



**Spring Research Day
at West Chester University**

**Program
5 April 2016**

Sykes Student Union

**Organized and sponsored by the Research Consortium
and the Office of Research and Sponsored Programs**

Invited Speakers

When 9:00am-10:00am

Where Sykes Student Union Theater

Dr. Eleanor Brown, Professor, Department of Psychology

The Art of Emotion Regulation for Children Facing Economic Hardship

Poverty places children at risk for negative educational outcomes including academic underachievement and social-emotional problems in school. Integrating the arts offers interesting possibilities for equalizing educational opportunities. Through the Early Childhood Cognition and Emotions Lab (ECCEL), WCU faculty and students have worked together to conduct three studies examining the impact of a local Head Start preschool where economically disadvantaged children receive multiple music, dance, and visual arts classes each day. The first study suggests that arts-integrated preschool promotes school readiness and vocabulary development. The second study suggests that arts-integrated programming fosters positive emotional development. The third study demonstrates that the arts can "get under the skin" and reduce levels of the stress hormone cortisol. Implications concern the arts as a vehicle for promoting equity for children facing economic hardship.

Dr. Michael Antonio, Assistant Professor, Department of Criminal Justice

Local, National, and International Research Experiences for Students: Get Involved

This presentation will highlight student research experiences associated with the Voices4Perú (V4P) organization. V4P serves youth and residents from Ventanilla, Perú, an economically deprived region, with no access to running water or proper sewage facilities for the majority of its population, is marred by high levels of violent crime, and has numerous gangs entrenched in neighborhoods throughout the community. Students will describe their research projects including conducting one-on-one interviews with adolescents from V4P and on-going initiatives to talk with families about the impact the organization had on their lives. Also, students will discuss their roles and responsibilities associated a future summer internship experience in Peru, including assisting V4P staff to develop an Equality House to meet the unique needs of the youth and residents of the region.

Dr. Kristen Crossney, Associate Professor, Department of Geography and Planning

Rural Homeownership in Pennsylvania and the Impact of Demographic and Market Differences

Housing has long been considered to be a crucial component of our national economy and the cornerstone of the "American Dream". Homeownership is believed to increase neighborhood quality and stability, improve quality of life and create wealth for owner occupants. These potential positive benefits are not equally felt across the entire American population in terms of race, ethnicity, class, and location.

After many years of rising national homeownership rates, the past decade has brought declines. The Great Recession of 2007-2009 led to decreases in homeownership rates and housing values, which negatively affected some areas and populations more than others. From 2000 to 2010, homeownership in Pennsylvania remained higher than national statistics, but declined from 71.3 percent to 69.8 percent. Pennsylvania's small cities and boroughs experienced a 4.5% decline in homeownership from 2000-2010. The decreases in homeownership may reflect declines in the overall economy, demographic shifts, and changes in the financial sector.

Student Research and Creative Activities Awards Presentations

When

10:00am-11:00am

Where

Sykes Student Union Theater

Featuring

Sean Brady, Chemistry, College of Arts and Sciences,

Faculty Mentor: Dr. Monica Joshi

A Study of Microcrystal Tests for Emerging Psychoactive Substances

Brynne Fitzgerald, Economics and Finance, College of Business and Public Affairs

Faculty Mentor: Dr. Simon Condliffe

Gym Use and GPA: An Economic Analysis

Joseph Jordan, Kinesiology, College of Health Sciences

Faculty Mentor: Dr. Sheri Melton

The Effects of Head Impacts on QTVI in Soccer Players

Beatrice O'Hara, Geology/Astronomy, College of Arts and Sciences

Faculty Mentor: Dr. Daria Nikitina

Blue Carbon Sequestration in the Delaware Bay Estuary

Corin Stratton, Mathematics, College of Arts and Sciences

Faculty Mentor: Dr. Allison Kolpas

Optimal Mating Strategies of Hermaphroditic Snails

Poster Presentation and Table Displays Session 1:

When

11:00am-12:00pm

Where

Sykes Student Union Ballrooms A-C

Featuring

Research Posters and Display Tables with topics from health issues in memory and neural tube defects to education to violence to inmates and salt marshes.

TABLE DISPLAY ABSTRACTS

Table Display # 1

Dr. Karen J Mitchell, Dr. Roger Barth, Dr. Marc Gagné and Dr. Farzin Irani

PRESENTER: faculty

TITLE: Sigma Xi - The Science Research Honor Society

Keywords: Science, Research, Honor Society, Student, Faculty

Sigma Xi is the national scientific research honor society. It defines “science” very broadly, to include the physical sciences, the life and agricultural sciences, the earth sciences, the medical sciences, mathematics, and engineering. WCU has many faculty and students, within several colleges, whose intellectual and research interests fall within these broad boundaries. It thus made sense for WCU to establish a local chapter of Sigma Xi on our campus. And it has: A newly formed chapter has been organized and approved, and the formal installation ceremony will be Tuesday, April 12, 2016 at 4:00 p.m. in the Philips Autograph Library. We believe this is a landmark event in the intellectual and research life of West Chester University. Having a Sigma Xi chapter here at WCU will raise the visibility of the sciences on our campus and in the broader science community, and provide more networking and funding opportunities for our faculty and students. If you are already an active member of Sigma Xi, we hope you will switch your affiliation to WCU and become an active member in the chapter here on campus. If you are not yet a member, we hope you will become a member soon. More information will be made available at the poster, and current members will be present to discuss the organization.

Table Display #2

Dr. Julie Tennille, Antar Bush, Jamie Metz, Dominique Davenport and Jehan Morsi

PRESENTER: faculty and students

TITLE: VOICES of West Chester University: Presenting 5 years of content from an MSW student-led journal

Keywords: student-led, social justice, social work

For the last five years, West Chester University's Graduate Social Work Department has curated a collection of personal perspectives on social justice through its student-led, peer-reviewed, open-access journal, VOICES. Seeking to help social workers raise their voices around issues of social justice, VOICES showcases written and visual storytelling of personal narratives, community experiences, and academic research, while addressing the concepts of personal impact and systemic change.

Soliciting content on a rolling basis, submissions are blind reviewed by MSW student editors who work alongside a faculty advisor to select work aligned with the journal's annual theme. Copies of the journal are disseminated in both print and electronic versions on the WCU website and by the MSW faculty. The most recent edition of VOICES included student reflections and research focused on the experiences of a gay man in prison, the "stop-snitching" phenomenon in Philadelphia, the over-medication of America, and universal HIV testing.

Presenting the last 5 years of VOICES content through a table display of journals with authors and student editors at the WCU Spring Research Day will provide the wider West Chester University community an opportunity to respond to narratives that portray social justice as a living concept, and experience the distinct tension of call and response.

