

Sample Abstracts by Major / Program Area

Dear student: the abstracts below are a resource for you as you compose your abstracts for submission and prepare for the Simmons College Undergraduate Conference. Best of luck!

Unless otherwise marked, undergraduate students delivered the presentations below at the annual National Conference on Undergraduate Research (NCUR) over the past four years.

Presentation Types

- Oral / Panel Presentation
- Poster

Africana Studies

RECLAIMING OUR HUMANITY: NEO-SLAVE NARRATIVES WRITTEN BY BLACK WOMEN *Danielle Procope (Dr. Cynthia Dobb), English Department, University of the Pacific, 3601 Pacific Avenue Stockton, California 95211*

I will analyze the ways in which neo-slave narratives, specifically written by black women from the 1980's forward, work to reclaim the body and humanity of enslaved women. These narratives give voice to the muted oppression existing during the time of slavery, extrapolating on the tangible physical oppression. Neo-slave narratives, however, also comment on the contemporary reality of black women. The author herself, uses the fictionalized story of a slave woman to elucidate upon her own humanity. The neo-slave narratives itself serves as a testament to the ways in which storytelling functions as autonomy and empowerment. I will use the novels *Dessa Rose* by Shirley Anne Williams, *The Wind Done Gone* by Alice Randall, and *Corregidora* by Gayl Jones. I will also use Hortense Spiller's essay, "Mama's Baby, Papa's Maybe". These works explore the complications of motherhood and sexuality during the time of slavery, while implicitly commenting on the modern black woman's struggle to regain the humanity she legally lost during this despicable period of history. Type: Oral

HIV EPIDEMIC GROWING FAST: A SYSTEMATIC ANALYSIS OF THE RECENT THREAT AMONG YOUNG BLACK GAY AND BISEXUAL MALES USING THE RATIONAL CHOICE THEORY *Cory Rhodes (Dr. Abdul Karim Bangura), Department of Political Science, Howard University, Washington, D.C. 20059*

The HIV epidemic has been accompanied by intensely negative public reaction to persons presumed to be infected by HIV. Today, HIV/AIDS infects and affects more young Black men than ever before. While a variety of economic, social networking, political and sexual factors make young Black men more vulnerable to HIV, young Black gay males have a roughly one in four chance of being infected by age 25. Data collected from The Center for Disease Control researchers have been found to show that HIV infection among Black men who have sex with men in the U.S. is higher than among White men. Understanding the extent of unrecognized HIV infections between these groups and associated factors is useful in targeting testing and developing effective interventions to curtail HIV transmission. Utilizing the Rational Choice Theory, which states that how self-interested individuals make choices influences their preferences, this paper examines what young Black men face in today's society. It focuses on

how and why HIV has affected so many young Black men in the African American community. Furthermore, the paper examines how social networking affects young men meeting up and having quick and unprotected sex. The paper therefore tests the hypothesis that the lack of adequate knowledge of safe sex in the Black gay community leads to inappropriate sexual behavior. Primary and secondary data for this paper were collected from reports at the Center for Diseases Control, books and articles by using the document analysis technique. These sources were augmented with expert interviews. Qualitative and quantitative analytical techniques were used to analyze the data to test the hypothesis. The results generated led to the acceptance of the hypothesis. Type: Oral

Art and Music / Art History

BIRDS OF A FEATHER IMAGINED TOGETHER: NATIONALISM IN THE WORK OF AUDUBON AND HARPER *Amy J. Browender (Travis Nygard) Department of Art & Art History, Ripon College 300 Seward Street, Ripon, WI 54971*

It is common knowledge that the United States of America was founded upon the principles of life, liberty, and the pursuit of happiness. But was it also founded on the depiction of its native aviary species? Although widely understood as an American icon, the work of John James Audubon has only rarely been interrogated using academic theories of nationalism. In this paper, I use the process of creating national identity as described by Benedict Anderson in *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (1983). Anderson argues that a commonly understood visual language must be established in a new country for it to truly come to fruition. I apply Anderson's theory to Audubon's seminal work *The Birds of America*, and argue that he established the nation's first work that equated American naturalism with nationalism. This trajectory set forth by Audubon carried through into the twentieth century, and is strongly manifested within the work of mid-century artist Charley Harper. Although widely celebrated within popular culture, Harper has never received intense academic scrutiny. This analysis interrogates Harper within American art history, building upon the element of nationalism that was deeply entrenched within *The Birds of America*, using a series of eight prints created for the National Park Service between 1986 and 1993 as a case study. I assert that a simultaneous investigation of the output of both of these artists is a worthwhile endeavor due to their ability to tell us much about the development and progression of the visual representation of America. Although these artists were separated by over a century, I argue that the work of Harper is the logical conclusion of a trajectory that Audubon began of using aviary naturalism as nationalism. Type: Poster

Art and Music / Music

MISTERIOSO: THE INVISIBILITY OF WOMEN PERCUSSION COMPOSERS *Paula Battista, Stephanie Jensen-Moulton, Music, Brooklyn College, 2900 Bedford Avenue Brooklyn, NY 11210*

Women in the mid- to late-twentieth century musical world have not achieved the same status that their male counterparts have achieved. Percussion performance, similar to the classical music field on a whole, has a high concentration of men. Is there a concrete musical reason why women writing for percussion have not reached the level of fame that male composers have, or is it simply a matter of gender bias? In this paper, I will explore the backgrounds and experiences

of women composers writing for percussion chamber ensembles. I will study pieces from a societal standpoint, taking into account the social influences on the women writing the pieces as they worked. I will also analyze the pieces from the point of view of the performer in a chamber ensemble. I will show that there is no true logical reason that women have not reached the same level of prestige as men in the composition field. The factors that hold them back include the biases of universities, ensembles, publishers, and critics. Type: Oral

COLLABORATION IN CONCERT *Kimberly Osberg, Maxwell Lafontant, Sydney Kjerstad, Jake Debacher (Brooke Joyce), Music Department, Luther College, Decorah, IA 52101*

It is rare for two composers in the classical music genre to write a piece collaboratively. This is strange, considering the large number of people composers are typically required to work with on a daily basis—producers, musicians, conductors, dancers, etc. As such, we decided to discover what opportunities, difficulties, and successes might result from such a project. Each of us has a rather unique approach to our process of composing music—with differing preferences in process, style, structure, harmony, and rhythm. In order to integrate our unique compositional styles in a seamless fashion, we devised a method of composing neither of us had attempted previously—or even encountered. Since the piece is for two pianists, we assigned one piano to each composer. The piece would have an overall form of A-B-A (fast, slow, fast) and would be about five minutes long. Kimberly began the piece, and wrote a specified number of measures for Piano I only. Then the piece was passed to Maxwell, who filled in those measures with a part for Piano II, then continued Piano II's part for another section; he then sent that material back to Kimberly, and thus the collaboration continued in this fashion until the piece was finished and then polished to create a unified composition. In our presentation, we will play a recording (or if possible, have a live performance) of the piece and then explain our process, detailing what aspects of the composition challenged us and how we overcame those obstacles. We will have a projection of the score available to better facilitate this part of the presentation, also using it to reveal which musical motives were produced by each composer. It is our hope that this process will inspire other composers to attempt this form of collaboration. Type: Oral

Art and Music / Studio Art

RECLAIMING *Rebecca Aiken (Dana Fritz), Department of Art and Art History, University of Nebraska-Lincoln, 120 Richards Hall, Lincoln, NE, 68588*

What effect does the hand of nature have on structures forged by the hand of man? We assume our dominance over the environment when we conquer expanses of nature with asphalt and steel. This supremacy is brought into question in the face of abandoned buildings—former testaments to architectural prowess reduced to ruins and dismantled by plant life. My project uses photography to explore the idea of nature reclaiming human structures, and I have investigated this relationship through both aesthetic and scholarly means. In addition to making photographs in Nebraska and surrounding states, I have looked further into this phenomenon by conducting research from a visual and an environmental perspective. In order to provide a groundwork for my own photographs, I have studied works by a diverse group of photographers who have come from a long tradition of using their cameras to consider humanity's relationship with nature. Among these are artists who participated in the famous 1975 exhibition *New Topographics: Photographs of a Man-altered Landscape*, which is credited with redefining the genre of

landscape photography. In response to a resurgence of interest in this work, New Topographics has been re-presented with the original prints and additional related work, giving me an unprecedented opportunity to view this groundbreaking work in person at the Los Angeles County Museum of Art. Research I have gleaned from environmental literature has helped me understand what is physically happening before my camera's lens, and outlined the big picture of the relationship between nature and humankind. My research provides a textual complement to my photographs, and I am presenting it in a way which merges my interest in both photography and graphic design with a website and a book. Type: Poster

Biology

HAMSTER HOME DECOR: AN EXAMINATION OF NEST MANIPULATION IN SIBERIAN DWARF HAMSTERS (PHODOPUS SUNGORUS) *Michael Armstrong, Leann Kanda, Biology Dept. Ithaca College, 953 Danby Road, Ithaca, NY 14850*

Behavioral syndromes are suites of correlated personality traits, and have been observed in many animals. To see if behavioral syndromes exist in Siberian Dwarf Hamsters (*Phodopus sungorus*) we tested individual hamsters in two types of mazes and scored their nesting habits every seven days. Previous research has shown the tunnel maze is a reliable measure of activity and boldness; the novel test is designed to test exploratory tendencies; nesting habits were evaluated for manipulation of food and nesting box. We analyzed the results for individual reliability across time in each test. Activity in the tunnel maze and food bowl and nest box manipulation were consistent over time, but boldness in the tunnel maze was not. Repeatability of the novel test could not be evaluated. Correlations between the behaviors from each test were examined by Spearman correlations. Analysis of the data revealed a partial behavioral syndrome between activity in the tunnel maze and nest box manipulation. This conclusion mirrors that of Ned Dochterman and Stephen Jenkins's 2007 study on Merriam's Kangaroo Rat, where a partial behavioral syndrome was found in a different study animal. Type: Oral

EXPLORING MEDICALLY SIGNIFICANT GENOMIC VARIATION IN DIVERSE DEMOGRAPHIC GROUPS *Alexa Campanile (Robert Kuzoff) Biology Department, University of Wisconsin-Whitewater, Whitewater, WI 53190*

One of the most effective tools used in learning about medically significant variation in humans is Genome Wide Association Studies (GWA). Common variants identified through GWAs are analyzed to determine whether they are associated with certain diseases. This information has sparked a personalized health care revolution, which entails the customization of medical treatment and evaluation of an individual's genome. Single nucleotide polymorphisms (SNPs) are markers of genetic diversity that are assessed in GWA studies. When SNPs are located in close proximity, they form linkage disequilibrium blocks (LBDs) and are inherited as a unit. Using an SNP-based survey, my research samples diverse sequences from the 1000 Genomes project for loci known to be correlated with complex diseases to determine the frequency of disease-associated alleles in demographic groups around the world. Complete genome sequences obtained from the 1000 Genomes Project are used for analysis. Until recently, most GWA studies have been conducted on individuals of European descent. The limited diversity of these samples produces appreciable bias. Accordingly, the medical findings based on such studies cannot be generalized over unsampled demographic groups. In effect, this excludes a significant

proportion of the world's population from the highest quality of available healthcare. Consequently, I am constructing a Bayesian model that estimates the frequency of alleles associated with the surveyed diseases in diverse demographic groups from The 1000 Genomes Project. To facilitate development of treatment plans that are suitable for the broadest possible range of genomically unique inhabitants of our planet, global assessment of medically significant variation is critical. Type: Poster

Business and Management

SHADES OF GREEN: ENTREPRENEURIAL INFLUENCES ON ENVIRONMENTAL PRACTICE ADOPTION *Jessica Lynn Richards (Dr. Jason Senjem), Department of Business Administration, St. Norbert College, De Pere, Wisconsin*

Many organizations have been making a commitment to adopt environmental practices as part of sustainability efforts in their organizations. However, some of these organizations are finding that it is more difficult to improve environmental performance than they initially thought. We propose that entrepreneurial behavior will be able to explain the variance in the progress of environmental practice adoption in organizations. Specifically, we are studying the ability to recognize opportunities and enact resources, two key aspects of entrepreneurship, and their role in creating unique solutions to improving environmental performance in the areas of waste management, energy efficiency, and integrative design. To examine this question, we are conducting a survey on a sample of 656 colleges and universities that have signed a commitment to address environmental issues. Our data collection includes phone interviews, a survey, and the information provided by college websites and written sustainability plans. We use measures tested in the literature wherever possible and base our questions on tested constructs in the literature. We will use a structural equation model to estimate our model via maximum likelihood. We advance the entrepreneurship literature by extending the critical construct of opportunity recognition to the area of organizations and their natural environment. We draw implications for those colleges that are struggling through implementing environmental practices. This study will contribute to our understanding of how successful adopters are able to overcome challenges and help define what role entrepreneurial behaviors play. Type: Oral

SUITS ME – A MARKET FEASIBILITY ANALYSIS FOR CREATING A BUSINESS APPAREL STORE *Angela J. Reynolds, (Dr. Susan M. Jensen), Department of Business Management, University of Nebraska – Kearney, 905 W 25th St, Kearney, NE 68849*

This study was conducted to analyze if a store selling professional business attire would be successful in Kearney, Nebraska. Primary market research was conducted (via a survey, with N=412), identifying products and services desired by the target market of college students and young professionals. Based on the needs identified, Suits Me was created to provide the selection desired, exceptional customer service, and educate people about current professional business attire trends in the United States. This primary research data was supplemented by secondary market research to identify current market trends, industry characteristics, and employer expectations. Further, the secondary data was used to identify and analyze differences noted between national trends and the data gathered from the target market in Kearney. This feasibility study explores the product and service needs of the Kearney market region while analyzing the current national business trends, how the target market relates to national trends, what employers

look for when hiring employees, expectations of those attending job fairs, and what prior research has demonstrated to be the most effective attire to wear to professional business activities such as interviews. Overall, the research indicated potential for the Kearney market to support a professional business attire store. Results suggest market need does exist for a retail store in central Nebraska that offers significant product selection, personalized customer service, and educates customers about current trends. Type: Poster

