese engineering firm, presented many communication issues. Many of the most critical problems found were rooted in the lack of cultural understanding between the two parent companies. Final recommendations include scheduling periodic communication audits and holding intercultural communication training sessions to better understand appropriate communication techniques.

Room 352, 4:35 p.m.

Chang-Soeb Yeo, Abdullah Alaskar, Abdullah Almasarir, Mohammed Alqahtani, George Campbell, and Daniel Maier

Professor Megan Endres

Seasonal Work Attitudes: Possible Effects of Employee Need for Achievement, Autonomy, and Power

The researchers investigated the effects of individual differences and season on work behaviors. Specifically, the researchers sought to relate the employee need for achievement, autonomy, and power with the self-reported tendency to experience periods of slower work speed and disinterest in work. The hypotheses were based on the known occurrence of seasonal affective disorder (SAD), although the questions were based on work behaviors. A total of ninety employees in multiple organizations were surveyed. Results indicate that negative winter work feelings are significantly associated with individuals who strive to gain control over events, enjoy competition and winning, are not seeking further autonomy at work, and socialize frequently at work. Implications are discussed for types of work environments that fit these conditions and may be conducive to winter work slowdown.

Poster Presentation: Room 310, 2:15 p.m.

Department of Marketing

Jeffrey Hayton

Professor Elizabeth Edwards

The Effects of Advertising on Eastern Michigan University's Branding Campaign

This study focused on the use and effectiveness of advertising to establish and grow Eastern Michigan University's brand image. Data were collected using online surveys in April and November of 2008. The researcher used SPSS to generate descriptive statistics and perform regression analysis to determine how effective advertising was in improving brand awareness and positive feelings toward Eastern Michigan University. The analysis looked at changes in perceptions between April and November. The data revealed that the advertising was indeed successful in reaching and growing the university's brand image. Analysis also identified differences in perceptions among specific groups of stakeholders, including students, employees, and alumni.

Room 352, 4:55 p.m.

College of Education

Department of Leadership and Counseling

N. J. Akbar and Shetina Jones

Professor Eboni Zamani-Gallaher

Comparing Developmental Education Services at Community Colleges and Universities

This presentation will discuss the literature on developmental education in higher education, highlighting trends in remediation at both two- and four-year colleges. Additionally, a commentary for future research and implications for practice will be offered based on available literature to date. Finally, the presenters will share a preliminary draft of a perceptions survey that will gauge how effective students and staff perceive developmental courses and utilize developmental services at the community college and university level.

Poster Presentation: Room 310, 4:00 p.m.

Thyagarajan Ammachathram

Professor David Anderson

Comparative Cost/Benefit Analysis of Affirmative Action Policies in the United States and Quota-Based Reservation Policies in India

In this study, the author performs a comparative cost/benefit analysis of Affirmative Action policies in the United States and Quota-Based Reservation policies in India. "Costs" and "Benefits" are broadly defined to include economic, political, social, and cultural dimensions. These are analyzed at all levels of policy formation using Lasswell's (1951) Stage Model of Policy-Making, which includes issue definition, agenda-setting, policy formulation, policy adoption, implementation, and evaluation. Fowler's (2004) "Prince" technique of policy analysis is used

to compare the policy positions and power relationships of various stakeholders in the U.S. and India. Finally, the distribution and redistribution of costs and benefits are analyzed through the perspective of globalization, drawing upon the work of Robertson (1987), Giddens (1987), and Jarvis (2000). This study provides educators with a deeper understanding of the societal dimensions of Affirmative Action and helps policymakers in the U.S. and India develop coherent Affirmative Action policies and programs in their respective countries.
Room 330, 1:15 p.m.

Carin Barber

Professor James Barott

An Ethnography of Student Culture at Eastern Michigan University

The researcher investigated the undergraduate student culture at Eastern Michigan University (EMU). This study considered the surrounding communities in southeast Michigan, specifically examining culture transmission and how hometown characteristics are brought with students onto the campus, rather than operating under the premise that student culture is formed within the confines of the university once students matriculate. The study uses anthropological and sociological approaches to explore culture and conflict in southeast Michigan and at EMU. The cultural environment on the EMU campus is composed of various cultural groups from southeast Michigan. This study examines the interaction or lack thereof among various cultures in southeast Michigan and how this translates at EMU. Preliminary research findings suggest that the cultural groups that exist in the EMU campus are constituted by cultural groups derived from the southeast Michigan community.
Room 330, 4:15 p.m.

George Boyce

Professor David Anderson

20th Century Adult Learners as 21st Century Students in Higher Education

Senior citizens are returning to college at an ever-increasing rate. Some seniors wish to obtain that elusive baccalaureate college degree, while others take classes more for self-enrichment. Eastern Michigan University's ElderQuest program was developed to afford a welcoming environment for persons 60 years and older and to provide them an opportunity to fully participate in campus programs and activities. The purpose of this study is twofold: to examine the experiences of senior citizens who are returning to higher education for degrees or personal enrichment and to ascertain if ElderQuest is successful in aiding the senior citizen student in his or her educational pursuits at EMU.
Poster Presentation: Room 310, 4:00 p.m.

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Marlena Bravender

Professor David Anderson

Social Ability and Community in the Asynchronous Environment

Colleges and universities are providing access to a broad range of students through online courses. With the increase of enrollment and demand, it is necessary to better comprehend the role and relationship of the tools available. The researcher investigated the relationships of social ability, motivation, and student-perceived sense of community within the threaded discussion feature of an online classroom. Participants from two small universities were chosen to take a five-part survey. The results are compiled through structural equation modeling to explore relationships among specific demographics, personal student needs, group development levels, social ability, and overall student sense of community. Recommendations from this study will help teachers address social engagement in online classrooms.

Room 330, 1:35 p.m.

Deborah Tenjeras Clarke

Professor Jaclynn Tracy

Exploration into the Head Start Fade Phenomenon

The researcher tested a theory to determine if the empirical evidence provided could help us understand the reasons children in Head Start demonstrated a Fade Effect. Using historical data, the researcher paired the effective correlates of Head Start and small class programs reported in the literature. The study tested Group I students who had full-day kindergarten and small classes in grades 1, 2, and 3 and Group II students with half-day kindergarten and other class sizes. The existing PreK-grade 3 data results were analyzed to determine if those correlates identified helped to lessen the Fade Effect between Groups I and II. Using an analysis of the student achievement reported and the current research on poverty and at-risk student achievement, the researcher quantified less Fade Effect for students in Group I.

Room 330, 2:15 p.m.

Nate Cradit and Sean Gray

Professor Martha W. Tack

Higher Education in the Russian Federation

The researchers investigated the system of higher education in Russia before, during, and after Communist rule. Continual, systematic change emerged as a trend, as well as significant issues surrounding access, finance, quality, and accreditation. Many similarities between higher education in Russia and the United States showed that leaders in higher education could learn from the experiences of those in Russia. Graduate student N. J. Akbar contributed to the research on this project.

Poster Presentation: Room 310, 4:00 p.m.