PRESENTATION ABSTRACTS

POSTER PRESENTATIONS

EASEL #1

Denston Carey, Kolawole Odesina, Ryan Mulligan, Kathryn Manning, Stefanie Weather and Farzin Irani, Ph.D.

Presenters: students

Faculty Mentor: Dr. Farzin Irani

Title: An assessment of asthma's effects on working memory

Keywords: neuropsychology, working memory, asthma

Although it appears as if we understand the impact decreased blood oxygenation has on cognitive functioning, the literature has been largely inconsistent in regards to the role asthma can play in this. Some studies have shown that individuals diagnosed with acute asthma display cognitive impairments and behavioral problems (von Leupoldt, Brassen, Baumann, Klose, & Büchel, 2011), while others have shown that individuals with asthma do not display cognitive deficits at all (Braman, 2010; Huss et al., 2001a). In this study, we examine the impact asthma has on cognition in college-age students through the use of a Computerized Neuropsychological Battery (CNB, Gur et al, 2009). Our analysis for this presentation will focus on the results from the Letter-N-Back test within the CNB, which is used to assess working memory.

EASEL #2

Patricia Bianchino

Presenter: student

Faculty Mentor: Dr. Jessica Sullivan-Brown

Title: Determining the Expression of Folate Metabolism Genes during Neural Tube Closure in the frog *Xenopus laevis*.

Keywords: Neural Tube Defects, Folate Metabolism and the frog, *Xenopus laevis*

Neural tube defects (NTDs) are the second most common human birth defect. NTDs are structural malformations of the central nervous system that result from disruption of neural tube closure during embryonic development. Interactions between genetic and environmental factors influence the process of neural tube closure. To date, folic acid supplementation is the only prevention strategy in place. Due to the complex interactions dictating neural tube closure, the mechanisms through which folate influences neural tube closure remain unclear. We will be using the frog *Xenopus laevis* as a model system for analyzing the expression patterns of folate metabolism genes through RNA *in situ* hybridization studies. Results from the RNA *in situ* studies will enable the visualization of temporal and spatial gene expression. Thus far, we have constructed the folate metabolism gene clones and generated RNA probes targeting various regions of folate metabolism genes. We are currently performing the RNA *in situ* experiments to determine the expression of the folic acid genes during embryonic development. We hope that this work will represent the initial steps toward understanding the role of folate in the neural tube.

EASEL #3

Dr. Brian Bowen and members of MAT 390 class, Mathematics, College of Arts and Sciences

Presenter: faculty

Title: Investigation Into the Relationship and Impact of the Adoption of Common Core Middle Grades Mathematics Programs on Classroom Instruction

Keywords: Curriculum, Pedagogy, Mathematics Education

In this study, West Chester University Middle Grades Mathematics Pre-Service teachers examined the relationship and impact of the adoption of Common Core Middle Grades Mathematics Programs on classroom instruction. The purpose of this study is to give a nuanced insight into the impact of the Common Core Mathematics Program from the perspective of those implementing mathematical curriculum reforms. This research includes examining the ways in which in-service teachers perceive the impact of these programs on their own teaching strategies, classroom structure, use of technology, and content focus. The study also looks at the ways in which middle grades math teachers perceive the adoption of these programs have impacted student learning in their classrooms. Results of the study indicate that the Common Core Mathematical programs have the potential to significantly impact how teachers teach and students learn, but that degree to which this is transferred into the classroom is highly dependent upon those entrusted to implement these programs.

EASEL #4

Michelle Hendrix, Nicole Kratz, Taryn Snyder, Erin Tyndall and Karen J. Mitchell, PhD

Presenters: students and faculty

Faculty Mentor: Dr. Karen J Mitchell

Title: Reducing Need For Cognitive Control Does Not Improve Older Adults' Explicit Source Memory

Keywords: Aging, Memory, Cognitive Psychology

Older adults' difficulty *selectively remembering* specific source information arises from an inability to ignore irrelevant information (Mitchell et al., 2013). The current study manipulated the degree of cognitive control needed during retrieval and assessed source memory. Participants saw names of objects (e.g., bunny) one-at-a-time. The names were sometimes accompanied by a picture, sometimes not (*format* information). For each, they decided either if they would like the item or if Oprah Winfrey would like it (*task* information). They then received picture/word tests, me/Oprah tests, and old/new item recognition tests in each of three conditions: (1) Test types were randomly intermixed and the test type cue (Pic Word) and test item (bunny) appeared at the same time (*random tests* like Mitchell et al.); (2) test types were intermixed, but the test cue appeared slightly before the item (*cued tests*); (3) tests were cued and participants did only one type of test for a block of items, so they did not have to switch back-and-forth (*blocked tests*). We conceptualized these test conditions as requiring progressively *less* cognitive control. Of primary interest, a significant Age X Condition X Test Type interaction was found: Condition had no effect for older adults, but young adults did better on the most difficult test (Picture-Word) in the Blocked condition, relative to all other test conditions. Consistent with other findings in the literature, this suggests that under the *explicit* task instructions used, older adults' source memory deficits are not alleviated by a decrease in the need for cognitive control.

EASEL #5

Wan-Yi Chen, PhD and Meghan E. Pasquarette

Presenters: faculty and student

Title: Mothers' Exposure to Domestic And Community Violence And the Association with Toddler's Behavioral Outcomes

Keywords: community violence, domestic violence, child behavioral outcomes

Background/purpose: Exposure to violence at home or in community has negative effects on parenting, maternal emotional and mental wellbeing, and subsequently, child behavioral and developmental issues. Nevertheless, rarely are studies available which investigated the potential cumulative effect of maternal exposure to both types of violence on children. This study examined how maternal exposure to domestic and community violence would affect the behavioral and emotional outcomes of young children. The study also explored protective factors that could help ameliorate the negative, spill-over effects of violence on toddlers' wellbeing.

Methods: Data from the Families and Child Wellbeing (FFCW) study were used in our investigation. The FFCW is a longitudinal study that followed a birth cohort since 1998 in large U.S. cities. In this study, child behavioral outcomes were measured by the Child Behavior Checklist (CBCL): (1) aggression; (2) withdrawn behavior; and (3) anxiety/depression. The community violence exposure questions included 7 items and were divided into two sub-scales: (1) direct experience/victimization; and (2) witnessing violence (e.g., saw someone being beaten). Other covariates examined in the analyses included: depression, psychological domestic violence and physical domestic violence, social support, paternal support, substance use. Demographic factors such as age, race/ethnicity, and poverty were controlled in the study.