LEAD WITH A LAUGH *Justin H. Pyron, Dennis Charsky, Strategic Communication Department at Ithaca College - 953 Danby Rd Ithaca, NY 14850*

How many communication specialists does it take to screw in a light bulb? The answer to that absurd question is far less than the amount of communication specialists it takes to understand the complicated role humor plays in the workplace. This paper explores how humor ultimately affects the office environment. Various studies have argued that it could make the workplace more hostile, or it could make it easier to complete tasks. Organizational leaders that understand the complex role that humor plays in the workplace can use techniques to increase worker productivity, creativity, and morale. Simultaneously, understanding the roles of humor assists managers in avoiding crises of lawsuits or lousy attitudes caused by misinterpreted humor and hurt feelings. This paper utilizes a number of studies conducted by social theorists to inform the conclusion that when it comes to management, its often best to leave them laughing. Type: Oral

Chemistry

DEVELOPMENT OF AN ANALYTICAL METHOD FOR THE DETERMINATION OF CAPSAICINOIDS *Sarah J. Abu-Rashed (Dr. Barbara M. Hopkins) Chemistry Department, Xavier University, 3800 Victory Parkway, Cincinnati, Ohio 45207*

Two capsaicinoids found in chili peppers are capsaicin and dihydrocapsaicin. Exposure to these compounds in pure form through inhalation can cause adverse health effects such as irritation of the eyes and throat, wheezing, coughing, and sneezing. Accordingly, the National Institute for Occupational Safety and Health (NIOSH) has developed a sampling and analytical method (NIOSH Method 5041) for their determination if present in the air. One of the components of an acceptable NIOSH method is a recovery study in which sampling media (filters) are spiked with the compound of interest and their recoveries determined after storage for various time periods. One goal of this research will expand the NIOSH method by performing a recovery study to evaluate the usefulness of various types of filters (glass fiber, Teflon, and polyvinyl chloride) after the spiked filters are stored for 7, 14, 21, and 28 days. By storing half of the filters at room temperature and half in a refrigerator, the temperature dependence of the recoveries will also be tested. Consistent with NIOSH guidelines, filters that yield recoveries between 75% and 125% will be acceptable. Using High Performance Liquid Chromatography (HPLC) the retention times for the two compounds of interest have been determined using a C-18 column with a mobile phase of 48% acetonitrile and 52% water. Each compound can be determined by the HPLC while monitoring its absorbance at wavelengths of 281 and of 228 nm. For each wavelength both compounds show good linearity over an appropriate range of concentrations. A second goal of this research will be to use the results of the recovery study to develop an experiment for use in an undergraduate Instrumental Analysis Laboratory course to demonstrate spiking the

compounds on appropriate filters and their extraction from the filters for analysis by HPLC.
Type: Poster

INVESTIGATING THE DEGRADATION OF VANILLIN VIA THE PHOTOCATALYTIC ACTIVITY OF TITANIUM DIOXIDE *R. Bhatia*¹, *A. Muraca*², *N. O'Connor*¹, *M. Jitianu*²
1 Department of Chemistry, Lehman College, City University of New York, 250 Bedford Park Boulevard West, New York, NY 10468 *2 Department of Chemistry, William Paterson University, 300 Pompton Road, Wayne, NJ 07470*

Organic pollutants are introduced into water bodies from various sources such as industrial effluents, agricultural runoff and chemical spills. Their persistence and toxicity in the environment has been a cause of public concern around the world as controlling the levels of organic pollutants in aquatic bodies is important for environmental protection. Titanium dioxide (TiO₂) nanoparticles have shown to be an effective photocatalyst for the degradation of organic pollutants. However, the removal of the nanoparticles post water- treatment is problematic. Therefore, we have undertaken a detailed study on the photo degradation of the toxic compound, vanillin, sensitized by titanium dioxide in an aqueous solution under a variety of conditions. Vanillin, which has been used extensively in flavorings, pharmaceuticals and perfumes has been found to be toxic to fish, causes odor in water and also inhibits growth of algae. TiO₂ nanoparticles were incubated with vanillin solutions on various supports and irradiated with ultraviolet light for various measured periods of time. The degradation of the compounds was measured by high performance liquid chromatography (HPLC). The most successful photocatalyst was observed to be hydrotalcite-TiO₂ composite doped with 10% Nitrogen. As much as 20% vanillin degradation was observed after 1 hour of irradiation. Type: Poster

Communications / Graphic Design

THE TRUTH AMONGST US: A PARODY OF SOCIAL ILLS *Laura V. Heckt (Dr. Janet M. Haavisto)*, *Department of Humanities, Jacksonville University, 2800 University Boulevard North, Jacksonville, Florida 32211*

This art research concentrates on some of the social ills of America through clinical study of cause and effect. Focusing on three specific topics—mental illness, alcohol abuse, and sexual assault—the goal is to create a body of work that captivates and pulls viewers in, informs and motivates them to action. Working in the combined media of photography and graphic design, a poster and accompanying brochure were created for each social issue. Original set designs feature Barbie and/or G.I. Joe as subject models. These two Pop-culture icons are used to emphasize, through parody, the seriousness of the issues because of their familiarity as the all-American girl that can do anything, and the classically robust, brave, and loyal emblematic male. Viewers recognize in them what is typically American among all of us who suffer from, either directly or indirectly, one or more of these three ills, specifically: depression/suicide, drunk driving, and child molestation. This graphic design campaign is to bring awareness to the truth that, along with these societal problems, there is a disturbing dilemma of silence associated with them. It is not until we, as a nation, begin to relinquish the stereotypical fears of shame and guilt that causes the debilitating secrecy linked with these ills that we can even commence to set in motion prevention and restoration. By striving to provide viewers with the knowledge that only when the truth can be spoken, can there be hope amongst us. Type: Oral

THE DEPTH OF MEMORY *Sierra Morse, Steven Polacco, Graphic Art & Design, Dominican University of California, San Rafael, CA 94901*

As a designer, I long for something more than Photoshop can give. Through my senior thesis project, I have attempted to find that something; an approach that goes beyond the computer. My process begins with the creation of diorama-like structures containing photographs that trigger my memories of “home” printed on various transparencies of paper. I use this structure as a stage for my photography, often taking pieces out and shooting through them in a variety of environments. By employing physical layers through three-dimensional space, I create an almost surreal construction of the landmarks of my past juxtaposed in my present world. The technique intentionally mimics the concept of layers in Photoshop, but gives a more organic feel that would be impossible to imitate in the program. The process allows for raw edges, texture, and beautiful mistakes only the human hand can give. I also plan to take the concept of hand-made design a step further by creating an art book from the resulting photographs using the physical layering approach. The research component of my thesis project involves more than just a different way of creating a photograph. In addition to the self-exploration necessary for the creation of a series about my concept of home, I wanted to explore this longing for less sterile design. Do we reach for that in some aspects of our lives? Why might some feel more of a connection to things made by hand rather than by machine? What is this niche market for things that are “vintage,” distressed, imperfect? My hope is that I can answer some of these questions, and perhaps satisfy some of that longing, through hand-made designs about a slower time in my life. Type: Oral

Communications / Journalism

GRACE CASE AND BEYOND: THE MAKING AND IMPLICATIONS OF AN INNOVATIVE NEWS REPORTING PLATFORM *Carmen George (Nadia White) School of Journalism, The University of Montana, Missoula, Montana 59812*

Last spring the Grace Case project combined the efforts of University of Montana law and journalism students to provide comprehensive news and analysis about the historic W.R. Grace environmental criminal trial in Missoula. The project combined traditional reporting, live blogging and twittering. Almost 10,000 people read the blog, including Environmental Protection Agency workers and residents of Libby, where Grace’s asbestos-laced tremolite mine caused hundreds of deaths. The project filled a reporting void in what the New York Times called, “A reckoning in one of America’s worst industrial disasters.” The project was the largest example of online team trial coverage, and the first time Twitter was used to cover a federal criminal trial. National media, scholars and lawyers looked to the site to see how new media tools were used to improve old-fashioned reporting. Michael Doyle, a legal affairs reporter for the McClatchy chain, told readers of his blog to “check out this site and see the future of legal coverage.” Ashby Jones of The Wall Street Journal hailed the site as “an impressive piece of work” that was incredibly accessible to non lawyers. The success of the site prompted professors at Montana to explore ways to help students elsewhere replicate this project to cover trials of importance to their communities. An environmental law Web site that could bring together law and journalism students across the country is in the research and design stage. My presentation for the conference, “Grace Case and Beyond,” is a oral presentation that examines what made the Grace Case project work, and where the lessons from that project might lead. Type: Oral

THE PRESIDENTIAL ELECTION 2008: IS THE KENTUCKY KERNEL A GOOD CITIZEN?
NO, IT'S BOWLING ALONE IN A TRADITIONAL ELITE WAY *Chelsea Brislin (Buck Ryan)*
Discovery Seminar Program, University of Kentucky, Lexington, KY 40506

A research study suggests that newspapers, which are mainly written in a traditional elite way, have turned 18 year-old voters away from civic duties. In the historical election of 2008, this research study sought to determine whether the Kentucky Kernel was bowling alone, or detached from civic life, as author Robert Putnam explains. To conduct this research, we collected data from four newspapers; the Kentucky Kernel, the Herald-Leader, the New York Times and USA Today. We collected information from front page headlines of these four papers for 2 1/2 weeks, leading us to analyze 62 pages all together. Our research questioned the amount of headline coverage containing presidential election information, how fair the coverage was between the two candidates and how engaging the framing of the papers were. The Kernel was predicted to have the most coverage, however, it ended up with the least, having only 31% coverage. The Herald-Leader had the most coverage at 118%. Coverage in this research is defined by the number of times the candidates' names were mentioned in the headlines. While all four newspapers were traditional elite, USA Today had the fairest coverage on average at 92%. Fairness is defined as the number of times presidential candidates McCain and Obama's names were mentioned as compared to equal naming of both. The Kernel, which was predicted to be the most engaging of the four, turned out to have the most at 25%, in terms of Public Journalism. Engaging was defined by whether the headlines were framed in a public journalism or traditional-elite way. Type: Poster

Communications / Media Arts

THROUGH THE LAYERS OF ENCAUSTIC SKIN: FUSING PRINT AND PAINT

Gina Hunt (Brian Frink), Department of Art, Minnesota State University, Mankato, 325 Wigley Administration Center-URC, Minnesota State University, Mankato, 56001

My intentions to create a bridge between painting and printmaking, by means of encaustic painting (a wax-based medium for oil paint) have manifested through six paintings. I have worked in nursing homes since I was sixteen, and this has caused me to explore the aesthetic qualities of the sick and dying. In *Waxing Poetic*, Stavitsky explains: "Functioning as a seductive skin or membrane, encaustic is an unusually malleable and mutable medium that evokes bodily sensations, emotions, alchemical transformations, religious rituals, layers of history, and the passage of time" (19). My work investigates the physical layers of the body, metaphorically. I make art that is dependent on the human hand, and refer to contemporary artist Ghada Amer and modern artist Jasper Johns. Amer's body of work includes large-scale paintings that incorporate embroidery. The scale of the paintings and technique explored asserts the hand-made. I examine the quality of the hand-made and the juxtaposition created when combining etchings and abstract painting. Jasper Johns uses wax to encapsulate objects and paper onto the painted surface, and the marks created add texture that make John's hand evident. My collage experimentations with four varieties of Japanese printmaking paper fuse the disparate elements of painting and printmaking. Making handmade characteristics palpable is reflective of the work of Amer and Johns in this body of work. My experiences working with the elderly have been a foundation for conceptual exploration. The encaustic process allows me to work in layers and explore the physical deterioration of the human body. The outcome is a delicate balance between

metaphorical skin, handmade qualities, and the concurrence of the distinct materials implemented. Type: Poster

NEGATING PEACE: A THREE PART ANIMATION *Andrew Madson, (Br. Simon-Hoa, Mike Opitz) Department of Art and Department of English, St. John's University, Collegeville, MN 56321*

Using the stop-motion masterpieces of the Bros. Quay and the visceral ink drawings of Ralph Steadman as a creative springboard, this thesis, a three part animation reflecting on negative peace, group think, and the link between responsibility and membership, assess the culpability of the United Nations Security Council (UNSC) for inadequate military action in Bosnia and Herzegovina (B&H) as well as the current situation in Darfur, Sudan. The piece incorporates first-hand collected interviews from survivors of the Bosnian war and Joe Sacco, award winning graphic journalist of Safe Area Gorazde: The War in Eastern Bosnia 1992-1995. The project scrutinizes the degree of culpability within the UNSC using the theory of John Walzer's Spheres of Justice as well as the compilation Approaches to Peace edited by David P. Barash. As Ambrose Bierce wrote in The Devil's Dictionary, "[War is a] by-product of the arts of peace. The most menacing political condition is a period of international amity...the soil of peace is thickly sown with the seeds of war and singularly suited to their germination and growth" (159-160). Bierce's acerbic declaration rings painfully clear when reflecting on the recent war in B&H as well as the continuing disaster in Darfur. The seeds of war blossomed, largely impart, within the amiable soil of the United Nations Security Council (UNSC). This award winning* three-part animation explores the UNSC's adherence to negative peace; it's binding to groupthink, and its disregard of responsibility by its members. The UNSC is gravely responsible for the massacres of our current age. *"Best Animation" College of St. Benedict and St. John's University Film Festival 2007 & 1st place College of St. Benedict and St. John's University art show. Type: Oral

Communications and Computer Science / Web Design and Development

Please note: The abstracts SMALLER, FASTER WEBSITES and GUERRILLA DESIGN TACTICS are from "An Event Apart: The Design Conference for People Who Make Websites" held in 2015.