Inna Gorlova

Professor David Anderson

Entrepreneurial Transformations in Public Michigan Universities in Response to Global Forces and Regional Economy Recession

The role of public universities in Michigan is seen as preparing the state for the demands of the knowledge economy—making higher education competitive in a global marketplace and producing a highly trained work force. As a response to this situation, public universities are employing a wide range of entrepreneurial activities. The author sought to understand the processes of entrepreneurial transformations in the state's public comprehensive universities located within the metropolitan area of Detroit. Interview, document, and observational data related to entrepreneurial activities at two selected universities were analyzed through five elements of entrepreneurial university developed by B. Clark (1998) and twelve globalization categories drawn up by J. Levin (1999) to develop a more systematic understanding of entrepreneurship at local comprehensive and research universities.

Room 330, 1:55 p.m.

Hannah Hyde and Christine Woods

Professors Yvonne Callaway and Robert Simmons

Inside an Action Research Project: How Service Learning Effects School Belonging

The researchers present the process of designing, planning, and implementing an action research project in secondary schools. The presentation gives information on how to effectively execute action research projects in the public schools. Preparatory steps illustrated include reviewing background literature on both service learning and school belonging, finding a university sponsor, obtaining a school site, and gaining subsequent permission to conduct the research. Also described is the development of the service learning model and implementation of that model and an ongoing assessment of the participants' feelings of school belonging.

Poster Presentation: Room 310, 4:00 p.m.

Ayanna Triplett McConnell

Professor Eboni Zamani-Gallaher

Exploring Best Practices for Mentoring African American Girls and Teens

In this independent study, the author reviewed the literature on mentoring studies specifically related to programs targeting African American girls in urban settings. Research studies revealed that both formal and informal mentoring relationships were considered beneficial by African American girls regardless of socioeconomic level or academic preparedness. Another theme in the literature included the concept of the "loud black girl" as a young woman seen, in various settings, either as a source of disruption or an assertive classroom participant. The author also

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participated weekly as a mentor to African American high school girls through the Girls in Action program at Inkster High School. Effective mentoring strategies were discovered first-hand, including (a) consistency by volunteers, (b) utilizing varied teaching and learning styles, (c) engaging the young women in service learning, and (d) providing a safe space for sensitive and highly charged discussions and growth to take place.

Room 330, 2:45 p.m.

Ramona Meraz

Professor Eboni Zamani-Gallaher

Understanding University-Linked Retirement Communities

Higher education has a long history of responding to the needs of a diverse citizenry. While offering retirees and senior citizens opportunities for engagement on college campuses is not a novel concept, a new trend, that of retirement living on campus, is emerging. One of the ways higher education is engaging retirees is through the pioneering practice of university-linked retirement communities (ULRC). The ULRC concept meets the needs of both retirees and the university. This presentation will overview the ULRC trend and introduce the conceptual framework utilizing psychosocial theories of aging including activity theory, life course theory, and continuity theory as they contribute to residents' attraction to a ULRC. This researcher will undertake a qualitative approach, which will involve site visits to three unique ULRCs.

Room 330, 3:05 p.m.

Tara Johnson and Joseph Moore

Professor Jessica Hale

Factors Impacting Access to Higher Education in Pakistan

The researchers explored higher education structures and trends related to access to higher education in Pakistan. Unlike the state-run educational system in the United States, Pakistan's Ministry of Education governs the public universities. Pakistan's educational reform has prioritized access for women and rural citizens in the last 50 years. Themes related to barriers to education were discovered in the following areas: polarization between public, private, and religious institutions; societal norms restricting choices for girls and women; and government instability. The researchers discovered two trends in Pakistan's higher education aimed at increasing access for all citizens, including creating satellite campuses and utilizing virtual learning environments. Graduate student Ayanna McConnell contributed to this research.

Poster Presentation: Room 310, 4:00 p.m.

Charles Muwonge

Professor James Barott

Ecclesiastical Control of Governance in Independent Catholic Universities: A Case Study of the Ave Maria University

Independent Catholic universities are institutions that identify themselves as having a Catholic vision of education but do not fully operate within the legal, financial, or administrative structures of the Catholic Church. These institutions, however, rely on the church to exist as the term "Catholic" can only be used by institutions that have officially been approved by the local bishop. Using the Ave Maria University in Florida, this research examines where independent Catholic universities stand on the continuum of favorability. It is an attempt to examine the mechanism of control the church has on governance in independent Catholic institutions of higher education, especially as these institutions cannot exist without the services of ordained ministers.

Room 330, 4:35 p.m.

Phillip Pittman

Professor Gary Marx

Improving Student Writing while Reducing the Achievement Gap

The researcher utilized a series of teaching best-practice intervention strategies in writing, including extensive revision; setting high expectations; providing extra assistance for struggling students; maintaining a rigorous, engaging classroom environment; and frequently checking for understanding, with his 11th and 12th grade AP Language and Composition students at North Farmington High School with the goal of increasing all students' writing abilities and narrowing the achievement gap between Asian, Caucasian, African American, and Middle Eastern students. The researcher used data from the ACT Plan Test and the Michigan Merit Exam, as well as classroom assessment data from comparison-contrast, rhetorical analysis, and argumentative writing. After a 12-week period, the data revealed an improvement in writing performance for all student demographic groups, and the achievement gap narrowed when comparing the highest-performing groups to the lowest-performing groups.

Poster Presentation: Room 310, 4:00 p.m.

Stuart Robinson, Karen Travis, Anna Stryker, Ben Hancock

Professor Eboni Zamani-Gallaher

Exploring On-line Orientation Programs in Michigan Community Colleges

The authors reviewed the extant literature referencing community college orientation offerings, revealing on-line orientation as a leading trend. In an exploratory study, the research group examined the relationship between on-line orientation and relevant institutional outcomes data drawn from the National Center for Education Statistics (NCES) for Michigan's 28 public community colleges. Additional

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data were drawn through document analysis (i.e., garnering information on orientation offerings at Michigan community colleges were gained via institutional web sites and personal communication with select community college personnel). Data were analyzed using SPSS, employing correlational analysis to examine the degree to which on-line orientation programs were significantly associated with costs of attendance, enrollment, full- and part-time retention rate, and graduation rate.

Room 330, 3:45 p.m.

Stacey Schenker

Professor Dibya Choudhuri

The Use of Computer-Based Alcohol Prevention Programs for College Campuses

The use of alcohol has been a continuing challenge for most college campuses. Many preventative programs have been implemented in the past, which have tried to combat college-age drinking. The use of computer-based programs has become increasingly popular in the past few years. This proposal will review the literature on the use of five different computer-based alcohol prevention programs that are marketed to college campuses. The programs that will be reviewed are Alcholedu, E-CHUG, Alcohol 101 Plus, MyStudentBody: Alcohol, and Alcohol Response-Ability. This presentation will explore the accessibility, cost, and proven effectiveness of these different computer-based programs.

Poster Presentation: Room 310, 4:00 p.m.