Results: Study results showed that witnessing community violence and psychological domestic violence were associated with higher levels of toddler withdrawn behavior and anxiety/depression. Direct community victimization was predictive of toddler aggression. Paternal support and social support were found to be protective factors for child's aggressive behavior and anxiety/depression.

EASEL #6

Nancy Brant

Presenter: student

Faculty Mentor: Dr. Jessica Sullivan-Brown

Title: Characterization of folic acid gene in *Caenorhabditis elegans*

Keywords: Neural tube defects, folic acid, model systems

A potential link has been established between low levels of folic acid in expecting mothers and an increased risk of Neural tube defects (NTDs) in their offspring. These NTD's include spina bifida and anencephaly and symptoms can include leg weakness, paralysis, and in some Arts and Sciences death. The goal of this project is to help better understand how folic acid contributes to embryonic development using the worm *Caenorhabditis elegans* as a model organism. We will observe the phenotypes of *C. elegans* when the folic acid metabolism gene *mtrr-1* is disrupted and determine at which point in the early stages of development the defect becomes apparent. This research will involve analyzing the *mtrr-1* strain throughout different stages of development via observation using dissecting microscopes. This will give us the ability to analyze potential defects in individual cells. Through this research, we hope to gain further understandings into the role folic acid plays in the cellular and molecular events regulating early stages of development.

EASEL #7

Warren G Harding

Presenter: student

Faculty Mentor: Dr. Jasmin Tahmaseb McConatha

Title: Social and Cultural Construction of “Normalcy”

Keywords: Relative Normalcy, empathy, socialization

Relative Normalcy is a socially constructed concept used to explain what different populations in a given environmental setting consider to be ‘normal’. This poster presentation focuses on research exploring the relevance of Social Cognitive Theory (Bandura, 1977) as a useful model explaining how people from different cultural groups acquire values, behaviors, and beliefs. In particular as they relate to “acceptable” social conduct including music, entertainment, TV programs, films, and other recreational activities. Community and culture shape concepts of “relative normalcy”. This research reports on the results of ethnographic analysis of two distinct communities, one inner city low-income community and one suburban more affluent community. The results of the analysis will be used to explain the development of notions of normalcy and the just world fallacy (Lerner, 1980). The poster presentation will address ways of developing understanding and empathy for marginalized or non-members of a particular community. The research results indicate that there is a possibility for people from diverse backgrounds to gain an increased sense of empathy towards out-groups members (Tajfel & Turner, 1979). Gaining an increased understanding of the fluidity of normalcy can help combat biases and prejudice and increase understanding.

EASEL #8

Gillian Coffey

Presenter: student

Faculty Mentor: Dr. Michael Antonio

Title: Examining Perceptions of Prosecutors and Inmates about Judicial Fairness and Likeability

Keywords: Judges, Prosecutors, Inmates, Fairness

In the American Criminal Justice System, judges are believed to be neutral decision makers and guardians of justice. The decision(s) a judge makes inside the courtroom impacts many groups of people, including the victim(s), respective families, and community at large. Arguably, two parties most invested in the sentencing decision reached by the judge are the prosecuting attorneys and the defendants themselves. The current study focuses on county judges who presided over Arts and Scienceses in a jurisdiction located in a Mid-Atlantic state. Unique to this analysis was the ability to gather and compare responses about the county judges from inmates, who were sentenced to county prison, and prosecuting attorneys, who litigated Arts and Scienceses in front of the judges.

The study examined overall likeability of the judges and level of agreement with the sentencing decision, while controlling for respondents' race, gender, age, and status (inmate vs. prosecutor). Data in this study was gathered using a self-administered questionnaire (SAQ). The SAQ contained approximately 45 questions/statements about perceptions of judicial fairness and likeability. Findings were gathered from approximately 275 inmates and 20 prosecuting attorneys. Findings revealed perceptions of individual judges varied significantly based on the respondent's characteristics, personal observations of courtroom behavior, and extent of experience inside the courtroom. Implications about objectivity in sentencing decision making will be discussed.

EASEL #9

Dr. Anita Foeman with the HONORS 386 Students

Presenters: Faculty and student collaborative

Title: Exploring the relationship between ancestry DNA and the construction of identity

Keywords: Diversity, identity, DNA

The Honors 382 class is working to extend the DNA Discussion Project that has been underway at West Chester University and its surrounding community over the past decade. The purpose of the class project is to use ancestry DNA to help students explore family narrative and track responses to new ancestry DNA information. Students in the class first explore their individual backgrounds, research family documents, take an ancestry DNA test, and then compare all of the information they gather. We engage in dialogue regarding the implications, and discuss the work with others who have also participated in the program. We hope to share our findings with both visual images of students and their DNA profiles as well as student commentary.

EASEL #10

Dr. Mary A. Houser

Presenter: faculty

Title: Implications of the iPad in 21st Century Schools: A Work in Progress

Keywords: iPad, and 21st Century school technology

For decades, education has been using technology in P-12 schools. However, the connections between students' achievement and teacher development linked to the 21st Century Skills remain unknown. The introduction of the iPad as an educational tool emerged after much of the initial research about the integration of technology was completed. The integration of effectiveness of the iPad in P-12 Education determines the level of integration and effectiveness of the iPad as a tool for enhancing the acquisition of the 21st Century Skills for teachers and P-12 students. P-12 administrators who observe teachers, general and special educators were surveyed to determine the extent and usefulness of iPad implementation in their schools. Findings of this study revealed the level integration of the iPad, process for selection of applications for the iPad, use in the delivery of instruction, effectiveness in the delivery of instruction, impact of the iPad in achieving skills and content knowledge, use for collaboration and professional development. This study had significance for P-12 education, as the conditions in which the iPad is successful will provide a foundation for others to follow. For higher education, as they continue to introduce technology in teacher preparation programs, the relationship with earlier efforts of Preparing Tomorrow's Teacher for Technology (PT³) will be revealed.

EASEL #11

Jeremiah Funk

Presenter: student

Faculty Mentor: Dr. Nicole Cattano

Title: A Comparison of Biomechanical Differences, Patient Outcome Measures, Jump-landing Adaptations and Strength Deficits between ACL Reconstructed Individuals and Matched Healthy Controls

Keywords: ACL, Reconstruction, Outcomes

Background: Anterior Cruciate Ligament (ACL) tears are a common injury during physical activity and many of these individuals undergo ACL reconstruction. Unfortunately, many individuals are never returning to pre-injury levels and those that do are suffering from numerous short and long term complications.

Purpose: Examine differences in strength, landing, biomechanical and patient reported outcome variables in ACL reconstructed individuals compared to controls. The secondary purpose was to find correlations between variables.