SMALLER, FASTER WEBSITES *Mat Marquis, Developer, Bocoup, Boston, MA*

When the goal is to serve an ever-expanding landscape of browsers, devices, and connection speeds, a responsive layout is just the beginning. Regardless of their browsing context, users expect a site to load as fast—or faster—on their phones and tablets than anywhere else. From bandwidth budgets and responsive images to smarter caching and leaner scripting, Mat Marquis will share the tools and techniques that ensure that your content will reach your most demanding (and least powerfully equipped) users, without detracting from the experience of users on the latest and greatest devices—without limiting the creativity of your team, and without a massively inflated deadline. We'll discuss strategies for smarter asset delivery, techniques for avoiding potential points of failure, and start to cultivate development habits that help us deal with a vast landscape of unknowns from the very start of a project. Type: Oral

GUERRILLA DESIGN TACTICS *Samantha Warren, Independent Designer*

It takes a village to design a responsive design system, so how do you convince the village that they need to? Facilitating change, making innovation happen, and fostering a design culture can be hard in an organization—especially when you are not in a position of authority. As an organization becomes comfortable with standard ways of operating and resistant to necessary change, you can find yourself in the tough position of implementing things you know are wrong. Get out from under this typical design dilemma. Samantha will show you how to use your design thinking as an asset to win battles where you are the underdog. You'll learn persuasive techniques that can help you get everyone on board with design that achieves your organization's goals, and of which you can be proud. Type: Oral

Computer Science

THE HIGHS AND LOWS OF CYBER SECURITY: DDOS ATTACKS *Camille Carter, Paige Piggott, Dr. Wayne Patterson Computer Science Department, Howard University Washington, DC 20059 Esteban Rojas, Freddy Gutierrez, Juan Pablo Muñoz, Cristhofer Valenzuela, Dr. Sergio Mujica, Universidad Santo Tomas, Santiago, Chile*

Used by a number of hacker groups, Denial of Service (DOS) Attacks are used to shut down a website in order to infiltrate a specific network system. DOS attacks can be graphically viewed as an extreme spike in the amount of traffic visiting that website. Similarly, the “Michael Jackson Affect,” which describes a large increase in traffic due to a major event, can also shut down a website. This research was conducted at the Universidad Santo Tomas in Santiago, Chile to formulate a mathematical method that would describe and predict the difference between DOS Attacks and High-Traffic events. Graphical data on each of the websites was collected using Alexa.com. With the support of news articles and hacker blogs as soft data, the spikes on each graph could be identified as an attack or result of a High-Traffic event. Using T-Tests for Equal Means, Shapiro-Wilk Normality Test, Kolmogorov-Smirnov Test, and Anderson Darling Distribution Test, the data proved to fit within normal distribution showing that the DOS attacks and High-Traffic events were all similar to each other within their respective category. Upon further reflection, it was noted that the data obtained using Alexa.com had reported traffic level values (the vertical axis) that were percentages of the overall usage of the Internet. Consequently, since a substantial increase in traffic on very heavily used sites such as Facebook or Netflix would still only show a small increase in slope, we normalized the data to reduce the effect of traffic on the heavily used sites. Thus we normalized these observed data, and the result showed means of 0.0470 for 61 observed DDoS attacks, and 0.0392 for 40 observed heavy traffic incidents. Applying the F-test at the 99% level, the result shows that the data supported the conclusion that the means of the slopes could provide a differentiation between a DDoS attack and legitimate but exceptional traffic. Type: Oral

USING SNORT NETWORK INTRUSION DETECTION SYSTEM TO MONITOR NETWORK TRAFFIC FOR PREDEFINED SUSPICIOUS ACTIVITY OR PATTERNS ON A SECURED AND UNSECURED NETWORK *Jonnetta Bratcher, Lakeasha Williams College of Engineering, Architecture, and Computer Sciences, Howard University, 2300 Sixth Street NW, Washington, D.C., U.S.A. Jonnetta.Bratcher@bison.howard.edu Advised by: William Emmanuel*

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Monitoring networks is vital when maintaining solidity with a network. Watching over the entire network allows you to detect hacking attempts, virus infections, configuration problems, hardware problems and a host of other things. Snort is an (open source) Network Intrusion Detection System that can analyze the traffic and packet logging of a IP Network. Using Snort we monitored a University's network and a USB Bongle's network to watch for inappropriate traffic. Keeping the NIDS the same the two networks that were being monitored differed in levels of security. Due to the levels of security on each network that altered the amount of activity we encountered. We then use the "bait and switch" technique which will attempt to draw exploiters in and then redirect them to another host (a honeynet). Given this tool we were able to detect hackers and common exploits and a tactic against them. We have found that in order to successfully get a hit on a network while using Snort, there are a few factors that must we must consider. One, the type of network that we are connecting the server to makes all the difference, due to the different levels of security. This is vital to the success of your security because it would be redundant to run Snort and the "bait and switch" system on a network that is fully secured. You will receive zero exploits, similarly to when we ran Snort on the University's network. Secondly, the amount of servers that are connected to the network increases the availability of the data that is trying to be accessed. If there is only one server connected to the network it is unlikely that server will receive a hit. What are the chances of one server being exploited out of one-hundred servers? Thirdly, the accessibility of the network that the server is connected to; a hacker will not attempt to gain the data from your server if the longevity of the time connected to the server is not consistent. The hacker will need idle time when trying to get into a server therefore; an ample amount of connection time will suffice. Lastly, the "bait and switch" technique offers a simple solution to redirect the exploits away from your system and into another host where you can identify the information of the hacker. This study was limited in time and servers connected to our network. This project would have produced more results if we had designed a honeynet that emulated web servers in a computer lab and ran our Snort for at least a months' time. The honeynet will be the second host that all of the inappropriate traffic is sent to which is the "bait and switch". Running this system for about a month gives the user and the potential hacker enough time to attempt to hack into the system and get turned around.

Type: Oral

East Asian Studies

THE PERSISTANCE OF CORRUPTION WITHIN THE JAPANESE GOVERNMENT: THE ROLE OF BID RIGGING IN PUBLIC WORKS PROJECTS *Megan F Ballenger (Bonnie Orzolek) Honors College, Virginia Commonwealth University, Richmond, VA 23220*

The purpose of this research is to examine the roots of a long-standing tradition of corruption within the Japanese government known as the dango. The dango is a harmful bid-rigging cartel used mainly in public works projects. This issue is important because of the magnitude of the dango's negative impact upon Japan's economy and political ethics. Japan's economy has been in serious trouble since 1990, and the government is currently facing trouble due to the general population's distrust of the government. The issue of the dango must be addressed and resolved before Japan's economy can make a complete recovery and the government is able to regain the

public's trust. Investigation of this issue includes review of economic and political journals, news articles, documents published by the Japanese government, and interviews with experts in the field of political science. Findings from the research reveal that the dango causes a significant amount of corruption and scandals within the government, as well as having a major negative influence on the Japanese economy and environment. Materials reviewed for this research also show that the dango is often defended in Japan as an important and helpful institution. Indeed, it does offer short-term benefits, though these are greatly outweighed by the harm created by the dango. In conclusion, the dango is a harmful institution that must be addressed by the Japanese government in order for Japanese society to move forward. Correcting such a long-standing and harmful institution will provide Japan with the needed long-term benefits to produce a stable economy and sustainable society. Type: Oral

FILIPINO NURSES TO THE MIDWEST REGION OF THE UNITED STATES

Joseph Noreik (Dr. Vivian Foss), Department of English, University of Wisconsin Oshkosh, 800 Algoma Blvd., Oshkosh, WI 54901

What country would most Americans associate with immigration issues and the United States? Mexico. However, within the last century and a half, the migration to the United States from the Philippines has played a large role in shaping America. The final contingent of Filipino immigration consists of nurses migrating to America. In this research collected data revealed how knowledgeable Filipinos and Filipino-Americans are with the issue of migration, revealed how the educational and nursing experiences have played a role in the decision to work as a nurse in the U.S. and compared interviewees to the literature of previous studies on a national scale. Filipino nurses in the Midwest region of the U.S. were interviewed, scholarly journals were reviewed, and other supporting literature was read. Participants from many different phases in their nursing career answered questions about their education and work experiences. Of nineteen participants, nearly all students and nurses agreed on having had positive experiences in both the nursing education and career. To understand their experiences, one must understand three concepts that are addressed in this research: First, there have been many ways nurses have come to America other than the assumed mean of immigration with visas. They have come by way of the Exchange Visitors Program and by other means. Second, one should understand the migration patterns to the U.S. throughout history to understand their reasons for coming to America at present. Finally, one should also understand that the culture of the Filipino people is critical to why so many are nurses in the U.S. The Midwest region has been home to Filipino nurses for numerous decades, and as the Filipino population continues to rapidly grow, more nurses will continue to originate from the Philippines. This research dissects personal aspects of the lives of Filipino nurses. Type: Poster

Economics

THE DECLINE EFFECT: RESEARCH MYTH OR OBSERVABLE PHENOMENON?

Grace Arnold, Dr. Tom Stanley, Department of Business and Economics, Hendrix College 1600 Washington Ave. Conway, AR 72032

Published research should represent the pinnacle of human knowledge. However, publication bias has routinely been observed in the published research of many fields, suggesting that this ideal may not always be true. Meta-regression is a type of literature review that quantifies every

empirical research finding in order to empirically and thoroughly assess what we know on a particular topic. Meta-regression analysis can identify and correct publication bias, thus providing a more accurate estimate of effect size. Previous meta-regressions in economics have discovered greatly exaggerated effect sizes due to publication bias. In medical research, it has been shown that initial research becomes weaker over time. This study aims to uncover whether or not this declining of effect sizes is present in economic research and if it is a result of publication bias or a property of the studied phenomenon itself. We have examined 12 independent meta-regression studies with a range from 60 to 1500 empirical estimates of a given economic phenomenon. We find that a decline effect is present and is largely the result of lessening publication bias over time. Type: Oral

THE ECONOMIC FUTURE OF LIBERAL ARTS COLLEGES *Robyn A. Ferg, Roderick Z. Gui, Sarah A. Warth (David Schodt, Kathryn Ziegler-Graham) Center for Interdisciplinary Research, St. Olaf College, 1520 St. Olaf Avenue, Northfield, MN 55057*

In the past decade, tuition and costs in higher education have been increasing at a rate faster than the overall level of prices, a situation widely held to be unsustainable. While this problem has been well-documented for the higher education sector as a whole, the economic circumstances of the liberal arts colleges as a group have not been well analyzed. This study used data from the Delta Cost Project over the years 1999 to 2009 to investigate how the experience of the liberal arts colleges compares to that of the higher education sector. By statistically analyzing 201 liberal arts colleges, this project identified factors of cost increase and explored tuition trends. Data demonstrated that listed tuition, tuition revenue, faculty and staff compensation, and educational expenses increased at a faster rate than the Consumer Price Index (CPI) from 1999 to 2009. Additionally, results showed that expenses are increasing at a faster rate than revenue. The results of this research can be used to explore this discrepancy and predict potential future tuition trends for liberal arts colleges. Type: Poster

Education

ARTS INSTRUCTION IN ELEMENTARY SCHOOL CLASSROOMS: LIMITING FACTORS AND SUCCESSFUL PROGRAMS *Nicole Ahern, (Rosemarie Michaels), School of Education, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901*

Since the No Child Left Behind (NCLB) act of 2001, there has been an increasing emphasis on the importance of high-stakes testing. It has been suggested that this emphasis has resulted in decreased instructional time for untested curricular areas, such as the arts, and reduced quality of arts instruction. The very inclusion of arts education programs in schools is being justified by the arts' reported ability to raise test scores in tested curricular areas, and has been compromised at the expense of achievement in other curricular areas. Arts education is further limited by factors such as lack of federal and local funding, and a lack of teacher confidence and capability for arts instruction. Consequently, the three-fold purpose of this study is to identify the components of a successful arts program, examine the factors that have limited arts instruction, and explore what arts education actual practice looks like in two counties in the San Francisco Bay Area. To answer these questions I will examine the current literature, interview and survey experienced elementary teachers and principals, and interview a focus group of experienced elementary school teachers. Research indicates that several factors, such as high-stakes standardized testing and lack of funding, impact the instructional time dedicated to arts education, as well as the

quality of arts education. I predict that my findings will be consistent with this research, and that in fact the amount of time spent on arts education at some specific districts may be even lower than the national averages and that some teachers may not devote time to the arts at all. I predict that the most successful arts programs will integrate the arts into other curricular areas in a way that does not diminish the quality of the arts education or the integrity of arts expression, and will result in benefits such as increased aesthetic understanding and knowledge, a more active imagination and creative thinking capacity, and high critical thinking skills. Type: Oral

THE RELATIONSHIP BETWEEN VISUAL AND PERFORMING ARTS AND ACT SCORES

Danielle Schafer & Olivia Crawford (Dr. Judith Puncochar), School of Education, Northern Michigan University, 1401 Presque Isle Avenue, Marquette MI 49855

Year after year, students compete for scholarships and acceptances to prestigious universities. These competitions often include standardized test scores from the Scholastic Assessment Test (SAT) and the American College Test (ACT). Pressure to perform well on these tests has led to an intense debate about areas of study that influence test scores. Some researchers have suggested that “mentally intensive leisuretime [sic] activities” are related to career success (Root-Bernstein, 1999, p. 323). Others have reported that high school students involved in school-sponsored extra-curricular music activities showed higher cumulative grade point averages and higher SAT and ACT scores than students involved in extra-curricular sports activities (Miranda, 2001) and that students who participated in music programs have scored “significantly higher than non-participants” (Kinney, 2008, p. 145). Our research involves the strength of the relationship between secondary education visual and performing arts classes and ACT scores. We chose to examine ACT scores due to the increasing number of states (e.g., Illinois and Michigan) that use the ACT for school improvement efforts and a relative lack of research concerning the relationship between ACT scores and number of visual and performing arts classes taken by high school students. In addition, the ACT Board does not compile a report of correlations between different fields of coursework and ACT scores. The purpose of this mixed methods research is to provide further insight about which areas of coursework are associated with higher ACT scores. We plan to survey Northern Michigan University undergraduates. The survey items will include the number of completed secondary education performing arts classes, visual arts classes, and the highest ACT score obtained. We also plan to conduct interviews with two groups of students, one group from honors housing and the other from general housing. The interviews will delve deeper into some factors that may have impacted the individual students’ experiences with the arts, as well as their levels of success with the ACT. We predict that the number of art classes taken will correlate positively with ACT scores. We also predict that since more of the human senses are utilized in performing arts than in visual arts, students who took mainly performing arts classes would have even higher scores than those who took mainly visual arts classes. This research should lead to further discussion of funding levels available for each area of coursework. Type: Poster