Tamara Nichele Stevenson

Professor Eboni Zamani-Gallaher

Beyond the Call of Duty: African American Faculty and the Unique Rigors of the Community College Professoriate

An ongoing condition that pervades institutional contexts is the disproportionate representation of African Americans in higher education to the general population and in contrast to student enrollments. Nearly half of all African American students in higher education attend community colleges. While African Americans compose a scant percentage of higher education faculties, the majority of them teach at community colleges. The role of faculty is critical to the quality and exchange of teaching and learning, particularly at community colleges. Along with the traditional responsibilities and demands of the faculty role, African American faculty members contend with racially distinctive tasks, responsibilities, and conditions unlike those of their White counterparts (Cooper & Stevens, 2002; Harvey, 2000; Laden & Hagedorn, 2000; Patitu et al., 2000). This presentation will outline the atypical aspects of the working conditions of African American faculty at community colleges.

Room 330, 3:25 p.m.

JJ Warren, Sarah Weckerle, Kyle Sutherland, and Yun Chen

Professor Martha W. Tack

An In-Depth Look at Chinese Higher Education

Based on an in-depth review of the organizational structure, culture, policies, and emerging issues in Chinese higher education, the researchers compare and contrast higher education in the United States with postsecondary educational opportunities in China. Based on information gathered, the researchers identify strategic initiatives to enhance reform in Chinese higher education. These initiatives support more access to higher education, satellite campuses, accreditation and certification of institutions, and the continued study of operations of higher education in other countries.

Poster Presentation: Room 310, 4:00 p.m.

Department of Special Education

Pamela Colton

Professors Phil Smith and Sally Burton-Hoyle

Hegemonic Masculinity and the R Word: Cultural Images, Violence, and Moral Exclusion

There is an epistemological link between cognitive ableism and homophobia. Individuals with cognitive disabilities have been excluded from educational and other normative communities in a manner that is consistent with the historical treatment of LGBT individuals. Moral arguments have been used as rationale for their exclusion from community settings and social institutions like marriage. The treatment of both groups in language and visual media are also similar, and judgments against LGBT individuals and individuals with cognitive impairments are often conflated through the use of specific derogatory terminology. This presentation includes content analysis of video and images from Internet culture that demonstrate the conflation of cognitive ableism and homophobia. Policy and curriculum implications for inclusive education practices will be discussed.

Room 350, 4:35 p.m.

Amanda McCartney

Professor Sally Burton-Hoyle

Social Videos: Using Social Videos to Teach Functional Social Skills and Self-Awareness to Students with Autism Spectrum Disorder

A Social Video is a video created for an individual student who is experiencing problems with social situations and self-awareness. The objective of Social Videos is to combine Social Stories with Video and Peer Modeling to create a stimulating Social Video that will teach students with Autism Spectrum Disorder appropriate functional social behaviors and self-awareness.

Room 350, 4:15 p.m.

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John Planck

Professor Ann Orr

Gadgets and Gizmos: A Weekly Open House to Experience Assistive Technology

An internship between the EMU Department of Special Education and the University of Michigan C.S. Mott Children's Hospital provided an opportunity for research and service to children with disabilities. In the summer of 2008, EMU interns established a program to host a weekly open house to provide families and hospital staff the opportunity to see and use a variety of low and high-tech assistive technology. Parents and doctors were surprised by the possibilities; most were unaware of the assistive technologies that can enable people with disabilities to participate in domestic, recreational, educational, and career activities. This presentation addresses the program's successes and shortcomings and the importance of making people aware of the possibilities of this technology in order to increase expectations and foster successful patient outcomes.
Room 350, 4:55 p.m.

Audrey Sarnacki

Professor Sheila Bentrum

Modified Response Elaboration Training: A Functional Approach to Treatment

Traditionally, treatment for apraxic-aphasic speakers has focused on either speech or language production. In an effort to maximize session efficiency and better address the needs of her apraxic-aphasic client, the researcher combined the best practices for the treatment of apraxia and aphasia into one functional treatment program. Response Elaboration Training, motor speech learning strategies, and oral reading were combined into one multi-faceted approach. This approach was implemented as follows: The client was asked to produce an utterance when presented with a photo. The researcher wrote this production down. The client was then asked to elaborate on his utterance. He judged and corrected paraphasias produced. After a delay, the client was asked to read the printed sentence, implementing previously learned motor speech strategies. The results suggested that when aphasia and apraxia therapies are combined, the language learning process is reinforced and an efficacious and functional treatment approach for apraxic-aphasic individuals results.

Poster Presentation: Room 310, 4:00 p.m.

Department of Teacher Education

Maria Gonzalez Allen

Professor Joe Bishop

The Student of Color's Experience in American Public Education, Past and Present

Students of color in the American Public School System graduate less frequently than, and tend not to do as well academically as, Caucasian students. Why is this? By asking current students this question, then asking adults who attended and/or graduated from the same school systems, we may find the answer.

Through the voices of current high school students, those who have graduated and pursued higher education, and those who were not so successful academically, a snapshot of their experience will emerge. Will the answers from these students and adults allow us to plot a trajectory that shows improvement in our American Public Schools, no change, or deterioration of the situation?

Room 350, 2:45 p.m.

Anne Davidson

Professor Patricia Williams-Boyd

Looking for Middle Ground: Evaluating Grade Configuration in Young Adolescents' Schools

The researcher assessed competing claims regarding the relationship between middle level grade configuration and young adolescents' academic achievement. Although the National Middle School Association favors 6-8 middle schools for optimal achievement, other researchers claim that young adolescents in elementary settings tend to outscore those in middle school settings on standardized tests. Analysis of the literature and interviews with community members revealed that configuration alone does not determine achievement levels. Factors such as school-to-school transition and school size also play a large role. Suggestions for maximizing young adolescent achievement within any configuration are offered from a praxis viewpoint.
Room 350, 1:15 p.m.

Kelli Renae-Cole Hatfield

Professor Patricia Williams-Boyd

A Closer Look at Urban and Diversity Education

Education is not the great equalizer that it is often said to be. In the case of urban education, these differences also break down along racial lines, with public policy consequently favoring the education of white children over minorities. The research investigated outlines how America's public schools clearly provide differing educational opportunities based on class and race. Core concepts examined include public policy, cultural competency of educators, teacher retention, and the trends of data. Compounding the complexity here is that traditionally in the arena of urban education research, attention most often remains focused on the problems of minority achievement, which, ironically, reinforces prevailing myths of cognitive and cultural deficiency as well.

Room 350, 1:35 p.m.

Whitney Jenzen

Professor Patricia Williams-Boyd

Integrating Elective Courses and Core Classes within the High School Curriculum

As our society grows more globally diverse, students need to be prepared for a future in such a globally competitive market. Although in high schools across the country, the graduation requirements have increased and advanced academic course-taking is on the rise, student achievement on national benchmarks

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has remained stagnant. Also, college remediation rates continue to hold national interest. This leads to the conclusion that our high schools need to dramatically improve how and where academic content is taught and create incentives for students to pursue the core curriculum in an interest-based setting.

Room 350, 1:55 p.m.