Methods: Cross-sectional cohort study with 23 active participants. Each participant completed outcome surveys and performed standardized landing and strength tasks. Groups were compared using independent t-tests and Pearson's correlations were taken ($p=0.05$).

Results: The ACL reconstructed group scored significantly lower on 4 out of the 5 outcome subscale scores. No significant differences were found between groups in landing and strength variables. Outcome scores were significantly correlated to strength ($r= -0.449, p=0.012$ and $r= -0.516, p=0.032$).

Conclusion: There was a moderate correlation between outcome scores and strength. Therefore outcome scores may be beneficial in identifying individuals where targeted strengthening is needed. Outcome scores are also a good tool for monitoring rehabilitation progress where equipment and time is limited. More research is needed looking at strength and landing adaptations to help explain and prevent these poor outcomes.

EASEL #12

Mary Freed

Presenter: student

Faculty Mentor: Dr. Eleanor Shevlin

Title: “James Hynes’s *The Lecturer Tale* and the Use of Intertextuality: Charlotte Brontë’s *Jane Eyre* as Arts and Sciences Study”

Keywords: intertextuality, *The Lecturer’s Tale*, *Jane Eyre*, literary allusions

Intertextuality within literature refers to referencing another piece of literature or other text within one’s work. More often than not, the author incorporates intertextual references to serve a larger purpose within his or her text. Often these references encourage the reader to draw connections between the text being read and the text being mentioned, and in turn develop stronger literary interpretations of the text at hand. This poster will chart the function and purpose of intertextuality in regards to what it does, or how it is enhancing the readers’ experience, if at all, specifically within James Hynes’s *The Lecturer’s Tale*. While Hynes’s work—from its title on—incorporates multiple allusions to multiple canonical literary works, this poster focuses on Brontë’s *Jane Eyre* as an extended example of his practice of intertextuality. The rationale for centering on Brontë’s novel stems not only from the many allusions to this work throughout Hynes’s novel—often at highly charged points and decisive plot moments in the text—but also because no published examinations of Hynes’s incorporation of *Jane Eyre* references exist to date. Ultimately this poster will shed important light on Hynes’s intertextual strategies and their interpretive effects while also advancing theoretical considerations of the literary practice of intertextuality.

EASEL #13

Mackenzie Jaros

Presenter: student

Faculty Mentor: Dr. Eleanor F. Shevlin

Title: “Expanding the Pennsylvania Literary and Cultural Heritage Map: Creating New Biographies”

Keywords: Literary map, Pennsylvania biographies, Helen W. Mallon, Horace Pippin

Jaros’s academically-based public humanities project contributes in important ways to a much larger state project: the maintenance and expansion of the Pennsylvania Literary and Cultural Heritage Map, a signature project of the Pennsylvania Center for the Book established by the Center’s director Dr. Steven Herb of Penn State University. The map features authors and cultural figures including artists, sports figures, inventors, educators, and more—all men and women with ties to the state. This poster features Jaros’s biographies of Helen W. Mallon, a living Philadelphia author who is also an editor and teacher, and Horace Pippin, the famed painter who was born and died in West Chester and who spent most of his life in Chester County. Additionally, the poster will display not only her biographical findings for these two figures but also insights into the truly interdisciplinary methods and tools needed to effectively advance the material for this interactive map.

EASEL #14

Craig Hartman

Presenter: Student

Faculty Mentor: Dr. Nicole Cattano

Title: Patient Reported Outcomes Over the Course of a Competitive Basketball Season in Participants with and without a Previous Knee Injury History

Keywords: Knee injury, Patient reported outcomes, Osteoarthritis

Background: Patient reported outcomes (PRO) utilization can potentially identify early symptoms prior to osteoarthritis (OA) development. Since sport participation and joint injury are separate risk factors for the development of OA, the combination of the two determinants may further confound the development and progression of OA. **Purpose:** The purpose of this study was to examine knee PROs over a competitive basketball season, and to compare PROs between basketball athletes with a knee injury history (INJ) versus no previous injury (CON). **Methods:** A prospective study was utilized and the Knee injury Osteoarthritis Outcome Score (KOOS) was distributed to the 29 participants biweekly, over the course of the competitive season. **Results:** Significant group-by-time interaction effects were found for KOOS sport/recreation ($F_{4.2,114.4}=3.326$, $P=0.011$) and QOL ($F_{2.9,80.6}=3.076$, $P=0.032$). Significant main effects for time were found for KOOS symptoms ($F_{4.5,122.8}=2.448$, $P=0.043$), sport/recreation ($F_{4.2,114.4}=6.103$, $P<0.001$), and QOL ($F_{2.9,80.6}=4.767$, $P=0.004$). INJ participants reported significantly poorer scores for all KOOS subscales (pain: 73.1 ± 20.2 ; symptoms: 63.9 ± 25.9 ; ADL: 81.6 ± 19.0 ; sport/recreation: 58.0 ± 24.9 ; QOL: 56.9 ± 24.8) in comparison to CON participants (pain: 93.7 ± 8.4 ; symptoms: 90.0 ± 11.7 ; ADL: 96.7 ± 4.6 ; sport/recreation: 89.2 ± 11.6 ; QOL: 89.9 ± 11.3) when competitions started ($P\leq 0.002$). **Conclusions:** These findings indicate that athletes with a knee injury history are reporting poorer outcome scores at various points over the course of the season. These scores affect them both with basketball activity and with their overall QOL. This may be related to an increased risk for possible OA development. These findings suggest that athletes with a previous knee injury history may benefit from interventions like rest or modified activity to help prolong the health of their knees.

EASEL #15

Dr. Barbara Harrison and Pam Repetto

Presenters: faculty and student

Title: A fall prevention program for community dwelling older adults.

Keywords: Fall prevention, older adults, community health, Nursing

Background: Older adults who experience a fall often sustain serious injuries. Fall prevention programs for community dwelling older adults may reduce fall risk.

Purpose: To determine if an 8 week fall prevention program provided by Nursing and other healthcare disciplines (nutrition, sports medicine, kinesiology) will improve fall risk profiles for community dwelling older adults.

Methods: A one-group pretest-posttest design study in which community-dwelling older adults attending senior centers were recruited to participate in an eight week program that met for one hour, twice-a-week. Nursing provided weekly programs on fall risk factors. Measures included Fall risk profile, fear of falling, and knowledge of fall risks. Fall risk was assessed via the Fall Risk Questionnaire (FRQ), a 12-item scale (scored 0 to 14) with 14 indicating high fall risk.