Education / Social Studies

INCORPORATING SOCIAL STUDIES INTO THE ELEMENTARY SCHOOL

CURRICULUM Allison Little (Jennifer Manak) Elementary and Early Childhood Education, Bridgewater State University, 131 Summer St., Bridgewater, MA 02325

As part of the Massachusetts History and Social Science Curriculum Framework, students are required to learn about United States history, World history and the communities in which they live. In the elementary school classrooms, students receive a broad understanding of history and social communities that forms a basis for future learning in social studies. This qualitative case study examined how social studies and social science content and instruction is incorporated into an elementary school curriculum. This case study was conducted in a suburban small school in northeastern Massachusetts. Over the course of the semester, I collected 40 hours of participant-observations, field notes, teacher interviews, and teacher and student artifacts. Findings from this case study will provide educators with examples of how to incorporate social studies instruction into their lesson plans. During my study, I found that the History and Social Sciences curriculum is lacking in the classroom. Teachers find that it is difficult to incorporate the necessary lessons due to lack of funding. The teachers have found that the best ways to incorporate History and Social Sciences into their lesson plans is to incorporate children's books and other materials into reading groups. Teachers also incorporated Social Studies instruction into the content area instruction being taught throughout the day. Type: Poster

English

FEMALE WRITERS OF THE AFRICAN DIASPORA AND THEIR INFLUENCE ON CULTURAL AND IDEOLOGICAL MOVEMENTS OF THE EARLY 20TH CENTURY
Ashley Balavender, Rosamond King, English Department, Brooklyn College, Brooklyn, NY 11210

Female writers of the African Diaspora were major contributors to the black literary landscape and related cultural and ideological movements of the early twentieth century. Black women writers such as Suzanne Lacascade, Jane and Paulette Nardal, Suzanne Césaire, Jessie Fauset and Zora Neale Hurston have been largely underrepresented in research and discourse on these subjects. Closely examining the ideas and literary work of these writers, this study demonstrates how they shaped the Négritude movement in Paris, France and the New Negro Renaissance (Harlem Renaissance) in the United States. Through close readings and historical research, I suggest that female writers of the African Diaspora had a larger influence on the literary landscape and movements of their time than they are historically given credit for. I also examine the implications of their relative absence from major scholarly works on these subjects. Type: Oral

MORE THAN THE MOLD: THE QUESTIONING OF FEMALE GENDER ROLES IN JOANNA BAILLIE'S DE MONFORT *Gayle E. Metzger, (Dr. Lucy Morrison), Department of English, Salisbury University, Salisbury, MD 21801*

In her Introductory Discourse, Joanna Baillie states, "We expect to find [characters in plays] creatures like ourselves; and if they are untrue to nature, we feel that we are imposed upon" (148). Baillie asserts that we all, both men and women, want to see a piece of ourselves, not only in the dramatic characters in plays, but in the world as well. How, then, must it have felt to be a woman during the Romantic Age and not see female characters who were true to the real nature of women during the late 18th century? In *De Monfort*, one of Baillie's Plays on the Passions, she includes two female characters who are more than the stereotypical mold of what women during the Romantic Age should be. While the play is named for *De Monfort*, the leading male

character, whose hatred for his rival Rezenfelt becomes all consuming, it is Baillie's portrayal of the female characters that is most intriguing. In *De Monfort*, the central female figures of Jane De Monfort and Lady Freberg both support and refute the rigid gender roles of the Romantic Age, suggesting that one should not place expectations of behavior solely on gender because women have the ability to be both masculine and feminine. By questioning the expectations of the female sex and by giving her female audience the idea that they could be more than what was required of them, Joanna Baillie must have influenced and inspired the women that came after her to push for more. Type: Poster

Environmental Science

STREAM SUBSTRATE COMPOSITION AFTER FIRE IN SOME WESTERN MONTANA MOUNTAIN WATERSHEDS *Sarah Caffrey, Vicki Watson, Environmental Studies, University of Montana, Missoula, MT 59812*

In 2000, large areas of the headwaters watersheds of the Bitterroot River burned. Such large scale fires can greatly increase sediment yield, possibly changing stream substrate composition and hence fishery habitat. Hydrologists of the Bitterroot National Forest wished to assess the effects of the fires on substrate composition of headwaters tributaries, but no pre-fire data existed. Hence they looked at 'recovery' over the 8 years after the fire, to see if substrate composition appeared to be recovering and stabilizing after the fires. If recovery was occurring, they expected to see median particle size increasing (as fines were washed from the streambed). Five tributary streams of the East Fork of the Bitterroot were monitored in August or September from 2002 to 2009. Wolman pebble counts were used to determine median particle size (D50) and related parameters. Observations indicated little change in median particle size over the study period. Possibly surface composition recovered very quickly, in the first year or two. Other studies have found surface participle composition to recover quickly after watershed disturbance but subsurface composition can take many years to recover after an increase in fines following such disturbances. Assessing the effects of fire on stream composition would be improved by assessing changes in particle size distribution at least to the depth at which fish deposit eggs. Type: Oral

DIRECT AND INDIRECT IMPACTS OF FLORIVORY ON BUTTERNUT SQUASH *Amanda Eigner, Lynn Adler, Department of Plant, Soil & Insect Sciences, University of Massachusetts, Amherst, 300 Massachusetts Ave., MA, Amherst 01003*

In 2008 the production of squash was valued at over \$375 million in the United States. Herbivores and pollinators can be important determinants of this production. Striped cucumber beetles are found in flowers of butternut squash and are considered to be an agricultural pest. However, the effect of cucumber beetles in flowers on crop yield is unknown. The striped cucumber beetle may reduce squash reproduction directly through florivory or indirectly by influencing pollinator preferences. We manipulated beetles in flowers and pollen loads and measured fruit set to distinguish between these direct and indirect impacts. Over 50 hours of pollination data were collected over the summer of 2009 over 18 days to determine if beetles deterred pollinators. The percent damage on flowers increased for both male flowers ($p < .001$) and female flowers ($p < .0001$) in treatment groups with beetles. Despite this significant difference in damage, initial analyses suggests that beetles in flowers do not affect yield or pollinator

preferences. If these results uphold as analysis continues, this could be important information for farmers, potentially influencing pest management decisions. If beetles are not reducing yield through squash flowers, farmers may not be concerned with these beetles in their flowers and perhaps management should be focused on early leaf damage and also belowground, when beetles are in their larval stage and feed on roots. Not needing to use pesticides on flowers could also avoid potential adverse effects on bee populations that are in decline. Type: Poster

Exercise Science

EFFECTS OF LEG DOMINANCE ON THE SINGLE-LEG HOP FUNCTIONAL TEST IN NON-INJURED ADULTS *Jamila Winstead, (Raphael Bahamonde, Ph. D.), Department of Biomechanics and Human Performance, Indiana University School of Physical Education, IUPUI, 755 West Michigan Street, Room 1140, Indianapolis, Indiana 46202*

The single-leg hop is a test used in ACL rehabilitation to assess and measure the strength of the injured leg and also to determine time of return to competition. In order to effectively assess strength of the injured leg, we need to measure the effects of leg dominance on the scores of the single-leg hop and to determine how leg dominance affects the results of the single-leg hop functional test in non-injured adults. Fifty healthy non-injured adult volunteers consisting of twenty-five non-injured males and twenty-five non-injured females ranging from ages 19 to 25 will be part of the study. Leg dominance will be determined by measuring weight distribution between the limbs using a two force-plates and a series of tests compiled in accordance with the Lateral Preference Inventory: a measurement of hand, ear, eye, and foot preference. The subjects will be asked to perform several trials of the single-leg hop with the dominant and non-dominant leg. Subjects with no leg dominance will be excluded. Data will be averaged and analyzed using descriptive statistics and paired t-test. Now that we have started collecting data, we are finding two very different yet complimentary types of dominance: stability and functional. As we continue collecting data, we anticipate the results may also show little or greater symmetry between the dominant and non-dominant leg according to stability and functional dominance. Clinicians anticipate that the results will assist in establishing a comparative standard between the effects of leg dominance on single-leg hop on non-injured and injured adults. Type: Oral

THE EFFECT OF STRENGTH AND POWER TRAINING PHASES ON COMPETITIVE SWIMMING *Scott S. Dueball (Bryan Morrison) Physical Education Department, Valparaiso University, Valparaiso IN 46383*

Periodization is widely accepted in the world of Strength and Conditioning as the best way to design training programs for athletes. Periodization uses training phases organized in a schedule that optimizes athletic performance during championship events. These schedules can be as long as four years for Olympic athletes but are usually only one year in length. The purpose of this study is to look closely at how two of these phases (strength and power) affect the performance of trained swimmers. This will allow us to draw conclusions about the importance of strength and power training phases in competitive swimming. More specifically, this study will relate improvements in strength and power to changes in various characteristics of swimming: stroke length (SL), stroke rate (SR), and speed. The participants are 24 Division IAA competitive swimmers (15 females, 9 Males). Prior to the start of each phase the subjects' strength and power will be tested. We will use the vertical jump to evaluate changes in strength and power. A Just

Jump electronic vertical tester will be used to test the vertical jump. The swimmers will be videotaped to evaluate the performance characteristics of swimming (SR, SL, and Speed) using Dartfish ProSuite software. At the conclusion of both lifting phases the same tests will be repeated. We expect to see an improvement in speed as a result of either increased Stroke Rate, Stroke Length, or both Stroke Rate and Stroke Length as a function of power. Type: Poster

Finance

DEVELOPING MICROFINANCE MODELS FOR THE MIDWEST *Kimberly M. Cunningham, Preston J. Knapp (Dr. Choton Basu) Global Business Resource Center, University of Wisconsin-Whitewater Whitewater, WI, 53190*

The purpose of this report was to determine whether microfinancing is a viable tool for reaching “underbanked” individuals and communities in the Midwestern states of USA. Given the dispersed population in this region, it is important to identify a workable model for this region. This study focuses on the state of Wisconsin and attempts to develop a model that can be extrapolated to other Midwest states. It is established that microfinancing works well in areas with high population density but the challenge is to develop models that might work for highly distributed populations. Initial study shows that while microfinancing organizations do exist in Wisconsin, their impact is limited. This study starts by focusing on the “underbanked” individuals/communities in Wisconsin, particularly in the major cities of Wisconsin and then examines the current infrastructure such as nodal points available in rural communities. The primary source of data for this report was obtained through interviews with banks, agencies, and existing microfinance companies in the region. This enabled the researchers to gain insight into what models and strategies have been utilized in the past. Secondary data was also collected through US Census reports and various local resources. We focused on specific economic and social indicators at the state level particularly in the cities of Madison and Milwaukee. These indicators included income per household, ethnicity, unemployment, poverty levels, women-owned businesses, minority-owned businesses, and debt capital availability. The study concludes that currently there are limited options for the underbanked individuals statewide. On completion of this project we will present a Wisconsin-based microfinancing model that could be applicable to other Midwest states. Type: Oral

FIRM PERFORMANCE AND CEO TURNOVER: THE ROLE OF INDUSTRY CONTEXT *Kristin Sickels, James Cordeiro, Ph.D., Department of Business Administration & Economics, The College at Brockport, State University of New York, 350 New Campus Drive, Brockport, NY, 14420*

The causes and consequences of CEO turnover generate interest among researchers in the finance and strategic management areas. Increasingly, researchers have begun to explore contextual variables that potentially moderate the relationship between forced CEO turnover and prior firm financial performance. We investigate the role of two key components of industry environmental uncertainty – industry munificence and dynamism (Dess and Beard, 1984). Industry munificence reflects the abundance of resources in the industry environment and is inversely related to environmental uncertainty (Boyd, 1995). In munificent industries, the wealth of resources makes it harder for firms to perform poorly. Boards may therefore be less forgiving of CEOs of firms that are unsuccessful under these conditions. Thus, we expect that boards are

more likely to attribute poor firm financial performance to the CEO in high munificence industries. Environmental uncertainty is high in highly dynamic industries (Boyd, 1995). To allow CEOs flexibility to adapt to the unpredictable environment, it is plausible that the discretion afforded the CEO by the board is likely to be higher in more dynamic industries. Higher discretion is likely to result in the board holding the CEO more accountable in dynamic industries. Consequently, we predict that boards are more likely to attribute poor firm financial performance to the CEO in highly dynamic industries. We expect environmental uncertainty as measured by munificence and dynamism to moderate the relationship between prior firm financial performance (measured using ROA, stock return) and forced CEO turnover. Using logistic regression analyses and related methods, we test these hypotheses on a sample of US corporate CEOs from 2003 to 2007. Type: Poster

French

THE COMPLEMENTARY RELATIONSHIP BETWEEN LIBERTY AND VIRTUE IN MONTESQUIEU'S 'LETTRES PERSANES' Pui-In Tang (*Roxanne Lalande*), *Department of Foreign Languages and Literature, Lafayette College, Easton, PA 18042*