Serhiy Kovalchuk

Professor Joe Bishop

Reflective Teachers within the Context of Neoliberal Society

Reflective teachers play a crucial role in the process of rearing and enriching conscious citizens of the democratic society. From Joel Spring's perspective, reflective teachers strongly believe that public schools are the primary institutions for providing an educated citizenry of democracy. They are miniature communities where students are able to acquire certain social and democratic skills, while adjusting themselves to the rules and laws of school and society. Grant and Zeichner point out that the behavior of reflective teachers involves active, persistent, and careful consideration of any belief or practice. They actively reflect upon their teaching and upon the educational, social, and political contexts in which their teaching is embedded. Consequently, through the reflective attitude to education and through the exercise of students' reason, thought, and speech, teachers are able to affect their whole being and prepare them to be civic agents in their communities and society.

Room 350, 3:05 p.m.

Lance Mason

Professor Christopher Robbins

Learning Fear

This documentary explores the many facets of fear in schools today, including fear-based policies such as No Child Left Behind and zero tolerance laws. Using interviews, documents, and public school data, these issues are scrutinized for their effects on children of color and those with special needs. Presidential speeches are analyzed for their role in fostering negative perceptions of today's youth. The role of teacher unions in accepting or resisting these policies is examined, and possible methods of local and national resistance are discussed.

Poster Presentation: Room 310, 4:00 p.m.

Felice Danielle Moorman

Professor Valerie Polakow

The Impact of Homelessness on Young Children: Building Resilience Through Supportive Early Educational Interventions

This study investigates the school experiences of young homeless children and their families in southeast Michigan. Using a qualitative case study approach, the researcher explores the obstacles that restrict vulnerable families' access to high-quality child care, after-school care, and school intervention

programs, and analyzes the developmental impact on the children. It is anticipated that the results of the study will reveal that the costs of high-quality child care, school enrollment requirements, and transportation are barriers that restrict access to these programs and diminish homeless children's educational rights. Recommendations include intensive training for school personnel to aid in working with homeless children and families, easing enrollment policies and procedures, and implementing wrap-around school support services that build resilience in vulnerable children.

Room 350, 3:25 p.m.

Delsie Sissoko

Professor Patricia Williams-Boyd

Dispelling Myths on Poverty in Education

Poverty is deeply rooted in our society and often associated with ethnicity. A teacher in an urban school faces the effects of poverty daily on her students and their dreams. Children in low-income families struggle in school, not because they are Black, Hispanic, White, or Native American, but because they are underprivileged. As a result of the misconceptions of poverty and associations tied to it, a true understanding of poverty is very important. Is there hope for a child growing up in poverty to graduate from high school and move on to college? It seems obvious that this child has a lot to overcome, and education takes a back seat. Children are the innocent bystanders in a war they do not understand.

Room 350, 2:15 p.m.

Jason Kenneth Windes

Professor Christopher Robbins

Sand, Surf, and Social Justice: Teaching Global-mindedness in a Summer Tour Format

A common summer activity for late adolescents in middle and upper classes are package tours and vacations abroad. Industry leaders heavily market these tours to students and parents as unique cultural and educational opportunities. Often these tours market culture as static and, more importantly, Euro-centric. In this paper I attempt to elaborate on the challenges and potential learning opportunities of a tour of the U.S. with multicultural and social justice themes at its core. Central to this goal are issues of cultural authenticity, pro-poor tourism, and indigenous rights. This paper concentrates more on the higher level challenges in choosing a tour itinerary and lesson topics than planning a specific curriculum. The paper focuses on producing a meaningful student-centered curriculum that attempts to minimize the voyeurism inherent in the tour format.

Room 330, 4:55 p.m.

Huayun Xu

Professor Valerie Polakow

American and Chinese Teachers' Perceptions of Teacher-Child Relationships in Early Childhood Educational Settings

This cross-national mixed-method study investigates American and Chinese early childhood teachers' perceptions about teacher-child relationships and their impact on young children in two distinct cultural environments: China and the United States. During the first phase of the study, the researcher conducted a cross-national survey, and, based on the emergent data, a small sample of teachers from both countries was selected to participate in qualitative semi-structured interviews. The key findings from the study point to culturally distinctive views about discipline, pedagogical methods, the purpose of early childhood education, and the role and responsibility of the teacher. Teachers' characteristics, levels of education, home-school connections, and issues pertaining to status and compensation shaped teachers' perceptions about their profession. Recommendations include the need for greater awareness of the cultural forces that shape the perceptions and practices of teachers of young children in a globalized world.

Room 350, 3:45 p.m.

College of Health and Human Services

School of Health Promotion and Human Performance

Michael A. Busa

Professor Stephen McGregor

High-Resolution Triaxial Accelerometry Is Strongly Correlated with VO₂ in Inter-collegiate Runners during Level Treadmill Locomotion

The use of high-resolution accelerometers (HRA) may be of value in the quantification of training load in running, a previously problematic task. The objective of this study was to determine the relationship of HRA and VO₂ in inter-collegiate runners. Runners performed 2 incremental VO₂max trials while wearing HRA affixed to the lower back. RMS of unfiltered HRA signal, in g's, from three axes (VERT, LAT, A/P) and the Euclidean resultant (RES) were significantly correlated to VO₂ (0.87-0.95). Also, test-rest correlations were determined for each axis and RES to determine reliability of this approach. A single linear regression best described the strong VO₂ to RES relationship (R = 0.95) across the speed spectrum from walking to high-speed running. High reliability was also observed with RES (ICC = 0.99; CV = 5.1). Results of this study indicate that HRA can accurately and reliably predict VO₂ during treadmill locomotion in highly trained runners.

Room 320, 1:35 p.m.

Julie McLean

Professor Anthony Moreno

The Influence of Yoga on Flexibility Characteristics among NCAA Division I Baseball Athletes

Among college baseball athletes, joint range of motion (ROM) is considered an important physical characteristic with respect to injury prevention and performance; thus, intercollegiate programs employ various methods of flexibility training. Because there is no literature with regard to the effect of a yoga-based training program, the purpose of this investigation was to determine the effects of a sport-specific yoga program among NCAA Division I intercollegiate baseball and football players. Baseball subjects (N=30, age 19.42 ±1.37 years) were assessed for shoulder joint (SH), hamstring (HS), and groin (GR) ROM and subsequently followed a 12-week, 2x/week yoga intervention. Post-test assessments indicated trends for improvement in SH and HS and decreased incidence of lower extremity injury. Future investigations should evaluate the influence of longitudinal yoga interventions on injury incidence and specific performance parameters (e.g., speed, bat acceleration, pitching velocity) important to the game of baseball.

Room 320, 2:15 p.m.

Anna Michalak

Professor Joan Cowdery

Health Education in Second Life

This paper describes a pilot study that uses the virtual world Second Life (SL) to educate college students about health. Via the use of an avatar, students are able to interact with other students, the health educator, and other avatars. This approach enables students to learn about physical activity and nutrition in a non-traditional, virtual world setting. Quantitative and qualitative assessments using pre- and post-surveys and focus groups measured theoretical constructs of behavior change and participant program satisfaction. Results indicated that the participants found Second Life to be a unique and novel approach for the delivery of health information and that the information was useful and informative; however, qualitative data revealed that few participants felt motivated to make health behavior changes. The issues of using a virtual world are discussed, as well as the potential of using a virtual world for pedagogy and other educational resources.

Room 320, 1:15 p.m.