Results: Twenty (N =20) older adults had complete pretest and posttest nursing data. Most participants (82.6%) were females and CauArts and Sciencesian (80%). Mean age was 78 years. In the past month, 15 % reported a fall leading to an injury. Forty percent (40%) reported any fall in the past 6 months. Participants reported lower fall risk at posttest (FRQ *Mean* = 3.07) compared to pretest (FRQ *Mean* = 4.0). Using paired t-test analysis, FRQ differences reached statistical improvement ($p < .05$). There was no change in fear of falling scores.

Conclusion: This 8 week fall prevention program reduced fall risk profiles for community older adults. Fall prevention programs with classes and exercise can improve health outcomes for older adults.

EASEL #16

Lisa Miller

Presenter: student

Faculty Mentor: Dr. Michael Antonio

Title: Content Changes and Trends on Police Department Facebook Pages:
A Response to Nationally Publicized Police-Minority Conflicts Involving Excessive Use of Force

Keywords: police, facebook, use of force, national events

As police-minority tensions escalate, social media may become an advantageous tool law enforcement agencies can use to respond to incidents that affect the public's trust in police. This study examined the content of police Facebook pages to discern how departments were using social media, as well as how content changed in the wake of controversial, nationally publicized events. The following research questions were examined: "What is the general content of law enforcement Facebook pages in Texas and South Carolina?" and "How do police department Facebook posts change in response to nationally known officer involved incidents involving excessive use of force against a minority individual?"

Archived data was gathered from police department Facebook accounts to determine information such as the number of posts departments made per week, whether posts were most related to crime prevention or positive public relations, and how many "likes" posts received. Data was collected for one month prior to when the national incident occurred, as well as one month after the incident. The focus of the analysis was on the Facebook accounts from three Texas police departments before and after a controversial pool party incident that occurred in McKinney, Texas on June 5, 2015 and three South Carolina police departments before and after an African American man was shot multiple times in the back by a white officer on April 4, 2015 in North Charleston, South Carolina.

EASEL #17

Paige Minka

Presenter: student

Faculty Mentor: Dr. John Pisciotta

Title: Effect of Cathode Depth on Novel Sediment Microbial Fuel Cell Performances

Keywords: Microbiology; Ecology; Electrodes; Energy

Purpose: Sediment microbial fuel cells (sMFC) are a type of bioelectrochemical system (BES) that generate an electrical current coupled with microbial catabolism of organic material in sediments. An anode is buried in anoxic sediment and electrically connected to a cathode placed in the overlying aerobic water column. SMFCs have been demonstrated to power small-scale devices but most studies to date have been carried out under laboratory conditions. In this study, four novel sMFC were constructed and deployed for 80 days in a freshwater pond in Chester County, PA to study the power output under natural field conditions. **Methods:** sMFC were placed in 1 m deep pond water. We hypothesized that an illuminated cathode 5 cm below the water's surface would generate higher power output compared to the less illuminated cathode 750 cm below the water's surface. **Results:** SMFCs with submerged lower cathodes resulted in higher power output (0.66 mW/m^2) in duplicate reactors and showed less operating variability over the 80-day experiment compared to duplicate sMFC with cathodes near the pond's illuminated surface. Fluctuations in voltage observed in sMFCs with upper cathodes may be due to greater environmental variability at the water's surface. PCR and denaturing gradient gel electrophoresis (DGGE) to compare the microbial communities present on the electrodes. **Conclusion:** These results indicate that pond sMFCs featuring an illuminated near-surface cathode have a quicker start up time, but that sMFC with submerged cathodes produce a higher and more stable current.

EASEL #18

Cheryl W. Neale-McFall, Ph.D. and Jennifer M. Toby

Presenters: faculty and student

Title: “Having It All:” The Experience of Balancing the Roles of Pre-tenure Counselor Educator and Mother

Keywords: Pre-tenure Counselor Educators, Mothers, 21st Century Expectations, Work-Life Balance

Pre-tenure Counselor Educators, like most professors in academia today, are tasked with balancing increased expectations and demands while also working to achieve tenure. These increased expectations are not limited to academia though, as mothers in the 21st Century are also expected to achieve and do more at both work and home. This research sought to explore the experiences of Pre-tenure Counselor Educator Mothers by interviewing 10 participants who fit the selected criteria. This qualitative study included the completion of a demographic questionnaire, focused on work (number of courses taught per semester, number of publications needed for tenure), family (number of children and ages, how is housework and childcare divided) and demographics (age, ethnicity, marital status) and a 60-minute one-on-one interview, in which participants described their experience of being a mother, working in academia, and balancing the demands of work and home life. The results of this study bring to light themes in regard to both the benefits and challenges of being a Pre-tenure Counselor Educator Mother. Specifically, themes found included: (1) incompatibility between motherhood and academia, (2) expectations within the roles, (3) benefits and challenges with multiple roles, and (4) strategies and advice. Participants shared their passion for being a role model for other women, dealing with feelings of guilt, and frustrations regarding the lack of family-friendly policies at many universities. This research further indicates the pressure that mothers in today’s society feel to “have it all,” and the constant need that exists to balance and prioritize.

EASEL #19

Cameron Martin

Presenter: student

Faculty Mentor: Dr. Eleanor F. Shevlin

Title: Literary Censorship in Late 20th- and Early 21st-Century American Public Institutions

Keywords: literature, censorship, public institutions, democracy

This project focuses on censorship in the late 20th- and early 21st-century United States. In examining the effects of censorship in contemporary America, this project seeks to explain both why public institutions such as schools and libraries are sites where censorship contests most frequently occur and how its occurrence in these institutions helps to undermine democratic principles. Analysis of various methods of censorship as well as historical examples exposes the underlying agenda of censors and the potential damage to the community censorship causes, especially from an educational standpoint. Public institutions are a prime target for censorship in the U.S. due to the misconception that taxpayer funding for an institution gives certain groups editorial control of the literary materials supplied by the institution. What pro-censorship advocates share is the sense that by permitting a literary work they consider to be offensive or ideological threatening in the collection, the institution is giving credibility to the ideas presented in the work. This belief makes libraries and especially public schools battlegrounds for what literary works should be included and what should be excluded. As this project demonstrates through specific Arts and Sciences, censorship of literary materials is an institutional way to mandate a specific mindset on the public and to prevent the development of alternative outlooks.