This study aims to examine the relationship between liberty and virtue in Montesquieu's epistolary novel, *Lettres Persanes*, a popular satire of French culture and society from the Enlightenment period. In this epistolary novel, Montesquieu illustrates his belief that virtue is not simply the absence of vice, but is directly related to the freedom to choose to do good deeds. Thus, virtue is by its very nature an active, not a passive principle. In the novel, two Persian noblemen, Rica and Usbek, travel out of their kingdom in search of enlightenment to a foreign country, namely France. The main character, Usbek, writes home to his noblemen friends giving them his objective, critical, and analytical commentary of French society, as well as the political theories he has derived from comparing different societies. Conversely, he writes on a very subjective and personal level to his wives and eunuchs in his seraglio in Persia, who live in confinement. Usbek's letters present the problematic rapport between liberty and virtue on two levels: the societal and the personal. Usbek himself is a paradoxical character who, on one hand, appears to champion the idea that virtue is only authentic when it is actively sought by the people and not imposed on them. On the other hand, he brutally oppresses his wives and finds them all the more attractive in their submission to his authority, while remaining blind to the fact that their virtue is the result of external constraints and confinement. The contrast between these two perspectives gives the novel an ironic twist in that the critic Usbek becomes himself an object of criticism. In turning Usbek's story into a cautionary tale, Montesquieu elucidates his stance on the relationship between the relativity of judgment, from which we may also glean his ideas on the inherent rapport between liberty and virtue. Type: Oral

Gender Studies

SEX WORKERS AND HIV/AIDS: THE IMPLEMENTATION OF LOCAL MODELS OF EDUCATION AND PREVENTION IN MUMBAI, INDIA Sara S. Amri (*Laura Hebert*), *Department of Diplomacy and World Affairs, Occidental College, Los Angeles, CA, 90041*

The high prevalence and continuing increase in HIV/AIDS rates in the metropolitan city of Mumbai, notorious for its flourishing sex industry, reveal a potentially explosive public health issue. This research project investigates the efforts being made by local organizations in Mumbai

to implement HIV/AIDS education and prevention measures specifically targeting sex workers. Furthermore, we evaluate the relative effectiveness of these techniques in addition to addressing potential explanations for the disparity of HIV/AIDS rates present in Mumbai as opposed to Kolkata. This project was conducted from May to June of 2009. Our primary means of collecting research consisted of holding interviews with employees and workers from selected local organizations in both Mumbai and Kolkata as well as partaking in field observation facilitated by several local NGOs. Project elements include an analysis of current HIV/AIDS prevention and education measures including the following activities: peer education; health camps; the distribution of Information, Education, Communication (IEC) material; media campaigns; and drop-in centers. After meeting with various local organizations in both Mumbai and Kolkata, our qualitative analysis suggests that the most effective methods of HIV/AIDS education targeting sex workers – in both cities – involve proactive peer education and extensive community involvement. Additionally significant attention was consistently brought to several issues in Indian society that continue to hamper the effectiveness of HIV/AIDS prevention and education programs targeting sex workers. These problems include the stigmatization of HIV/AIDS throughout Indian society, medical sensitization, police corruption, and the flawed implementation of anti-trafficking measures. Our project attempts to identify the root of these issues and proposes prospective solutions. Type: Poster

QUEER GENDER IDENTITIES: NARRATIVES AT THE INTERSECTION OF AGENCY AND AUDIENCE. *Naomi H. Dale (Keith Bramlett), Department of Sociology, University of North Carolina at Asheville, One University Heights, Asheville, North Carolina 28804*

While it may be true that the poststructuralist idea of gender as performance has afforded individuals more agency than ever in constructing and manipulating gendered identity, it is important to locate these performances in specific historical, social, political, racial, spatial, and cultural contexts. It is important to question what forms of power dynamics make particular gender performances more or less likely and acceptable. Gender expression is not a simple manifestation of individual intention, but is a complex intersection of personal agency and cultural specificity. Individual intention in performing gender is complicated by both the history of the individual and the social context where they find themselves. This research project attempts to understand specific expressions of queer gender as presented in diverse contexts and for different audiences. Such a theoretical compromise permits a concrete discourse about particular gender expressions while simultaneously recognizing social contingency and cultural construction. In other words, individual voices and specific gendered experiences can be understood and analyzed more insightfully by placing them within a network of intersecting social landscapes. This postmodern identity politics is a methodology that inextricably links gender performance with the systematic power of gender. Through the use of process and content driven in-depth interviews, this research project illuminates queer gender intersections in individual narratives. Instead of coming to a singular, universal, and transcendent notion of truth, narratives enable us to see a pluralism of truths in contextual and specific experiences. Listening to lived experiences and personal narratives of queer embodiment exposes the diverse, multidimensional, and dynamic nature of gender; it complicates and expands the suffocating gender binary. Utilizing this researcher's personal narrative in combination with interviews and ethnographic data collected during this researcher's fieldwork in San Francisco, this project gives voice to queer gender expressions in all of their complexity and diversity. Type: Oral

Health Informatics

Please note: Below are two sample professional presentation abstracts from the 2014 “Health Informatics & Technology Conference” and 2014 “International Workshop on the World Wide Web and Public Health Intelligence” respectively.

IMPLEMENTING STUDENT INFORMATICS PROJECTS WITH HEALTHCARE ORGANIZATIONS: CREATING CAREER OPPORTUNITIES *Sharie Falan, Bronson School of Nursing, Western Michigan University*

Student engagement with community is critical for a well-rounded educational experience for health informatics and information management students. Over the past two years, informatics students at both undergraduate and graduate levels have completed projects at local health care organizations to apply skills learned in academic courses. As a result of the projects and building of relationships, health care organizations have made career opportunities available for students. Creating student projects is a fulfilling experience-however, some pitfalls emerge that can be avoided. This presentation will discuss all phases of the student-project endeavor with health care organizations to assist educators and others in preparing students and faculty for these roles. Type: Oral

PURSUING PLANETARY-SCALE SIGNALS ABOUT HEALTH AND WELL-BEING *Eric Horvitz, Distinguished Scientist & Managing Director, Microsoft*

I will discuss efforts to harness anonymized behavioral data drawn from online services as large-scale sensor networks for health and well-being. I will highlight opportunities for garnering insights and performing inferences and predictions about health via analyses of signals expressed in social media, web searching and browsing, and interpersonal communications. I will frame directions by presenting studies that consider different types of data, and show how behavioral signals can complement more traditional studies performed in medicine, public health, psychology, and sociology. Finally, I will reflect about opportunities for sharing data, and on directions with privacy and ethics that may come to the fore with efforts to leverage behavioral data in studies of health and well-being. Type: Oral

History

FOR THE SAKE OF THE CHILDREN: HOW THE JOHN BIRCH SOCIETY CHANGED A HIGH SCHOOL LIBRARY AND THE NATION *Molly Anderson, Stephen Kercher, History Department, University of Wisconsin-Oshkosh, Oshkosh, Wisconsin 54901*

The 1960s is often remembered for the emergence of the counterculture and the rise of the new left. By comparison, the rise of the new conservative right has been given little, if any attention. Given the direction of American politics since the 1960s, historians have recently become much more interested in conservatives of this period. Exactly who were these people who lit the way for conservatives for years to come? And why was this is such a popular movement in an era typically associated with liberal and radical change? We can begin answering these questions by looking at the groups that were formed around conservative, anti-statist ideals. More than any other group, it was the John Birch Society that effectively led this new wave of conservatism.

The John Birch Society rallied its members with messages of anti-communism and a return to traditional family values. This grassroots, political movement garnered much support, and there were soon hundreds of chapters spread across the country. While the John Birch Society and its place in history have been examined in recent years, not much attention has been given to the individual members themselves and their actions within their own local communities. And it is these actions and motivations that are essential to understanding why this radical new movement succeeded on such a large scale. In order to better understand grassroots John Birch Society activity, my presentation will examine the Eagle River censorship scandal. Based on extensive archival research from collections within the Wisconsin Historical Society, I will examine how this scandal brought the controversial beliefs of the John Birch Society to the forefront of mainstream Wisconsin politics. By utilizing the papers of Harold Tuttle, the president of the High School's Board of Directors and an active member of the John Birch Society, I will show that the John Birch Society and its conservative counterparts' success can be attributed to its reactions to the thoughts, ideas, and policies of the radical new left, emerging throughout the United States during the early 1960s. Type: Oral

THE MUNICH MASSACRE: THE EFFECTS OF TERRORISM ON THE INTERNATIONAL COMMUNITY AND THE RESILIENCE OF THE OLYMPIC SPIRIT *Sharon DuPree, Joyce Wood, History Department, Anderson University, Anderson, SC 29621*

This paper deals specifically with the tragedy that occurred at the 1972 Olympic Games which were hosted in Munich. Beginning with a brief history of the conflict between the Arab and Israeli people beginning in the late nineteenth century, the paper then presents a narrative of the tragic hostage situation that came to be known as the Munich Massacre. The Munich Massacre was essentially a hostage situation in which the Black September group, a militant terrorist branch of the Palestinian Liberation Organization, captured eleven Israeli athletes within the Olympic Village. The result of the hostage situation was the death of the Israeli hostages and all but three of the Black September terrorists. Additionally, the paper examines the deeper consequences of the Munich Massacre with particular regard to the influence of technological advances and how that shaped the presentation of the tragedy to the world. Finally, the paper addresses the world's reaction to the Munich Massacre as well as how the broadcasting of the event reshaped the global community's awareness of the threat of terrorism. Type: Poster

Information Technology

COMPARING SELF-PURPOSES AND MOTIVATIONS OF PLAYING VIDEO GAMES AND ENGAGING ACADEMIC ACTIVITIES AMONG COLLEGE STUDENTS *John R. Powell Jr (Dr. L. Roger Yin), Dept. of Information Technology and Business Education, University of Wisconsin-Whitewater, Whitewater, WI 53190*

Facing the gamer generation who are in the universities today, the conventional "sage on the stage" kind of didactic classroom lecturing will be in question for its effectiveness. Gamers play to win - no matter how many attempts they must try. Research indicates that recovering a person's own mistakes is the most significant predictor of mastery in a self-paced individualized learning situation facilitated with computers (Yin, 2001). However, the deterministic standardized test-driven curricula used widely today do not allow flexible learning with too many trials and errors. Therefore, the researcher is proposing to investigate the similarities and

differences of the self-purposes, including motivations and incentives, of college students who are voluntarily playing video games and required to engage course activities for academic achievements. The data will be generated by a 14-question survey questionnaire asking college students' affective and behavioral tendencies toward playing video games vs. studying for courses. The survey will be distributed to 300 or more undergraduate students at all class levels in varied colleges and disciplines in a medium-sized Midwest university. Through statistical analyses, three primary constructs will be examined: (1) perceived self-efficacy in game playing, (2) perceived self-efficacy in studying for classes, and (3) preferred mode of knowledge representation when receiving instructions. The results of this study as a pilot may lead to the bridging of affective reasoning and sustained enthusiasm of college students between game playing and studying to meet course requirements. In addition, new pedagogical approach with game appeal – game-based learning – may prove to be a more effective means to engage young minds in contextualized formal learning. Type: Poster

IMPACT OF POLYINSTANTIATED INFORMATION ON CUSTOMER SATISFACTION

Muhammed Zamar Loyola University Chicago 6525 N. Sheridan Rd., Chicago, IL. 60626

This ongoing project investigates the use of polyinstantiated information in management of customer relationships. Polyinstantiation is a term that refers to presenting more than one version of truth about the same real world entity. For example, the same grocery store item (e.g. loaf of bread) has one price for a person with loyalty card and another price for a customer without the loyalty card. Even though both customers are looking at the same loaf of bread, they are given two different prices. The price of that loaf of bread is a polyinstantiated attribute of that real world object. Polyinstantiation can be used to present different information to customers who are segmented according to some criterion, such as prior purchase behavior. Our empirical study aimed to show that presentation of polyinstantiated information about products and services in an on-line store environment, affects customer satisfaction, both with the offer itself and with the quality of information about it. In order to conduct the study a mock on-line shopping environment was created which was used to conduct transactions. A group of participants (over 250), who represented the appropriate targeted demographic of online consumers, conducted transactions by using the mock online shopping environment. The study focused on the differences in participants' satisfaction as influenced by our manipulation. Preliminary analysis showed us that satisfaction measures were higher among participants who were presented with polyinstantiated information than among those who were exposed to regular information. This is consistent with our model which predicted that presenting information on multiple levels, affects customer satisfaction positively. Although this study is employed in a web-based retail setting, the relationships between this information presentation approach and measures of user/consumer satisfaction is not limited to retail scenarios or to on-line interactions. Type: Oral

International Studies

WHAT MAKES A COLLEGE CITY ATTRACTIVE FOR STUDENTS: CROSS-CULTURAL DIFFERENCE AND SIMILARITIES *Trisha Arnold, Sara Spain, Brittany Sharp, Rachel Machen (Irina Khramtsova) Psychology Department, Arkansas State University, State University, AR 72467*

What makes a town attractive for college students? Ninety-nine U.S. and international students from a medium-sized northeastern Arkansas city were surveyed to discover what aspects of a town they find the most important. The results revealed that there were more similarities than differences in students' responses. Entertainment, attractive downtown, and ethnic food were rated by both groups as the most important. Public transportation and bicycle lanes were rated as less important and there was a significant cross-cultural difference in the ratings. Additionally, international students valued natural parks higher than did US students. Gender differences were not significant. All responses should be beneficial for the city to consider for future planning. Type: Poster

FOSTERING WOMEN'S ENTREPRENEURSHIP IN POST-CONFLICT COUNTRIES: A POLICY RECOMMENDATION *Kelley Lane Kiril Kolev Department of Politics and International Relations Hendrix College 1600 Washington Avenue Conway, AR 72032*