Timothy A. Muth

Professor Stephen McGregor

Using High Resolution Accelerometers (HRA) for the Estimation of VO₂ in Untrained Individuals

The quantification of VO₂ is essential when creating/monitoring the exercise programming of sedentary or clinical populations. The use of high resolution accelerometers (HRA) may prove useful in the determination workload in instances when indirect calorimetry is not practical. Workload is directly

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proportional to VO_2 ; therefore, the purpose of this study was to determine the relationship of HRA and VO_2 in untrained individuals during treadmill locomotion. Nine untrained subjects performed two incremental VO_{2max} trials, at least three days apart, while wearing HRA. RMS of high frequency unfiltered signal from three axes (VERT, LAT, A/P) and the Euclidean resultant (RES) were compared to VO_2 . One-minute averages of absolute and relative VO_2 were correlated most strongly with RES (.930 and .922; $p < .001$). Test-Retest correlations for RES were .919 ($p < .001$), indicating strong reliability. These results indicate that HRA are valid and reliable when estimating VO_2 in healthy untrained individuals during treadmill locomotion.

Room 320, 1:55 p.m.

Lindsay Reynolds

Professor Robert Rhodes

A Clinical Evaluation of Rigid Rocker Bottom Soles in Their Different Configurations

Rigid rocker soles were originally designed to limit motion at the metatarsalphalangeal joints. By limiting motion at these joints, displacement of the soft tissues cushioning the plantar surface is reduced. Previous assessment has shown that rocker soles are also able to decrease lateral movement during gait. Limiting lateral motion is crucial for a safe, balanced gait. This study will compare the differences in step length, speed, center of mass, and line of progression between a straight rocker, a traditional rocker, and a reverse rocker. Pre-experimental assessment along with a literature review predicts that a reversed style rocker will improve balance in a clinical setting to create a more efficient and safer gait.

Poster Presentation: Room 310, 4:00 p.m.

School of Health Sciences

Nicole Bunt, Beverlee Kerby, Katie Morrison, Alissa Romans, and Brigid Wernert

Professor Gretchen Dahl Reeves

Sensory Processing, Body Awareness, and Self-Concept in Adolescent Girls with Major Mood Disorders

Our study examines sensory processing, body awareness, and self-concept in adolescent girls with major mood/affective disorders. Three groups are being compared. The control group is composed of typically developing adolescent girls between the ages of 13 and 17, and the two experimental groups are adolescent girls who are seeking outpatient psychiatric services for a major mood/affective disorder. We will compare one group of adolescents at the psychiatric facility who self-mutilate to adolescent girls who do not have a history of self-mutilation. Four assessments are being used: the Sensory Profile, the Piers-Harris 2, the Body Investment Scale, and the Draw a Person: Screening Procedure for Emotional Disturbance. Physiological tests are also performed to evaluate heart rate, temperature, and respiratory rate when presented with

various sensory stimuli, using the I-330 Compact System. Data collection and processing is being completed.

Poster Presentation: Room 310, 4:00 p.m.

Janelle Campbell-Buzzell

Professor Judi Brooks

Pediatric and Adolescent Weight Management Literature Review

The reviewer investigated the childhood obesity epidemic and its prevalence and increasing numbers of individuals with this problem. In particular, associated health problems are discussed as well as professional assessments from physicians on how to address this issue. Medication and surgery options are available for adolescents, and their role is reviewed. Registered Dietitians and how they assist this population with weight management regarding recommendations, behavior monitoring, goal setting, and solutions are detailed. Prevention is the key to avoiding further problems with the childhood and adolescent obesity epidemic, and this literature review provides a comprehensive discussion of these topics.

Poster Presentation: Room 310, 4:00 p.m.

Dee Murphy

Professor Judi Brooks

Nutrition and Autism Spectrum Disorders (ASD)

After an exhaustive review of the literature, this annotated bibliography summarized research studies, case reports, and theories linking nutrition therapies with Autism Spectrum Disorders (ASD). The cause of ASD is unknown, and many of the nutrition therapies used to treat symptoms have little evidence to support them. Therapies include gluten-free, casein-free diets, various vitamin and mineral supplements, and omega-3 fatty acids. Based on the widespread use of these therapies, further research is needed to determine their effectiveness. Dietitians need to individualize counseling to families by empowering them to experiment with therapies, educating them on the various risks/benefits involved, ensuring a balanced diet, and giving them permission to quit if the therapy is not working.

Poster Presentation: Room 310, 4:00 p.m.

Nancy Parker

Professors Anahita Mistry and Joe Bishop

Registered Dietitians in Entrepreneurial Practice: Barriers and Perceptions in the Use of Information Technology

Barriers to, perceptions of, and the types of information technology (IT) used by registered dietitians (RD) in private practice were investigated. Entrepreneurial RDs were observed and data supplemented with qualitative interviews. The narratives and observations accumulated in the study represent a portion of the perceptions, barriers, and uses of information technology by RDs. Themes that emerged include (1) how dietitians overcame inexperience with technology through a hands-on approach, (2) barriers of cost and time in implementing technology into their dietetics practice,

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(3) a weak link in using web technology, and (4) the importance of personal client contact for dietitians involved in one-on-one counseling. Data suggest a need for access to technology training in continuing education and in university programs with learning outcomes more specifically defined toward IT.

Poster Presentation: Room 310, 4:00 p.m.

School of Social Work

Elizabeth Trapp and Pierre Rice

Professors Elvia Krajewski-Jaime, Jenny Kellman-Fritz, and Barbara Walters

Educating Youth about the College Experience

The researchers investigated the impact of a program designed to provide information about access to higher education. Forty-three low-income youth from local area high schools and social service agencies participated. Content of the program included academic presentations, student panels, team building, and a variety of recreational activities. The primary goal was to create strategies to balance educational, social, and financial areas of college life. This presentation will discuss results of the evaluation, which assessed overall satisfaction as well as perceptions of the college experience. Results indicated that participants learned time management; organization; balancing financial, social, and academic stresses; and how and where to seek assistance when needed. They concluded that skills learned in this program were valuable and recommended its continuation.

Room 350, 5:15 p.m.

College of Technology

COT Doctorate

Reshuk Dawra

Professor Vijay Mannari

Novel Soy Polyols: Applications in Polyurethane Coatings and Foams

Polyurethanes (PU) are versatile and high performance materials with myriad of applications. A new class of soybean oil-derived polyols (Soy polyols) with a broad range of viscosity, hydroxyl content, and chemical structures has been used as primary component of polyurethane systems. This poster will discuss properties of PU coatings and rigid PU foams derived from these soy-polyols. Comparison of these systems with those based on conventional petro-based polyols and the benefits of soy-polyols will be highlighted.

Poster Presentation: Room 310, 4:00 p.m.

Amanda Gale

Professor Louise Jones

Adoption of Environmentally Responsible Design by Architects, Facility Managers, and Interior Designers

Many architectural and interior design firms, as well as facility management groups, are being called to design, build, and operate more environmentally responsible spaces. This research will use Rogers' adoption process theory as a framework to review the current literature regarding the extent to which the decision makers know about, seek out information about, and actually adopt environmentally responsible design strategies and certified products.

Room 320, 5:15 p.m.