EASEL #20

Elizabeth Raymond, Melanie Guerrier, Meghan Flinn, Chandler Dangerfield and Briana White

Presenters: students

Faculty Mentor: Dr. Jasmin Tahmaseb McConatha

Title: Managing chronic illness: The importance of community support

Keywords: Community Support; Resiliency; Chronic Illness; Health

Diabetes is one of the most prevalent diseases around the world. Approximately one fourth of older Americans have a diagnosis of diabetes, an even larger percentage are pre-diabetic. These percentages represent a national health crisis (Kim, Shim, Ford, & Baker, 2015). This poster presentation examines the relationship between diabetes patient's feelings of resiliency, self-efficacy, and optimism and the social and community support. Diabetes is an illness that is often manageable with lifestyle changes such as healthy food consumption and exercise. The ability and motivation to engage in appropriate health management is influenced by a number of intersecting factors, such as gender, age, race, ethnicity, social class, as well as a supportive community. In this study we present the results of ethnographic field analysis of community resources and challenges. Important community supports include health promoting factors such as educational programs, exercise opportunities (walking trails, parks, classes), social support and engagement, health care, healthy food access (supermarkets, farmer's markets). These are crucial in successful disease management. Feelings of community integration also promote positive feelings, help residents cope with stress and anxiety, and prevent feelings of loneliness and isolation. This study draws on interviews with 15 older participants from diverse backgrounds. Participants discussed their health concerns and feelings of resiliency and self-efficacy when faced with chronic health conditions. Data analysis indicated that patients with greater resources, economic, social, and community tented to feel a greater were better able to manage their health, experienced less distress, and were less dependent on medicine to manage their illness.

EASEL #21

Hannah LaFleur

Presenter: student

Faculty Mentor: Dr. Nicole Cattano

Title: Prevalence and Report Rate of Concussion Signs and Symptoms Survey of NCAA Division II Divers: Pilot Study

Keywords: Survey, Diving, Concussion

Context: Participating in a contact sport is considered a risk for a concussion. However, athletes that participate in diving, traditionally a non-contact sport, do experience contact with the water through “smacking” during participation of a failed dive, exposing them to the chance of sustaining a concussion. These impacts could potentially lead to signs and symptoms of a concussion. **Purpose:** To examine the prevalence of concussion signs/symptoms within an atypical non-contact sport - diving. Secondly, to examine the relationship between concussion signs/symptoms occurrence and reporting rates. **Methods:** An online survey was administered to 5 participants to examine smacking incidence, subsequent symptoms, and assess athlete concussion knowledge. **Results:** All participants reported “smacking”. Half reported concussion signs and symptoms as a result of diving. Only 25% were diagnosed with a concussion by a medical professional. Zero percent accurately identified all concussion sign and symptoms. All participants correctly identified typical signs and symptoms; however, only half correctly identified less notorious symptoms (i.e., fatigue, sleep trouble, emotional disturbances, neck pain) and only 25% correctly included being nervous/anxious. **Conclusions:** Smacking is a prevalent occurrence and has resulted in concussion signs/symptoms within the diving populations. Furthermore, the knowledge of concussions in this population is lacking and there is a need for more education within the diving population as well as a need for clinicians to be more aware of risk for water contact and subsequent concussions.

EASEL #22

Lauren Apakian

Presenter: student

Faculty Mentor: Dr. Joy Fritschle

Title: Reconstructing historic salt marsh dynamics: Stone Harbor, New Jersey

Keywords: wetlands, climate change, sustainability

Salt marsh ecosystems provide many benefits to human and natural communities due to the presence of highly productive and critical habitat, the protection of inland communities from coastal erosion and extreme weather events, and their service as natural filtration systems. Yet salt marsh ecosystems face significant threats due to rising sea levels, even in locales with long-standing preservation efforts. For example, the salt marsh ecosystem at the Wetlands Institute in Stone Harbor, New Jersey has significantly reduced in extent over the past century, in spite of more than fifty years of preservation efforts, as a result of rising sea levels. Sea level rise is an obvious threat to both human and ecological communities in New Jersey as nearly 99% of residents live within counties categorized as coastal. Using archival evidence including historic aerial photographs and maps, in combination with field mapping of ecotone boundaries, we reconstructed the historical ecology of the salt marsh ecosystem in the Stone Harbor area of Cape May County, New Jersey. Reconstructing historical changes in salt marsh geography, especially the changing extent of salt pannes and open areas in the marsh, provides insights on marsh responses to past changes in sea level, and allows us to hypothesize the future trajectory and management needs of salt marsh ecosystems.

EASEL #23

Vanessa Thiel

Presenter: Student

Faculty Mentor: Dr. Jessica Sullivan-Brown

Title: Effects of folic acid during development in the roundworm *C. elegans*

Keywords: Undergraduate, Biology, Research

Neural tube defects are common and severe types of congenital disorders. Studies have indicated that folic acid supplementation lowers the risk of neural tube defects. Due to the various roles of folic acid in development, the mechanisms by which folic acid affects neural tube closure is unknown. To gain better insight into the roles of folic acid on development, we will use the roundworm *Caenorhabditis elegans* (*C. elegans*) as a model system. Although *C. elegans* are invertebrates without a neural tube, many developmental processes that occur during neural tube closure are similar to those that occur during early development in humans. Furthermore, *C. elegans* is a simplified system, with a functional folic acid pathway that we are able to observe and study. In the Spring 2015 Semester, I began the research by identifying folic acid metabolism gene homologs in *C. elegans*. We obtained disrupted folic acid metabolism gene homologues, and observed the phenotypes that were produced. Worms with disrupted folic acid metabolism were observed to have decreased embryonic production, and those embryos produced were not developing. We plan to continue this study, obtain more data, and to obtain imaging of the embryonic development of the mutant roundworms. This phenotypic characterization and imaging will help us understand the developmental effects of folic acid on *C. elegans*. We hope to use these studies to better understand the roles of folic acid during neural tube closure in humans.

EASEL #24

Tyler Traub and Eric Balawejder

Presenters: students

Faculty Mentor: Dr. Richard Burns

Title: Helping Sight-Impaired Individuals Understand Information Graphics

Keywords: Computer Science, Information Graphics, Accessibility

In popular media, information graphics such as pie charts, line graphs, and bar charts are used to communicate high-level messages. These high-level messages transcend the lower-level data: *imagine a pie chart that shows voting percentages, where a very small slice in the chart has a salient highlighted color.* Rather than merely displaying low-level data, we contend that this pie chart has a high-level message that it is intended to convey: to compare the small highlighted slice against the other slices. This poster examines the underlying high-level messages that pie charts can convey. We collected pie charts from popular media and analyzed them to categorize the different pie chart messages that we recognized. We also noted any communicative signals (such as a slice with a salient color or mentioned in the caption of the graphic) in the pie chart that helped us to recognize this message. In this poster, we report on the most prominent high-level messages and communicative signals we found. Our current work is constructing a Bayesian network, which is often employed in Artificial Intelligence problems, that automatically identifies the most likely high-level message of a pie chart. One application for this work is assisting a sight-impaired user, who cannot see the graphic, by transforming the high-level message of a pie chart into an accessible form.