A post-conflict environment can provide the right opportunity for women—often marginalized economically in developing countries—to become entrepreneurs. Conflict can upset the dynamics that give rise to economically restrictive conditions, many of which apply particularly to women. Because warfare often disrupts existing forms of income and institutions, it can create a window of opportunity for women. It is critical to capitalize on this window and establish a post-conflict system that will provide opportunities that reduce gender discrimination. Low per capita income, unequal distribution of resources, marginalization and exclusion are frequently the cause of contemporary civil wars. To minimize these threats to economic security, a nation can increase the diversity of its business sectors. By expanding the number of its small and medium enterprises (SMEs), for example, a nation can reduce its vulnerability to sector-specific shocks and fluctuations, especially by increasing woman-owned businesses that bring sector diversity. To measure the opportunities provided to women and assess their impact on a country's post-conflict environment, I utilize data from the World Bank's Women, Business, and Law database, the Economist Intelligence Unit's Women's Economic Opportunities Index, and the World Economic Forum's Global Gender Gap Index. Among other things, these data point toward reforms of women's rights relating to business ownership pre- and post-conflict. After exploring the success of women-run SMEs in post-conflict situations, I propose that incorporating legislative reforms into a comprehensive approach will support women-owned SMEs and will narrow the gender gap and help stabilize the economy. This research highlights key policy recommendations that include social protection and public services that give women greater agency and promote inclusive growth, employment opportunities, and a dynamic entrepreneurial culture. Type: Oral

Marketing

KEEPING DOWNTOWN BUSINESSES INVOLVED AND VITAL IN DEVELOPMENT ORGANIZATIONS *Lisa Klingelhoef, Jackie Ziemke, Dayoung Yoo, Gage Bender (Greg Broekemier) Marketing Department, University of Nebraska at Kearney, Kearney, NE 68849*

Recently, many downtown development organizations have had difficulty keeping their shopping areas in their citizen's choice set as well as having their local businesses stay involved in maintaining vital downtowns. Working closely with one such downtown organization in a Midwestern community of approximately 30,000 people, a team of undergraduate marketing

students developed a study and attempted to collect data from all businesses located in the downtown area. The field workers walked door to door and distributed self-administered questionnaires to the owners and managers of the businesses and returned to pick them up several days later. The surveys collected data from the downtown organization's members concerning their current levels of involvement with the organization and the events, their views of the organization, and ideas on how to improve the retail events and the organization. Information was also gathered from nonmembers in the downtown area regarding reasons why they are not members as well as factors that would encourage them to become members. This research was descriptive in nature and included several opened-ended questions to allow respondents to express their views and opinions in addition to numerous closed-ended questions. This information will be used by the organization to determine a strategy to create an increase in their numbers of members in the downtown area; as well as developing an approach to increase their current member's involvement within the organization and its events. The study and recommendations made by the research time will aid this downtown development organization current position with the downtown businesses and finding focal points to enhance their improvement efforts. Other downtown revitalization organizations in similar situations may also find this research to be of value. Type: Oral

INTEGRATED MARKETING COMMUNICATIONS PLAN TO INCREASE ORGAN DONOR REGISTRATION AND ADVOCACY *Emily L. Stocks, Austin M. Durham, Priya H. Rajani, Dan J. Becker, Ethan T. Wilke, John C. Bukacek, Talia D. Schutz, Samantha N. Hoerchner, Emily A. Gullickson, Jordan S. Ferry, Benjamin T. Land, Kaelynn K. Peters, Kiersten N. Boos, Ryan J. Weber (Pavan Chennamaneni) American Marketing Association Office, University of Wisconsin-Whitewater #3900 809 W. Starin Road Whitewater, WI 53190*

The University of Wisconsin Whitewater's American Marketing Association student chapter has decided to take on the challenge of this year's National Collegiate Case Competition. The case challenge, sponsored by Donate Life America, is to identify attractive segments to target for organ donor registration and create an Integrated Marketing Communications plan that will create a passion for donation and ultimately lead to donor registration and advocacy. There are currently 114,712 patients on the organ waiting list. Additionally, 18 people in the United States die each day due to the lack of donated organs. A single donor can save up to 8 lives and improve the lives of up to 50 individuals. While there are many reasons why people do not register to become organ donors, misinformation about organ donation seems to be one of the main hurdles. In order to create an IMC campaign to meet the goal of the case challenge, our team has conducted extensive secondary and primary research. In addition to the surveys and reports by Donate life America, our secondary research included several research articles published in the organ donation area. In-depth interviews and survey of college students and their parents helped us identify two market segments to target for donor registration and advocacy. Given our insights about the two segments, an IMC plan is created to increase donor registration and advocacy in these two segments. Our campaign and media strategy, while being effective in targeting the two segments, also reach out to other under-registered segments. We also provide a budget and timeline for implementation of the campaign. Type: Poster

Mathematics

CLEANSING THE ORIGAMI DODECAHEDRON OF THIRDS *Andrea Becker, Donald Spickler, Mathematics, Salisbury University, 1101 Camden Avenue, Salisbury, Maryland 21801*

Origami modulars are three-dimensional figures composed of interlocking individual pieces of folded paper, each of which consist of the exact same folding pattern. Since each piece is the same, the modulars themselves are uniform in shape, each spike, face, and corner being the same size as its companions. Platonic solids make up some of the base forms of origami modulars, consisting of three dimensional shapes with equal edges, faces, and corners; the icosahedron and dodecahedron figures are the most complex of the solids. Of the flat and spiked versions of both solids, the icosahedrons and spiked dodecahedron modular units are composed of pieces that make judicious use of edges and exact angles. However, the original base piece of the flat dodecahedron modular is heavily based on thirds, an imprecisely measured fold, and one that proves frustrating to create. My research was to design a new base piece for the flat dodecahedron containing the same height, base, and side length ratios, while using exact edges and angles to create the unit. This allows for the more precise creation of the modular unit, losing any inexactness that may cause holes or other imperfections in the final product. Type: Oral

Neuroscience and Behavior

PHARMACOLOGICAL IGNITION OF HIPPOCAMPAL FUNCTION IN JUVENILE RATS
Sarah H. Albani, Theodore C. Dumas

The ability to form and recall memories about one's personal experiences is indispensable for carrying out everyday functions and provides a basis for a sense of self. The hippocampus is the primary brain structure specialized in the formation and retrieval of episodic memories, and is one of few structures in the brain that is not fully developed at birth. It is known that the hippocampus is not utilized in spatial navigation in rodents until the end of the third postnatal week, a time during which glutamatergic excitatory postsynaptic potentials (EPSPs) are reaching final maturation. To test the relationship between the emergence of spatial navigation and maturation of glutamatergic EPSPs, we utilized a positive allosteric neuromodulator that prolongs EPSPs by decreasing desensitization and deactivation of α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors. When rat pups under three weeks of age were allowed to freely explore a Y-shaped maze after administration of this neuromodulator, a significant increase in the alternation rate of arm entries (a positive indicator of hippocampal integrity), was observed. Drug effects were lessened in animals just over three weeks of age. Electrophysiological recordings revealed that pharmacological prolongation of EPSPs increased post-synaptic discharge and excitability, while also reducing the threshold for induction of long term potentiation and synaptic plasticity. Higher efficacy was observed in juvenile animals compared to animals over three weeks of age, likely due to molecular changes in the AMPA receptor. Western blotting revealed modifications in AMPA receptor subunit composition with development, namely a decrease in the GluR1 protein and a coinciding increase in GluR3 and the transmembrane AMPAR regulatory protein, Stargazin. Thus, a developmental modification in the composition of glutamate receptors may explain the limited function of the hippocampus in animals under three weeks of age and reduced drug potency with increasing age. These results

are the first to reveal hidden memories in developing rats and provide greater insight into the physiological factors that are critical for memory retrieval. Type: Oral

BEHAVIORAL ANALYSIS AND COMPARISON OF SOMATOSTATIN NEURON SIZE BETWEEN DIFFERENT SEXES OF JACK DEMPSEY CICHLIDS, ROCIO

OCTOFASCIATA *Kaitlin A. Oswald, Kristen A. Sigley, Dr. Audrey J. Ettinger, Department of Biological Sciences and Neuroscience Program, Cedar Crest College, 100 College Drive, Allentown, PA 18104*

The relationship between behavior and physiology has been studied in many species to try and answer the question of which component causes the other. Specifically, cichlid fish have been used as a model organism to study this question due to their easily observed aggressive behavior and the high plasticity of their social statuses. Studying cichlid fish can lead to a better understanding of how behavior shapes the brain. The hormone somatostatin has been identified as a regulator of the growth rate in cichlids and in other species. Here, we have begun to test the relationship between the social status of the cichlid fish Rocio octofasciata and the size of SST-containing neurons. We have established pairings of behaviorally dominant and behaviorally subordinate fish in order to compare the sizes of somatostatin-containing neurons in dominant and submissive males and females. We predict that in both sexes, the socially dominant individuals will have larger somatostatin neuron sizes, correlated with low growth rates. The results of this work will contribute to a better understanding of the cause and effect relationship between behavior and biology. Type: Poster

Nursing

THE EFFECT OF A RESIDENTIAL SUMMER INSTITUTE OF NURSING EXPERIENCE INCLUDING SIMULATION ON HIGH SCHOOL STUDENTS' AWARENESS AND LIKELIHOOD OF PURSUING CAREERS IN THE NURSING PROFESSION

Emily Batchelder (Lynnea Myers) Nursing Department, Gustavus Adolphus College 800 West College Avenue, Saint Peter, MN 56082

The purpose of this research study was to evaluate the effect of high school students' experiences at the Summer Institute of Nursing (hereafter referred to as Institute) on student awareness and likelihood of pursuing careers in the nursing profession using a post-experience survey. Career exploration experiences in nursing have been shown in research to be valuable opportunities to expose high school students to the profession of nursing. Research studies indicate these experiences have increased student awareness of opportunities within the nursing profession and likelihood of students pursuing a career in nursing. The Institute was a five-day residential experience at a rural college campus in the Midwest for students entering their 11th and 12th grade years in high school to explore careers in nursing. In this exploratory, quantitative study, students rated their satisfaction with the Institute overall, as well as the value of individual experiences held during the Institute on the post-experience survey using a 5-point Likert scale. Post-experience surveys also included questions rating student feelings toward the nursing profession and their likelihood of pursuing a career in the nursing profession before and after the Institute using the same 5-point Likert scale. Twenty out of twenty students participated in the research survey (n=20). All students were female. Overall, students rated their enjoyment of the Institute at a mean of 4.90 on the 5-point Likert scale. All 20 students (100%) rated their views

on the variety of career opportunities in the profession of nursing and simulation experiences offered during the Institute at the highest level on the Likert scale (5). The mean of students' evaluations on likeliness of pursuing a career in nursing before Institute was 4.15, while the mean of students' evaluations on likeliness of pursuing a career in nursing after the Institute was 4.90. The p-value calculated between these two means and their respective standard deviations (using a two-tailed t-value calculation) was $p=.0009$, making the difference statistically significant. Research studies have shown an increase in high school students' awareness of, and likelihood of pursuing a career in nursing as a profession as a result of career exploration opportunities. The findings of this study supports opportunities such as the Summer Institute of Nursing to increase students' likelihood of pursuing a career in nursing, as well as increased awareness of the variety of career opportunities within nursing. Offering a variety of career exploration opportunities proved to be a positive experience for high school student participants overall, and the Institute as a whole was rated as a highly enjoyable experience. Type: Oral

IMPROVING THE ATTITUDES TOWARD BREASTFEEDING IN LATINA MOMS THROUGH A BREASTFEEDING PEER COUNSELING PROGRAM *Isabel Contreras, Lexie Williams, and (Dr. Donna Plonczynski), Nursing Department, Northern Illinois University, DeKalb, IL 60115*

The purpose of this project is to improve the attitudes of Latina moms in the Greater Elgin area. Exclusive breastfeeding is recommended until at least 6 months of age to decrease obesity, diabetes, and asthma, and increase maternal bonding and other physical, psychological, and psychosocial effects. We will be using a quasi-experimental design to evaluate the attitudes of English and Spanish-speaking Latina moms. The survey instruments were originally developed by Freed et al. to assess breastfeeding attitudes, which are significantly associated with initiation and sustained breastfeeding. Questionnaires will be distributed to every English and Spanish-speaking Latina moms for 2 weeks in December 2012 before initiation of a peer counseling intervention to foster breastfeeding in the community. Following implementation of the program, Latina moms will be surveyed at the hospital post-partum unit for 2 weeks. The expected outcomes are a poster presentation for NIU's Undergraduate Research and Artistry Day and dissemination of our findings at conferences and to Sherman Hospital nursing staff. Type: Poster

Nutrition and Dietetics

THE MICROBIOLOGY OF RAW MILK: ORGANIC VS. CONVENTIONAL

Kimberly M. Altenhofen (Dr. Purnendu C. Vasavada), University of Wisconsin, River Falls, WI 54022

"Organic" milk is labeled as such because it is produced with stringent standards so that it may be "Certified Organic" by the USDA. Some of the required production practices include: raising the dairy cows in a low stress environment that includes pasture access and ample space, feeding the cows organic feeds and forages, and the limitations regarding use of sythetic antibiotics and hormones. The Organic classification does not pertain to the quality or safety of the milk; however there are wide spread myths and misconceptions about benefits of organic milk including its safety and quality. The nature of organic milk production may make it is possible for the cows and facilities to be generally cleaner than those in a conventional farm setting , resulting in lower bacterial counts found in raw milk. Milk quality and grades are regulated by

the US FDA. The Grade A standard for raw milk from a single farm requires the bacterial limit not exceed 100,000 cfu's/mL. Milk that exceeds the 100,000 cfu's/mL bacterial limit is categorized as Grade B milk and may still be used in processing manufactured dairy products such as cheese. These bacterial contaminants can be controlled by pasteurization which kills 99.999% of microorganisms in milk. A microbiological analysis of 125 raw milk samples was conducted (66 organic and 59 conventional). Results indicated that 95% of the organic raw milk samples and 59% of the conventional raw milk samples passed the Grade A standard (<100,000 cfu's/mL). The results indicated that the organic raw milk samples contained a significantly lower bacterial load than the conventional raw milk samples. This suggests that the rigorous production standards required for organic milk certification may contribute to a decreased bacterial load in comparison with conventional milk. Type: Oral