Senthilkumar Rengasamy

Professor Vijay Mannari

Novel Bio-based Polyols for Sustainable Coatings Applications

Polyurethanes resins (PUR) are very versatile and increasingly important resins for coatings, adhesives, sealants, and foam applications. Polyols are important components of PUR that primarily dictate performance properties and their end-use applications. Bio-based polyols have emerged as environmentally friendly alternatives to petrochemical-based ones, due to their sustainability, lower carbon footprint, and often lower cost. Novel family of vegetable oil-based polyols has been derived from epoxidized soybean oil, with broad range of hydroxyl content and chemical structure. This poster will discuss our novel synthetic approaches, control of polyol architecture and their potential coatings applications.

Poster Presentation: Room 310, 4:00 p.m.

School of Engineering Technology

Agnishikha Choudhuri

Professor Shinming Shyu

Sustainability and Kitchen Design in Urban Areas

The modern kitchen is a product of centuries of development. From smoky fireplaces within the cabins of early settlers, then annexed outhouses, twenty-first century kitchens have evolved into the technologically complex social spaces that they are today. Many diverse factors have contributed to this transformation, including industrialization, women employed outside the home, and changes in cooking habits. This presentation explores the degree to which the growing demand for sustainability and environmental responsibility are directing kitchen design today.

Room 320, 4:35 p.m.

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Karyn McKey

Professor Shinming Shyu

Children's Environment and How It Affects their Development

Designing for a child is a challenge designers often encounter while creating an environment that facilitates healthy developmental processes, produces the desired learning outcomes, and deters undesirable behavior. Children need age- and developmentally-appropriate physical environments that support and promote child-directed and -initiated play and learning activities. The design of this environment, including the building, playground, interior spaces and finishes, room arrangement, and selection of furniture and equipment has a profound impact on the formation of a child's social behavior, intellectual development, and learning capacity. This research will examine appropriate environments for child development and analyze the design factors that contribute to the creation of such environments.

Room 320, 4:55 p.m.

Matthew Alan Ward

Professor Robert E. Chapman

Air Conditioning Warranty Tool

Based on my research, automotive thermal engineers now have a tentative mathematical tool to aid in predicting (forecasting) the number of yearly air conditioning Evacuation & Charge warranty claims. Two models were developed: 1) time series analysis was used to account for the effects of month-to-month seasonality; and 2) reliability distribution analysis was used to account for different numbers of product sold in different time periods. Both models were developed using past air conditioning warranty claims for a popular minivan between January 2002 and December 2007.

Room 320, 4:15 p.m.

School of Technology Studies

Dan Cushman

Professor Denise Pilato

Steel Fields: Tractors and Their Impact on Women of American Farms

The twentieth century was the backdrop for the development and implementation of varying technological innovations. Agriculture, in particular, experienced its own renaissance with the adoption of the tractor and hydraulically controlled implements. Further, it signified the transition from farming practices traditionally done with draw animals such as horses and oxen and into expansive and enterprising farming practices by means of mechanization. This new farm machinery also had an impact on the women of farming families in America. Farm women experienced a variety of changes in their everyday processes, and many found a degree of relief from the arduous work once required of them.

Room 320, 3:25 p.m.

Thomas Hart and Diana Hough

Professor Al Bellamy

The Temperaments of Intuition and Sensing

This study asked 63 graduate students 30 questions relating to their satisfaction with online/hybrid and traditional courses. We examined the relationship between the Myers-Briggs definition of Intuition and Sensing and overall user satisfaction for graduate students at Eastern Michigan University enrolled in entirely online/hybrid courses and traditional lecture courses without an online component. It concluded that temperament is not significantly correlated to satisfaction with online courses. This study was designed to assist EMU in allocating resources between online/hybrid and traditional lecture courses. A well-designed balance may lead to an increase in the successful completion of degrees, greater student satisfaction, and a more valuable educational experience for graduate students at EMU.

Poster Presentation: Room 310, 4: p.m.

Scott Hyde and Megan Richey

Professor Al Bellamy

Studying the Effects of Cell Phone Communication on Romantic Relationships

This study examines the correlation between cell phone utilization and romantic relationships and determines the effects that age and gender have on this relationship. A questionnaire was given to 220 participants from a suburban high school, a large university, and several businesses located in Southeastern Michigan and Northern Ohio, using an online survey website. The data revealed a negative correlation between cell phone utilization and romantic relationships, with the most significant moderating factor being gender. Graduate student Kenneth Moore contributed to the research on this project.

Poster Presentation: Room 310, 4:00 p.m.

Kenneth Moore

Professor Denise Pilato

The Downfall of Small Town America: Technological Advances Decimate Community Bands

The community band played a significant role in local culture in America following the Civil War, until the 1930s. The automobile, radio, and other forms of entertainment decreased the valuable role the band played in the local community. These new inventions decentralized the culture of local communities by allowing people to get their entertainment further from home, via the use of the automobile, or in their homes by listening to phonographs and through radio broadcasts.

Room 320, 3:45 p.m.

Graduate Research Fair 2009

Charisse Dore Nilles, Dennis Johnson, and Brian Whitsett

Professor Al Bellamy

The Impact of Cell Phone Etiquette on the Perceived Quality of Communication in Romantic Relationships

The researchers investigated communication, which is one of the most important aspects of a relationship, between romantic partners. Data were collected by using a survey created specifically for this study. The survey asked about a partner's cell phone usage and the individual's communication quality with that partner. Age of the participants was used as a moderator to determine the difference in the perceived quality of communication with respect to cell phone etiquette.

Poster Presentation: Room 310, 4:00 p.m.

Natalie Rae Reynolds

Professor Subhas Ghosh

Protective Apparel: Which Method is Best?

Two different coating dispersions, acrylic-based and polyurethane-based, are examined and compared for the purpose of finding which polymer coating is more suitable for the end use of protective apparel. The dispersions will also be applied using two different methods, floating knife and knife over roll, to find which method is better for each polymer. Different textile tests will be performed and analyzed to determine which polymer and coating method lets the textile retain important properties like comfort and maintains the substrate's adhesion to the fabric. These tests will include stiffness, abrasion resistance, thickness, weight increase, drape, wash durability, thermal resistance, and evaporative resistance. Coated textiles can be useful in various types of apparel including waterproof, chemical-proof, stain-resistant, and in creating different weights and textures for fashion apparel.

Room 320, 2:45 p.m.

Julie Uranis and Kristen Krug

Professors Denise Pilato and Al Bellamy

Student Satisfaction in Correspondence Courses

In this study we will explore the relationship between student satisfaction and course completion in correspondence courses. We will also examine moderator effects to determine if variables such as gender, age, education level, high and low Locus of Control (LOC) and learner type, particularly Self-Regulated Learner (SRL), produce differences among subcategories. Correspondence courses have been a part of America's educational landscape for more than 160 years. While technology has made distance education more interactive, allowing for both synchronous and asynchronous communications, it is the correspondence course that began the distance

education revolution. Researching student satisfaction in correspondence courses, considering the advancements made in distance education, will allow stakeholders and higher education institutions to make decisions on the future of correspondence study in higher education.

Poster Presentation: Room 310, 4:00 p.m.