EASEL #25

Allison Velez

Presenter: student

Faculty Mentor: Dr. Eleanor F. Shevlin

Title: "Filling in the Gaps: Concepts of Collegiate Mental Health in Tom Perrotta's *Joe College*"

Keywords: university novel, collegiate mental health, fiction as theoretical tool

Integrating creative work and academic research, this project affords a greater understanding of how the university novel as a genre represents collegiate mental health. Specifically, it focuses on Tom Perrotta's *Joe College* and employs an interdisciplinary methodology that combines scholarship on mental health, literary craft, and the university novel. Brief interviews were conducted to gain insight into sociocultural and linguistic norms during the 1980s, the time in which Perrotta's novel is set. The result is an original, theoretically informed chapter that employs the conceit of being accidentally omitted from the published *Joe College* and that fulfills the missed opportunity for a subplot focused on collegiate mental health. A critical preface accompanying the chapter contextualizes collegiate mental health while also supplying the rationale for craft choices. In the end, what this project underscores is the deficit of substantive depictions of mental health issues within the university novel genre, despite frequent opportunities for inclusion. Furthermore, this study argues forcefully that future incarnations of this genre should address and include depictions of mental health if it is to represent significant issues of contemporary university life.

EASEL #99

Shane Metivier

Presenter: student

Faculty Mentor: Dr. Michael DiGiovine

Title: Shukatsu: Ritual and Wellbeing within Japanese Job-hunting

Keywords: Ritual, Japan, Wellbeing, Work

Every year in Japan soon-to-be college graduates begin a rite of passage in the form of job hunting. Referred to as Shushoku Katsudou, or more recently Shukatsu. This form of job hunting in Japan is highly structured and takes the form of a ritual. Anthropologists have argued that rituals facilitate transitional periods in social life—changing social status, creating collective identity (“communitas”), and providing the means of working out contradictions and complexities inherent in social change. This explorative research, partly conducted in-situ (Tokyo, Japan), seeks to examine this ritualized activity and the how the wellbeing of those involved are influenced by this social process. Based on ethnographic methods such as participant observation, interviews, and archival research, this study highlights the performance of actors within a transitional period in society’s structure. I argue that shukatsu is a holistic ritual that affects mental, physical, economic and social well-being. In speaking to and observing informants it appears that the transition from a student (“gakusei”) to a member of society (“shakai-jin”) is a defining event that intertwines with a person’s sense of identity and provides significant impacts on wellbeing. Drawing on theories involving performance, identity, and ritual, a framework for observing and analyzing wellbeing can be made to articulate a better understanding of rites of passages. Much like job hunting in other countries, participants exist within a particular space that provides an environment for detachment from one societal role and creatively establishing a new identity.

Lunch and Faculty led research information session for students

Dr. Eleanor Shevlin, Dr. Michael Bell, Dr. Simon Condliffe, Dr. Kurt Kolasinski, Dr. Elizabeth Grillo, Catherine Spaur, Dr. Josh Auld and Dr. Kenneth Clark

When

12:00pm-1:00pm

Where

Sykes Student Union Ballroom C

Featuring

Students' opportunity to hear from faculty about important research related topics which could help students seeking research and scholarship options at WCU. There will be eight invited faculty to discuss four topics:

- a) The Summer Undergraduate Research Institute (SURI) experience
(Shevlin, Bell)
- b) How to start in undergrad research at WCU
(Condliffe, Kolasinski)
- c) How to seek funding for research ideas or for scholarship support
(Grillo, Spaur)
- d) What to expect in grad school
(Auld, Clark)

Poster Presentation and Table Displays Session 2:

When

1:00pm-2:00pm

Where

Sykes Student Union Ballrooms A-C

Featuring

Research Posters and Display Tables with topics from medical issues involving thyroid and memory to athletic performance to issues with poverty and children to education and Padre Pio.

PRESENTATION ABSTRACTS

POSTER PRESENTATIONS

EASEL #26

Alexandra Sheriff

Presenter: student

Faculty Mentor: Dr. Jason K. Kim, University of Massachusetts Medical School

Title: Chronic Administration of Thyroid Hormone Reduces Obesity and Fatty Liver without Affecting Inflammation in Diet-Induced Obese Mice

Keywords: thyroid, inflammation, diabetes

Thyroid hormone plays a pivotal role within the body to regulate metabolic homeostasis. T3 (Triiodothyronine), the active form of the hormone, targets tissue-specific nuclear receptors and modulates gene transcription of metabolic processes including carbohydrate and lipid metabolism in the liver and adipose tissue. Evidence from previous studies reveals patients with obesity-induced Type II Diabetes Mellitus (T2DM) are more likely to have lower circulating levels of T3 and increased levels of pro-inflammatory cytokines (IL-6, TNF- α , MCP-1 etc.). However, it is unclear whether a causal link exists between T3 levels and cytokine expression, which can significantly affect energy balance and insulin sensitivity. To explore this relationship, we treated high fat diet (HFD) induced obese C57Bl/6 mice with exogenous T3 hormone and analyzed its effects on body composition, glucose tolerance, and inflammation. We observed significant weight loss upon T3 treatment resulting from decreased fat mass. In contrast, lean mass was increased 17 days after initiation of T3 treatment. Hepatic lipid content was also significantly reduced. Finally, glucose tolerance as well as levels of circulating and liver-specific cytokines were not significantly different between groups. Overall, these data support a speculative role for T3 in the control of adiposity and hepatic lipid content but minimal effect on inflammatory cytokine levels.

EASEL #27

Scott Wushensky Diana Stilley, Taryn Snyder, Stephanie Frasca, Timothy Pettyjohn, Kolawole Odesina and Karen J. Mitchell, PhD.

Presenters: students

Faculty Mentor: Dr. Karen J Mitchell

Title: Whose Headline Is It Anyway: Source Memory for Online News Stories

Keywords: Cognitive Psychology, Memory, Stereotypes

Stereotypes influence our memories. As people continue to receive more news from online sources, there is an increasing potential for memory distortion regarding the actual source of news events. For example, you may remember reading inaccurate information in a credible source such as *The New York Times (NYT)* simply because it seems like the kind of story *NYT* might carry. This may lead you to regard the inaccurate information as credible, increasing the possibility you will share the information as fact. We are investigating that possibility. Via an online survey, students rated news sources on familiarity and trustworthiness. Those data were used to choose one highly familiar and credible news source (*NYT*) and one source highly familiar but not very credible (*Buzzfeed*). A second survey presented a different sample of students with headlines and snippets from actual news articles, and asked them to indicate whether they thought each story was from *NYT* or *Buzzfeed*. Students' attributions of stories to news sources demonstrate their stereotypes regarding the types of news stories they generally associate with *NYT* and *Buzzfeed*. We are currently using these findings to develop a source memory study in which students will be presented with headlines/stories and their sources and later asked to recall where each story was published. We expect to show stereotype-based source memory errors such that people remember more ostensibly credible news stories as coming from *NYT* and less credible stories as coming from *Buzzfeed*, regardless of actual source.