DIET AND OXIDATIVE STRESS IN REPRODUCTIVE AGE WOMEN

Molly S. Turnquist and Katie E. Engeln. (Dr. Denise Haynie) National Institute of Child and Human Development, Rockville, MD 20852

High levels of oxidative stress, cellular damage caused by inadequate neutralization of free radicals, are associated with increased risk of cardiovascular disease, chronic fatigue syndrome, female infertility, and other chronic conditions. A high intake of flavonoids and antioxidants, primarily found in fruits and vegetables, has been associated with lower levels of oxidative stress. This research aimed to determine whether a higher diet quality, as assessed by the USDA's Healthy Eating Index (HEI), is associated with lower levels of oxidative stress in reproductive age women. Dietary data was collected from a sample of pre-menopausal, non-pregnant women in western New York using four 24-hour dietary recalls taken over one month. Data was analyzed using the Minnesota Nutrition Data System for Research and USDA HEI total and subscale scores were calculated and compared to the average American HEI scores. Oxidative stress was measured from four fasting blood samples collected over the same month and levels were assessed by quantification of F2-8-isoprostanes (8-iso-PGF2-alpha). Linear regression analyses were conducted to evaluate the relation of HEI total score and fruit and vegetable subscales with 8-iso-PGF2-alpha, adjusted for age, body mass index, and smoking. A significant negative correlation was found between HEI scores for total fruit (-.17; p=.004), whole fruits (-.19; p=.001), total vegetables (-.18; p=.002), dark green/orange vegetables and legumes (-.17; p=.003), total HEI score (-.22; p=.000), and the level of F2-8-isoprostanes. These results indicate that fruit and vegetable intake with overall diet quality are significantly associated with reduced levels of oxidative stress in reproductive age women, signifying the potential benefit of a healthful diet in disease prevention. Department of Nutrition and Dietetics, Concordia College, Moorhead, MN 56562

Physical Therapy

AQUATIC THERAPY INTERVENTION IMPROVE FUNCTIONAL OUTCOME OF TOTAL KNEE REPLACEMENT *Iris Ann De Leon Ms. Virginia I. Ellis Texas A&M University-Kingsville Ronald E. McNair Scholars Program Christus Spohn Rehabilitation Services Kingsville, TX 78363*

The purpose of this study was to compare patients with total knee arthroplasty (TKA) or total knee replacement who received aquatic intervention with their land based physical therapy

sessions (Group A) to those who only received land-based therapy (Group B). This study compared improved functional outcome attained over the course of out-patient rehabilitation for a period of 3 - 12 weeks. A retrospective examination of 25 patients by way of their discharged charts was performed. Age range criteria included patients 50 to 82 years. Patients who had acquired pneumonia, deep vein thrombosis, blood clots or any life threatening conditions as a result of the TKA surgery were excluded from the study. Some of the variables included in the study were: surgeon/surgical technique, age, sex, race, and bilateral TKA vs. unilateral TKA. The comorbidities and significant medical history included: diabetes, congestive heart failure, high blood pressure and general physical health. The functional outcome tool called the Knee Outcome Survey Activities of Daily Living Scale (KOSADL) is a self reported measure of a person's functional abilities. The questionnaire was given at the beginning of the program of therapy and then re-administered at the conclusion of therapy to see if there was improvement. Symptoms that were taken into consideration in the questionnaire were pain, stiffness, swelling and weakness. The mean improvement on the scores for the KOSADL for the patients in Group A was 13.23 coupled with a standard deviation of 9.73. On the other hand, the mean improvement on the scores for the KOSADL for the patients in Group B was 20.08 with a standard deviation of 9.85. Results from this study sample indicate that Group B had higher scores on the KOSADL questionnaire post therapy contrary to the hypothesis previously stated in the introduction of this report. Type: Oral

A THERABAND™ SIMULATION OF THE PENGUIN FLIGHT SUIT ON BALANCE STABILITY MEASURES IN NORMAL YOUNG ADULTS *Katherine Grandelski and Jared Azuma (Stephen Lahr) Department of Physical Therapy, Ithaca College, Ithaca, NY 14850*

This study is designed to compare the effects of the penguin flight suit and simulation with theraband™ straps on Limits of Stability (LOS) and Rhythmic Weight Shift (RWS) tests using the NeuroCom balance master™ static system. The original purpose of the flight suit was to maintain muscle and bone mass in a reduced-gravity environment by applying axial compressive forces. It has since been shown, by Siconolfi, that the flight suit has a beneficial effect on LOS balance measurements. If a theraband™ simulation of the flight suit can be designed to recreate the compressive forces, this could be a readily available clinical tool. In addition, a carry-over effect will be tested to determine if balance is affected following a “rest” period after the suit and straps have been removed. Twenty healthy, young adults aged 18-25 were recruited from Ithaca College. Each subject was tested using a specific protocol using two tests of the NeuroCom balance master™ (LOS and RWS), and went through the test series under four conditions: first without external compression, second and third sessions used the flight suit and theraband™ straps in randomized order (both were arranged to apply axial compressive forces at approximately 15-20% of total body weight), and lastly without either form of compression following a five minute “rest” period. Composite data was analyzed using a one-way ANOVA with repeated measures and a Bonferroni correction. Preliminary statistical analysis of the LOS results from the first twelve subjects showed a significant difference between the control and the flight suit when comparing LOS end-point excursion measurements. Statistical analysis showed no significant difference between other test situations. Analysis of the RWS test is yet to be completed. Preliminary analysis indicates the compressive forces of the flight suit have a mild effect on balance measurements. Type: Poster

Physics

COHERENT LIGHT GENERATION USING FOUR-WAVE MIXING *Laura J Alderson (Erik Brekke) Physics Department, St. Norbert College, De Pere, WI 54115*

Four-wave mixing is a nonlinear optical process that uses the coupling of four atomic levels to produce coherent emission of the generated photons. The objective of our experiment is to use a single, high power, 778nm diode laser in the parametric four-wave mixing process in Rubidium to generate two coherent beams, one of which being 420nm. A single external cavity diode laser is locked using two-photon spectroscopy to the two-photon 5s to 5d transition frequency. The laser is amplified using a tapered amplifier chip to produce an output laser of 2W with the same frequency characteristics as the input laser. We observed coherent output of 420nm light as a function of input power and frequency, and have optimized the set up to maximize the output power of the produced beam. This experiment has produced 60 μ W of coherent 420nm light using the parametric four-wave mixing process. It was predicted that the largest output power would be produced when on resonance, but through experimentation it has been found that the production is suppressed on resonance and maximized when slightly off resonance. This suppression is thought to be the effect of absorption of the produced beam. Further adjustments to the apparatus will be made to improve the efficiency of the process and maximize the power of the 420nm beam. Type: Poster

CONFORMAL GRAVITY AND THE ALCUBIERRE WARP DRIVE *Zily Burstein (author), Gabriele Varieschi (mentor), Physics Department, Loyola Marymount University, 1 LMU Drive, Los Angeles, California 90045*

The Alcubierre Warp Drive metric, proposed in 1994 by Miguel Alcubierre, states that it is possible for a spaceship to travel faster than the speed of light. This is achieved by expanding and contracting space-time behind and in front of the spaceship respectively, while the spaceship remains in a region of flat space-time called the warp bubble. However, Alcubierre's theory, which is based on Einstein's General Theory of Relativity, has a gap: such speeds can only be obtained with large quantities of exotic matter—matter with negative mass which (with our current knowledge) can only exist in small quantities. To improve upon this theory, we approach the Warp Drive idea under the framework of Conformal Gravity, an extension to Einstein's Relativity based on the invariability of the universe's space-time fabric. With a Mathematica program we designed to calculate tensor quantities in both General Relativity and Conformal Gravity, we have observed that the latter does not require exotic matter for certain shaping functions which describe the form of the warp bubble. These results suggest that if Conformal Gravity is a correct extension of General Relativity, faster-than-light interstellar travel via an Alcubierre metric might be a realistic possibility. Type: Oral

Political Science

GOVERNMENT POLICY AND MORAL HAZARD IN THE 2007-2009 FINANCIAL CRISIS *Ariana G Abrams (Mark Dallas) Political Science Department (Eshragh Motahar) Economics Department, Union College, 807 Union Street Schenectady, NY 12308*

The Global Financial Crisis of 2007-2009 marked the largest financial meltdown of the United States economy since the collapse of the stock market during the Great Depression. The level of

financial instability required the Federal Reserve, U.S. Department of the Treasury and Congress to provide an unprecedented bailout effort with credit lines to provide liquidity and the purchase of troubled assets to prevent a drop in security prices (D'Apice and Ferri 2010). However, critics of the government bailouts claim that additional assistance through Federal credit and public tax dollars increases the likelihood of moral hazard by allowing institutions to take greater risks. My paper analyzes the roles of the Federal Reserve, U.S. Department of the Treasury, and U.S. Congress in increasing and/or decreasing the risk of moral hazard through government safety nets. It argues that the magnitude and public disclosure of government financial assistance programs varied in institutions where representatives are democratically elected, like Congress, versus representatives that are politically appointed, like the Federal Reserve and the Treasury. The financial crisis began and ensued because brokers, investors, and regulators were focused on the short-term, microeconomic outlook of their actions, rather than the greater long-term macroeconomic picture. I measure moral hazard through the level of overall leverage by the debt-to-equity ratio, systemic risk through the growth of the financial sector, as well as the rise of the shadow banking system. The greater understanding that we have of the macroeconomic instances of moral hazard, the better we can prevent another systemic collapse of the US economy. Type: Oral

RELIGIOSITY AND UNINTENDED PREGNANCY: SEX EDUCATION, CONTRACEPTION, ABORTION AND THE ROLE STATE-LEVEL RELIGIOSITY PLAYS
Ashley C. Burek (Dr. Dena Levy), Political Science Department, The College at Brockport State University of New York, Brockport, NY 14420

This research looks at the role religiosity plays in deterring unintended pregnancy and consequently, abortion. The purpose of this research is to demonstrate that religious and politically conservative states are less successful than their more liberal counterparts at deterring unintended pregnancy due to hesitation in providing comprehensive sex education and contraception on the basis of moral and/or religious belief. Drawing from a series of studies released by the Guttmacher Institute and The Pew Forum on Religious Life, among others, I compare data at the state level for religiosity, rates of unintended pregnancy, contraceptive usage and availability, abortion rates and laws, and the type of sexual education taught in public schools. I also analyze criticisms of these and similar studies in order to provide a more comprehensive understanding of the social and political implications of the data. The research highlights the importance of affordable family planning services as a means of preventing abortion; for one does not need to seek an abortion if one never experiences an unintended pregnancy. Type: Poster

Psychology

THE RELATIONSHIP BETWEEN SELF-ESTEEM AND NARCISSISM ON FACEBOOK
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The use of social networking sites (SNSs) has continued to explode in recent years. Most research that has examined narcissism and self-esteem on SNSs analyze them as though they coexist on the same continuum. Despite narcissism and self-esteem having some overlap in characteristics, they have been shown to be concepts unique of one another. That is, individuals can have high levels of narcissistic tendencies with different levels of self-esteem. Research

examining the relationship between SNS usage and narcissism and self-esteem has found weak, but inconsistent, relationships. Thus, further research is needed to examine how these two individual difference variables interact and relate to SNS usages on a specific site, such as Facebook. Given that each trait has shown to be independent of one another, it is reasonable to expect that people with varying degrees of each would behave in differing ways on Facebook. In the following are some examples of Facebook behaviors and hypotheses that will be explored in the proposed study. Narcissistic personalities try to have large audiences that they can receive affirmation from, and individuals with high self-esteem tend to have many face-to-face relationships. Therefore we hypothesize that individuals with higher levels of narcissism and higher levels of self-esteem will have the most Facebook friends. People high in narcissism tend to behave in ways that are self-promoting, while individuals with lower levels of self-esteem try to raise their self-esteem. Thus, it is anticipated that individuals with higher levels of narcissism and lower levels of self-esteem will post more pictures of themselves and will have more status updates about themselves. Data will be gathered from a survey using the Narcissistic Personality Inventory (NPI), the Rosenberg Self-Esteem Scale, and Facebook usage. The results will be examined using correlation and regression. Type: Poster

THE EFFECTS OF GENDER AND HUMOR ON ROMANTIC ATTRACTION

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Previous research supports the stereotype that both men and women believe that men are the more humorous gender (Mickes, Walker, Parris, Mankoff, & Christenfeld, 2012) and suggests that women are more attracted to men who produce humor, while men show no preference for those who produce or do not produce humor (Bressler & Balshine, 2006). The current study examined men and women's preferences for humor in potential romantic partners. I hypothesized that men would rate themselves as being funnier than women would rate themselves. I also hypothesized that women would be more attracted to men who were described as funny compared to men who were not described as funny, while men would show no difference in their level of attraction towards women described and not described as funny. I expected that women would be more likely than men to include humor in a list of qualities they find important in romantic partners, and I also hypothesized that when forced to choose between someone who appreciates good humor and someone who produces good humor, women would prefer those who produced humor and men would prefer those who appreciated good humor. 129 undergraduate students read a vignette about a potential romantic partner described as funny or not described as funny, and then answered questions about how attracted they were to the vignette characters and about their preference for humor in potential partners. There was no difference in how funny men and women rated themselves. Neither men nor women found those described as funny significantly more attractive than those not described as funny. Men were more likely than women to include humor on a list of important qualities in romantic partners. More women preferred a man who made them laugh than a man who appreciated good humor, while men were just as likely to prefer a woman who makes them laugh as a woman who appreciates good humor. Even though men and women's level of attraction towards potential romantic partners was not influenced by the presence of humor, when forced to choose, only women preferred partners who made them laugh compared to those who appreciated good humor. Type: Oral

Public Health

METHODOLOGY TO ATTAIN NOISE COMPLIANCE FOR A SMALL COMPANY (A HEALTH & SAFETY CASE STUDY) *Kate E. Barrow, I Alejandra Garza-Garcia, and I Viridiana Villafuerta-Flores [Yearout and McKenzie] Management and Accountancy UNCA, Asheville NC 28804 and I Tecnológico de Monterrey, Monterrey Mexico*

Hearing loss is one of the top ten injuries reported by occupational health workers. Unlike other injuries, hearing loss may or may not be a direct result of occupational exposure. Since this type of injury is commonly the result of years exposure to marginal loudness levels, it may be difficult to substantiate cause and effect. However, in 1989 the Occupational Safety and Health Administration (OSHA) established standards for permissible noise levels. Since that time, OSHA has developed very specific guidelines that must be followed by companies with ten or more employees. Large organizations typically have one or more employees dedicated to insure OSHA compliance. However, in small companies compliance is an additional duty. Failure to meet mandated standards can result in significant penalties. This project was conducted to insure that a small western North Carolina micro-brewery was in noise level compliance. Policies and procedures were developed and implemented prior to a scheduled OSHA inspection. Noise levels were measured during the bottling process and recorded on a to-scale layout. Individual workers were monitored via a noise dosimeter to determine the individual exposure. The average noise level throughout the facility was 78 dBA (d = 1.24 dBA). Peak levels for the brewing and bottling processes were recorded at 93 dBA (d = 1.24 dBA). Audiograms were conducted and recorded for all employees. Those employees with recorded hearing loss were scheduled for additional testing to determine if any had experienced a permanent threshold shift. This research resulted in the facility being in compliance with noise level standards with no deficiencies.