Sangeeta Yadav

Professor Subhas Ghosh

Cloth's Defensive Wall against Germs

One of man's basic needs is clothing advanced enough to meet ever-increasing consumer demands. Now apparel not only provides shelter to the body but also functions as anti-wrinkle, water repellent, soil repellent, fire protective, and antimicrobial. The last is in much demand because of our polluted environment and the outbreak of infectious diseases. The treatment of textiles with antimicrobial agents avoids cross-infection by pathogenic microorganisms, controls the infestation by microbes, and arrests metabolism in microbes in order to reduce odor formation. The antimicrobial treatment also protects the textile products from staining, discoloration, and quality deterioration. The present study is based on improving the antimicrobial property of the textiles using a unique isocyanate functional silane. This compound can react with most hydrogen-containing compounds, and the silane portion of this product crosslinks with each other and can be used to adhere to a variety of substrates.

Room 320, 3:05 p.m.

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Oral Presenters by Location and Time

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

Room 104

1:15

Lisa Storc

Communication, Media, and
Theatre Arts

1:35

Meriah Sage

Communication, Media, and
Theatre Arts

1:55

Gina Morris-Cicalo

Communication, Media, and
Theatre Arts

2:15

**Musick, Davingracia,
Fitzpatrick**

Communication, Media, and
Theatre Arts

Room 204

1:15

Kay Stremler

World Languages

1:35

Mikyung Kim

World Languages

1:55

Polly Ricciardo

World Languages

2:15

Adam Sheaffer

Communication, Media, and
Theatre Arts

Room 208

1:15

Ashley Ray

Art

1:35

Brenna Moloney

Geography and Geology

1:55

Deborah Deacon Odette

Geography and Geology

2:15

Adam Cook

Geography and Geology

Room 300

1:15

Abdulhamit Arvas

English Language and Literature

1:35

Jui Pagedar

English Language and Literature

1:55

Sheryl Ruskzkiewicz

English Language and Literature

2:15

Kate Stephanie Williams

English Language and Literature

Room 301

1:15

Nadine Chahine El-Ayache

Chemistry

1:35

Renee Ann Beardslee

Chemistry

1:55

Roshini Fernando

Chemistry

2:15

Anitha Jayaprakash

Chemistry

Room 302

1:15

Sarah Nolen

English Language and Literature

1:35

Alison Marie Malburg

English Language and Literature

1:55

Sara Williams

English Language and Literature

2:15

Nicole Guinot Varty

English Language and Literature

Room 304

1:15

Marcus Karl Adams

History and Philosophy

1:35

Karen Widger Caldwell

History and Philosophy

1:55

Joseph E. Pfeifer III

History and Philosophy

Room 302

1:15

Anna Michalakis

Health Promotion and Human
Performance

1:35

Michael A. Busa

Health Promotion and Human
Performance

1:55

Timothy Muth

Health Promotion and Human
Performance

2:15

Julie McLean

Health Promotion and Human
Performance

Room 330

1:15

T. Ammachathram

Leadership and Counseling

1:35

Marlena Bravender

Leadership and Counseling

1:55

Inna Gorlova

Leadership and Counseling

Graduate Research Fair 2009

2:15
Deborah Tenjeras Clarke
Leadership and Counseling

Room 350

1:15
Anne Davidson
Teacher Education

1:35
Kelly Renae-Cole Hatfield
Teacher Education

1:55
Whitney Jenzen
Teacher Education

2:15
Delsie Sissoko
Teacher Education

Room 352

1:15
Susan Wyman
Political Science

1:35
John N. Nelson
Political Science

1:55
Christopher A. Blough
Political Science

2:15
Ryan Stevens
Political Science

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

Room 104

2:45
Rebecca Archer
Communication, Media, and
Theatre Arts

3:05
Yi-Hsin Lu
Communication, Media, and
Theatre Arts

3:25
Yuri Mano
Communication, Media, and
Theatre Arts

3:45
Jenny Sawtelle-Koppera
Communication, Media, and
Theatre Arts

Room 204

2:45
Yarden Ginsburg
Psychology

3:05
Erin Henshaw
Psychology

3:25
Lauren McSweeney
Psychology

3:45
Sarah Wice
Psychology

Room 208

2:45
Allison Marie Fuhrman
English Language and Literature

3:05
Sarah Goletz
English Language and Literature

3:25
Jessica Kander
English Language and Literature

3:45
Angela Laginess
English Language and Literature

Room 300

2:45
Andrew Winckles
English Language and Literature

3:05
Ferdinan Okki Kurniawan
English Language and Literature

3:25
Evelyn Richter
English Language and Literature

3:45
Ania Kubisz
English Language and Literature

Room 301

2:45
Layla M. F. El-Sawy
Biology

3:05
Suchithra Seshadrinathan
Biology

3:25
Catherine Wiesner
Biology

Room 304

2:45
George Royce
History and Philosophy

3:05
Bridget Sekuterski
History and Philosophy

3:25
Michael Stout
History and Philosophy

3:45
Carly Willacker
History and Philosophy

Room 320

2:45
Natalie Reynolds
Technology Studies

3:05
Sangeeta Yadav
Technology Studies

Graduate Research Fair 2009

3:25

Dan Cushman
Technology Studies

3:45

Kenneth Moore
Technology Studies

Room 330

2:45

Ayanna T. McConnell
Leadership and Counseling

3:05

Ramona Meraz
Leadership and Counseling

3:25

Tamara Nichele Stevenson
Leadership and Counseling

3:45

**Stuart Robinson, Ben
Hancock, Anna Stryker,
Karen Travis**
Leadership and Counseling

Room 350

2:45

Maria Gonzalez Allen
Teacher Education

3:05

Serhiy Kovalchuk
Teacher Education

3:25

Felice Danielle Moorman
Teacher Education

3:45

Huayun Xu
Teacher Education
Room 352

2:45

Deliena Grantham
Political Science

3:05

Matthew Klepac
Sociology, Anthropology, and
Criminology

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

Room 104

4:15

Malisa Hinderliter
Communication, Media, and
Theatre Arts

4:35

Melissa Masserant
Communication, Media, and
Theatre Arts

4:55

Cara Williams
Communication, Media, and
Theatre Arts

5:15

Emily Winderman
Communication, Media, and
Theatre Arts

Room 204

4:15

Chris Lezotte
Women's and Gender Studies

4:35

Nicole Carter
Women's and Gender Studies

4:55

Peter Cherlet
History and Philosophy

5:15

Rachel Elaine Zirk
Music and Dance

Room 208

4:15

Kayti Purkiss
English Language and Literature

4:35

Teresa Asiain
English Language and Literature

4:55

Patrick Manning
English Language and Literature

5:15

Maria Montagnini
English Language and Literature

Room 300

4:15

Fatima Ijaz
English Language and Literature

4:35

Matthew Lahrman
English Language and Literature

4:55

Hunter Thompson Lockwood
English Language and Literature

Room 301

4:15

Christina Trombetta
Mathematics

4:35

Katherine Ballentine
Mathematics

4:55

Gary Brent Duma