Type: Poster

MIGRANT HEALTH IN SOUTHEAST IOWA *Nicole L. Novak, Angela K. Ulrich, Aurora G. Vincent (Julie Legler) Department of Mathematics, Statistics and Computer Science, Saint Olaf College, Northfield, MN 55057*

The Migrant Health Act of 1962 authorizes federal funds for health clinics and other health services for migrant farmworkers, a high-risk group for many health problems because of poor economic status and significant occupational hazards. While migrant workers still face unique health challenges, the nature of migrant work (in terms of living conditions and crops harvested) and the types of health problems that afflict migrants have changed significantly since the establishment of migrant health programs. We explore routine medical examination data of 634 migrant farmworkers who directly benefit from Migrant Health Act programs. We compare this to general health data of the United States population as reported by the National Health and Nutrition Examination Survey (NHANES), conducted by the Center for Disease Control. We apply Item Response Theory (IRT) to NHANES data to create a health score model. We then apply the model to the migrant farmworker dataset to compare the health of migrant workers with that of non-migrants of similar ethnic and socioeconomic backgrounds. To conclude our work, we suggest ways of improving contemporary Migrant Health Act programs to better serve the unique and changing needs of migrant farmworkers. Type: Oral

Social Work

PROJECT PREPARE: PREPARING YOUTH TO SUCCESSFULLY AGE OUT OF ORPHAN CARE IN ETHIOPIA *Jacqueline Ader (Julia Pryce) Social Work Department, Loyola University Chicago, Chicago, IL 60660*

Currently, over 5 million orphan youth live in alternative care in Ethiopia (Ministry of Women's Affairs, 2010). Research shows these youth face incredible challenges in the transition to adult life, including lack of social networks and support, lack of job skills training, and psychological symptoms such as anxiety and depression (Rutman, D., Hubberstey, C., Feduniw, A., & Brown, E., 2007). The International Organization for Adolescents (IOFA), along with faculty and students from several Chicago universities recognize the lack of services preparing transitional orphan youth and urgency of addressing the issue. With a focus on youth-informed research, a 12-module, strengths-based and risk-targeting curriculum was developed to address the needs of these youth aging out of care. The curriculum was implemented by Youth Allies, staff from orphan care institutions who were trained by IOFA interns, in three groups of Ethiopian orphans ages 14-17. Group 1 was comprised of 12 boys from a private orphanage for AIDS/HIV positive children. Group 2 was a co-ed group of 12 children from a foundation network of Ethiopian orphanages. Group 3 consisted of 25 girls from a community care program for orphan girls. Data collected through post-implementation surveys, focus groups, and individual interviews has been systematically analyzed in an effort to understand the process and outcomes associated with this intervention, as well as identify areas in need of improvement. Preliminary findings suggest that the children feel more prepared and less apprehensive regarding their transition out of care after completion of the Project Prepare program. Also, the children who have social support outside of their care institution report more confidence about their transition out of care. Children already aged out of care reported many struggles regarding independent living due to lack of financial support or income. These findings will be presented, as well as implications for the long term goal of creating a culturally adapted, effective and sustainable curriculum to assist orphans internationally in successfully transitioning into adulthood. Type: Poster

BULLYING: THE EXPERIENCES OF COLLEGE STUDENTS *Megan Lejeune Mentor: Jeannie Duke University of Montevallo Station 6185 Montevallo, Al 35115*

Although considerable attention has been given to K – 12 bullying, little attention has been given to college level bullying. This study, based on a convenience sample of 173 University of Montevallo students, examines middle school, high school and college level bullying experiences of students, ages 18-24 by self-report. The survey includes three sets of five questions about bullying and a sixth question evaluating related outcomes of bullying. Participants reported that seventy-three point four percent (73.4%) experienced middle school bullying, fifty-three percent (53%) experienced high school bullying, and twenty-one percent (21%) experienced college bullying. Students reported bullying effects ranging from mild to severe including suicidal ideation. The results suggest that younger students are more likely to be bullied than older students. In addition, 1 in 5 college students experienced bullying by peers and professors. Of the students who reported being bullied in middle school, twenty-two point five percent (22.5%) of them also reported having suicidal thoughts, of the students who reported being bullied in high school, twenty-two point five percent (22.5%) of them also reported having suicidal thoughts, and of the college students, ten percent (10%) reported having suicidal

thoughts because of the bullying. Implications for further research are discussed and recommendations are made addressing college bullying. Type: Oral

Sociology

CONTRIBUTING FACTORS TO RAPE CULTURE ON COLLEGE CAMPUSES: SMALL RURAL UNIVERSITY *Caitlin Armer, Marilyn Chamberlin, Sociology, Western Carolina University, Cullowhee, NC 28723*

This paper explores norms, stereotypes, myth acceptance and demographics that contribute to rape culture on college campuses, with specific focus on a small rural campus. Hypothesis and variables are constructed through literature review and observations. Four types of scales and inventories are used to collect data from a student population. From the target population, two samples were taken based on gender. The male sample was asked about hyper-masculinity, alcohol consumption and rape myth acceptance by a three part survey. The female sample was asked about alcohol consumption, safety on campus and rape myth acceptance by a three part survey. This study identified the attitudes on campus surrounding the issue of rape and sexual harassment. Having a better understanding of such attitudes can lead to the design of better and more effective preventative programs on campus. It adds more modern findings to existing studies while linking/using existing studies to make campuses much safer for the people who live and/or learn there. Type: Oral

PATRIOTISM AND THE PUBLIC SCHOOL SYSTEM: A COMPARATIVE ANALYSIS OF FOUR COUNTRIES' APPROACHES TO FOSTERING SOCIAL SOLIDARITY.

Rachel M. Cohen (Stephen Plank) Department of Sociology, Johns Hopkins University, Baltimore, Maryland 21218

Through an analytical lens guided by the theories of Emile Durkheim, the current research explored differential approaches to the teaching of nationalism (civic pride) in the public schools of four different democratic nations: The United States, Canada, Germany and Israel. The principal focus of this qualitative program concerned the role of historical challenges in shaping the socialization of each country's citizens. First person accounts were interviewed from each of the four nations, through conversations with government officials, university professors, and lay citizens. With the exception of Germany, all of these democracies tend to paint flattering but historically incomplete national narratives in their public schools in an effort to increase nationalism and strengthen organic solidarity. Further cultural and historical forces will be discussed as they pertain to the programs of socialization implemented in each country's public school system. Type: Poster

Spanish

CUBA: THE FORBIDDEN COUNTRY *Brittany N. Bottoms Mr. Daniel Ostergaard Department of Global Management and Strategies WCU-Global Management and Strategies Department Forsyth Building 328 Cullowhee, NC 28723*

Business scholars and political science professors have often contemplated how life in the United States would be different if America were able to trade with Cuba. Trade restrictions have created undue stresses on both Cuba and the United States and increased the former's reliance on imports from China. The embargo of 1960 forbade economic transactions between the two

nations, but with President Obama now in office, restrictions on trade and travel have been slackened and the embargo may be lifted completely in the coming months. The embargo was enforced due to Cuba's disregard for internationally accepted standards of human rights and for democratic values. While under the regime of Fidel Castro, Cuba violated the standard and internationally acceptance freedoms of speech, assembly, and press as well as the fall of the Soviet Union which lead to oil and food shortages. Protestors against President Obama want the embargo to stay in effect because it is the most effective weapon in America's foreign policy. While others who oppose the embargo argue that, as long as the embargo continues, non-U.S. foreign businesses in Cuba do not have to compete with United States businesses and thus will have a head start when and if the embargo is ended. What President Obama plans for the United States is to rebuild the economy on a sustainable foundation which will cut costs for American families and businesses, as well as create new jobs. President Obama's campaign is for a trade policy that opens up foreign markets to support good American jobs and for the use trade agreements to spread good labor and environmental standards around the world. Type: Oral

RE/DISCOVERING THE ART OF FLAMENCO *Colbi Custis and Michelle Walsh (Louise Detwiler), Department of Modern Languages, Salisbury University, Salisbury, MD 21801*

What makes a Spaniard cry out in excitement, "Ole!?" What makes your jaw drop in amazement and your hands come together even though you may not understand the language behind the performance? It is the art of flamenco, one of the most spirited and culturally rich dances of Spain. Through online articles, book research, and firsthand experiences in Los Gallos and other taverns of southern Andalusia, Spain, co-presenters Michelle Walsh and Colbi Custis explore how this art has become a national symbol and source of Spanish pride. From its eclectic and somewhat mysterious origins dating back to the Indian gypsy migrations in the 15th century to its evolution into a modern art form performed in both flamenco theaters and unique flamenco night clubs (los tablaos flamencos), flamenco serves as a method of examining Spanish culture. By delving into flamenco's major components: dance (el baile), song (el cante), guitar playing (el toque), and "hell-raising" which is best described as the combination of foot-stomping, hand-clapping, finger-snapping, and shouting (el jaleo), we are able to appreciate more fully the intricate skill and driving passion behind this art form. Along with these components, we look at the concept of el duende, which is the strongest form of emotional expression in flamenco, having no true English translation. Finally, we investigate flamenco globally and examine its influences on contemporary jazz, Latin American dances such as the rumba, ballet, and thus reveal the dance's significance to world culture. In the form of a poster presentation, we venture across the globe, displaying personal photos, images and facts pertaining to the key flamenco components, a family tree of flamenco, and more. Type: Poster

Retail Management

THEORY AT WORK: EXPLORING SERVICE OPERATIONS AT A RETAILER

Christa Lynn Alvich and Jarred Ryan Blumensheid (Dr. M. Ali Ülkü), School of Management and Leadership, Capital University, Columbus, OH 43209

Waiting in lines is not only unpleasant, but also costly. Thus, unnecessary waiting degrades the customer's perception of service quality, which in turn might hurt the bottom-line of the service provider. In this research, we explore the dynamics of waiting lines at a retailer using

management science techniques. How can one mathematically model and improve the customer's shopping experience with reduced waiting times? Drawing on various well-established queuing models, we quantify the expected queue length and the average time a customer waits in line before checking out. We then formulate a cost-optimization problem in which the decision variables are the number of active check-out lanes and the service capacity sales associate. Our model elevates the tradeoff between the operational costs and the congestion in the system: It is needless to keep all of the lanes open when the rate of customers who want to check out is not sufficient to warrant so. Therefore, we specifically investigate the threshold number of customers waiting in a queue above which triggers the activation of another check-out lane. This policy enables management to set a certain service level (i.e., expected average waiting time) that is acceptable by the customers. Along with an analytical framework to monitor and control the performance measures of such a waiting line, we also develop a simulation-based optimization model to help management make better decisions. We provide numerical examples and sensitivity analyses to reveal further managerial insights that can be utilized not only in retailing, but also in other service industries. Type: Oral

ANALYSIS OF ORDERING AND PRICING POLICIES OF FASHION GOODS FOR AN OFF-PRICE RETAILER *Sierra R. Ho, Sasha D. Simpson, (Dr. M. Ali Ülkü), School of Management and Leadership, Capital University, Columbus, Ohio 43209*

Fashion goods (e.g., designer garments) lose value over time, and thus they are perishable. Off-price retailers (OPRs) such as Marshalls in the U.S. and Winners in Canada, are able to sell those off-season fashion goods even at a 65% discount because they purchase clearance merchandise from the wholesales of the original designers at a lower price. Naturally, the demand for those goods is extremely uncertain as the trends in fashion change frequently. In addition, many retailers over order or designers over produce creating more demand-supply imbalances in the fashion market. OPRs try to take advantage of this situation by making deals on those secondary-market top brand labels. Motivated with this industrial observation, we study the problem of ordering and pricing decisions of a fashion good, with the objective of maximizing sales profit for an OPR. From the OPR's perspective, the research questions we address include: How can we mathematically model the demand functions for fashion goods at an OPR? What is the optimal amount of a particular fashion good that is to be ordered from the wholesaler of a designer? How should that product be priced over time while carried in the OPR's store? What are the key operational factors that can provide discounts enticing to the customers but still generating a target profit level for the OPR? When should a markdown be offered to maximize sales and to minimize inventories that are left in-stock after the selling season of the OPR? To provide a decision framework for more efficient operational policies, we employ a host of Management Science analytical tools including inventory management, dynamic pricing, and optimization. Along with future research directions, we offer numerical examples and sensitivity analyses of the optimal ordering, pricing and inventory trajectories that yield insightful recommendations that are generalizable to the marketing and operations management of perishable goods, at large. Type: Oral