Mathematics

5:15

Leigh Ann Soltis
Mathematics

Room 302

4:15

Jacob Job
Biology

4:35

Alexis Stein
Biology

Graduate Research Fair 2009

Room 304

4:15
Aaron Dougherty
History and Philosophy

4:35
Wilson C. Blythe, Jr.
History and Philosophy

4:55
David Wagner
History and Philosophy

5:15
Amber Van Amburg
History and Philosophy

Room 320

4:15
Matthew Alan Ward
School of Engineering
Technology

4:35
Agnishikha Choudhuri
School of Engineering
Technology

4:55
Karyn McKey
School of Engineering
Technology

5:15
Amanda Gale
College of Technology

Room 330

4:15
Carin Barber
Leadership and Counseling

4:35
Charles Muwonge
Leadership and Counseling

4:55
Jason Kenneth Windes
Teacher Education

5:15
Pamela German
History and Philosophy

Room 350

4:15
Amanda McCartney
Special Education

4:35
Pamela Colton
Special Education

4:55
John Planck
Special Education

5:15
Elizabeth Trapp
Pierre Rice
Social Work

Room 352

4:15
Jason Mancini
Management

4:35
Andrea Raftery
Management

4:55
Jeffrey Hayton
Marketing

Poster Presenters in 310 by Time

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

Kate S -H. Wu
English Language and Literature

Tracy Aris
Geography and Geology

Anne Stevenson
Geography and Geology

Meghan Schafbuch
Jody Chansuolme
Veronica Robinson
Geography and Geology

Chevetta Burtan
Management

Chang-Seob Yeo
Abdullah Alaskar
Abdullah Almasarir
Mohammed Alqahtani
George Campbell
Daniel Maier
Management

Tiffany Abrego
Psychology

Sarah Ahlfs-Dunn
Psychology

Lucy Allbaugh
Psychology

Jari Billiot
Psychology

Jillian Carey
Psychology

Chelsea Cawood
Psychology

Laszlo Erdodi
Psychology

Erin Gallagher
Psychology

Krupa Hegde
Psychology

Nasreen Islam
Psychology

Valentina Ivezaj
Psychology

Kylene Krause
Psychology

Graduate Research Fair 2009

Jenny Nerbonne
Psychology

Christopher Roberts
Psychology

Syreeta Scott
Psychology

Alisha Serras
Psychology

Ana Tindall
Psychology

Jacqueline Titus
Psychology

Ashley Wiedemann
Amy Collings
Psychology

Barbara Steer
Sociology, Anthropology, and
Criminology

Dave Endresak
Women's/Gender Studies

Judith Sachs
World Languages

Lisa Wharton
World Languages

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

Jennifer Miller
Biology

Craig Rockey
Biology

Tennille Senn
Biology

Shane Sergent
Rae Labadie
Robert Loepp III
Saedeh Sepehri
Biology

Reza Eizadkah
Chemistry

Charles Harrison
Chemistry

Srikanth Konda
Chemistry

Ranadheer Pesaru
Chemistry

Rohini Sidhu
Chemistry

Reshuk Dawra
College of Technology

Senthilkumar Rengasamy
College of Technology

Hande Bakir
Computer Science

Janelle Campbell-Buzzell
Health Sciences

Dee Murphy
Health Sciences

Nancy Parker
Health Sciences

Nichole Bunt
Beverlee Kerby
Katie Morrison
Alissa Romans
Brigid Wernert
Health Sciences

Lindsay Reynolds
Health Promotion and Human
Performance

N. J. Akbar
Shetina Jones
Leadership and Counseling

George Boyce
Leadership and Counseling

Nate Cradit
Sean Gray
Leadership and Counseling

Hannah Hyde
Christine Woods
Leadership and Counseling

Tara Johnson
Joseph Moore
Leadership and Counseling

Phillip Pittman
Leadership and Counseling

Stacey Schenker
Leadership and Counseling

JJ Warren
Sarah Weckerle
Kyle Sutherland
Yun Chen
Leadership and Counseling

David Lubke
Mathematics

Audrey Sarnacki
Special Ed.

Lance Mason
Teacher Ed

Charise Dore Nilles
Dennis Johnson
Brian Whitsett
Technology Studies

Thomas Hart
Diana Hough
Technology Studies

Scott Hyde
Megan Richey
Technology Studies

Kristen Krug
Julie Uranis
Technology Studies

Graduate Research Fair 2009

Thank you!

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

Special appreciation goes to:

Administration

Jon Margerum-Leys, Graduate School
Susan Anderson, Graduate School
Lisa Mills Walters, Graduate School
Jeanne Torok, Graduate School
Amanda Curylo, Graduate School
Rachel Foshag, Graduate School
Angela Laginess, Graduate School
Office of Research Development Staff
Richard Magyar, ORD

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Graduate Research Fair Planning

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Brenda Riemer, HPHP
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Graduate Council

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Standard Printing

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Kathlyn Parker
Loreena Parks
Genevieve Peden

World Languages
Sociology, Anthropology, and Criminology
Technology Studies
Teacher Education
Chemistry
Psychology
Leadership and Counseling
Biology
English Language and Literature
Mathematics
Chemistry
Accounting and Finance
Mathematics
Special Education
Social Work
Psychology
Teacher Education
Computer Science
Sociology, Anthropology, and Criminology
Special Education
Special Education
World Languages

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Elsa Poh	Computer Science
Paul Ramsey	Teacher Education
Brenda Riemer	Health Promotion and Human Performance
Andrew Ross	Mathematics
Barb Scheffer	Nursing
Lee Stille	Communication, Media, and Theatre Arts
Toni Stokes-Jones	Teacher Education
Carla Tayeh	Mathematics
Jaclynn Tracy	Leadership and Counseling
Wendy Wang	World Languages

*judging facilitator

Room Moderators

Decky Alexander	Communication, Media, and Theatre Arts
Helen Aristar-Dry	English Language and Literature
James Barott	Leadership and Counseling
Peter Bednekoff	Biology
Joe Bishop	Teacher Education
Sally Burton-Hoyle	Special Education
Yvonne Callaway	Leadership and Counseling
Marilyn Corsianos	Sociology, Anthropology, and Criminology
Elisabeth Daumer	English Language and Literature
Ronald Delph	History and Philosophy
Joseph Engwenyu	History and Philosophy
Ketl Freedman-Doan	Psychology
Subhas Ghosh	Technology Studies
Deborah Heyl-Clegg	Chemistry
Christine Hume	English Language and Literature
David Kass	Biology
Ted Ligibel	Geography and Geology
Stephen McGregor	Health Promotion and Human Performance
Walter Moss	History and Philosophy
Christine Neufeld	English Language and Literature
Joe Ohren	Political Science
Denise Pilato	Technology Studies
Jayakumar Ramanathan	Mathematics
T. Daniel Seely	English Language and Literature
Christine Tanner	Communication, Media, and Theatre Arts
Michael Tew	Communication, Media, and Theatre Arts
Jackie Tracy	Leadership and Counseling
Mary Vielhaber	Management
Wendy Wang	World Languages
Annette Wannamaker	English Language and Literature
Patricia Williams-Boyd	Teacher Education
Eboni Zamani- Gallaher	Leadership and Counseling

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