EASEL #28

Kelly A. Kozell

Presenter: student

Faculty Mentor: Dr. Vipanchi Mishra

Title: Analyzing the Job of a Professor of Business Management

Keywords: job analysis, job specification, job description

Job Analysis is a process used to define Tasks, Knowledge, Skills, Abilities and Other Characteristics (KSAO) of a given job. The resulting job analysis can be divided into two components a) a job description which includes the job title, location, job summary, working conditions, etc.; and b) a job specification which includes minimum qualifications, experience, training, skills, responsibilities and physical demands for successful performance on the job. This paper details the steps followed to analyze the job of a Professor of Business Management. First the Occupational Information Network (O*NET), created by the U.S. Department of Labor was consulted to gather information related to the tasks and KSAOs required to perform this job. Next, Subject Matter Experts were asked to describe the tasks and KSAOs that are relevant to the job via an interview questionnaire. Information collected from both of these sources was used to create a job analysis questionnaire, which included statements regarding the tasks and KSAOs required in performing the job. This questionnaire was distributed to a second set of Subject Matter Experts who rated the items on frequency of use and importance to the performance of the job. After analysis of the data, a cutoff score was set and only tasks and KSAOs rated higher than the cutoff were retained. The retained KSAO statements were then linked to corresponding task statements and these retained items were used to develop a job description for the job of a Professor of Business Management.

EASEL and TABLE DISPLAY #29

Dr. Karen J Mitchell, Dr. Roger Barth, Dr. Marc Gagné and Dr. Farzin Irani

Presenter: faculty

Title: Sigma Xi: The Scientific Research Society

Keywords: Science, Research, Honor Society, Student, Faculty

Sigma Xi is the national scientific research honor society. It defines “science” very broadly, to include the physical sciences, the life and agricultural sciences, the earth sciences, the medical sciences, mathematics, and engineering. WCU has many faculty and students, within several colleges, whose intellectual and research interests fall within these broad boundaries. It thus made sense for WCU to establish a local chapter of Sigma Xi on our campus. And it has: A newly formed chapter has been organized and approved, and the formal installation ceremony will be Tuesday, April 12, 2016 at 4:00 p.m. in the Philips Autograph Library. We believe this is a landmark event in the intellectual and research life of West Chester University. Having a Sigma Xi chapter here at WCU will raise the visibility of the sciences on our campus and in the broader science community, and provide more networking and funding opportunities for our faculty and students. If you are already an active member of Sigma Xi, we hope you will switch your affiliation to WCU and become an active member in the chapter here on campus. If you are not yet a member, we hope you will become a member soon. More information will be made available at the poster, and current members will be present to discuss the organization.

EASEL #30

Dr. Dean J. Johnson and Shannon Boyle

Presenter: faculty and student

Title: Defining “White Middle Class”

Keywords: whiteness, middle class, race

Dr. Dean Johnson was approached to write an entry for the “White Middle Class,” in *The American Middle Class: An Economic Encyclopedia of Progress and Poverty* (ABC-CLIO, Forthcoming October 2016). Johnson then approached student Shannon Boyle to co-author the entry. Together Johnson and Boyle co-authored the entry through a series of conversations and writing exchanges. Both are equal contributors.

EASEL #31

Cathleen Byrnes and Dr. Daniel Baer

Presenter: student and faculty

Title: The Relationship between Functional Movement Score and Performance and How they are Affected by an Intervention

Keywords: functional movement screen, athletic performance, intervention

Purpose: The purpose of this study was to examine the relationship between Functional Movement Screen (FMS) score and athletic performance, and the effect of an intervention on these variables.

Methods: Thirteen Division I collegiate women's rugby athletes completed FMS testing and athletic performance assessments, including vertical jump height, 40-yard sprint time, hamstring flexibility, and timed agility "T-test" at baseline, 4 weeks post-baseline, and 8 weeks post-baseline. Each participant was matched based on baseline FMS score and placed into an intervention group or control group. The intervention group completed a program of corrective strengthening and stretching exercises over the course of 8 weeks. Independent t-tests were used to determine differences between intervention and control groups. A repeated-measures ANOVA was used to determine differences between each variable over time. Pearson's correlation was used to analyze the relationship between FMS score and each performance variable.

Results: There was a significant relationship between FMS score and vertical jump height at baseline. There was no relationship between FMS score and any other performance measurements at any testing time. There was no significant change in FMS score or performance measurements between groups at any of the testing times.

Conclusion: There is still a lack of evidence to support a relationship between FMS score and athletic performance, and whether corrective exercise interventions can improve those scores. These findings are consistent with existing research on the relationship between FMS and performance. Further research is needed to examine these variables and the relationship between FMS score and injury risk.

EASEL #32

Dr. Kenneth Clark

Presenter: faculty

Title: Short-Term Development of Motor Abilities in College Athletes

Keywords: Motor abilities, Sprinting, Throwing, Jumping

Introduction: Sprinting, jumping, and throwing are fundamental motor abilities and key determinants of performance in many team sports. However, because many teams only have a short time window for physical preparation in pre-season, eliciting positive adaptations in a brief time interval without inducing the negative effects of overtraining is of paramount importance. **Purpose:** Given the goals and constraints listed above, the current study seeks to investigate the magnitude of benefits that can be attained in a truncated training period while minimizing the risks of overtraining. **Methods:** This research study employed a pre-test, post-test randomized group design utilizing two training groups. 14 members of a local junior college baseball team were assessed for sprinting speed, jumping distance, and throwing velocity before and after a five-week training intervention. After pre-testing, they were matched and randomly assigned to either a Strength Training group (ST) or a Dynamic Training group (DT). The ST group performed exercises at a slower, controlled speed of movement, while the DT group performed exercises in a ballistic manner at a high speed of movement. After completing the five week training program, post-tests will be conducted to determine the efficacy of the two training interventions. **Results:** Post-testing data will be collected during the last week of February; therefore, results are not presently available but will be by Spring Research Day. **Conclusion:** Any between-group differences after the training intervention will be used to develop evidence-based protocols for the safe and effective improvement of motor performance.

EASEL #33

Lauren R. Weaver, Zachary P. Henry and Dr. Jodi B. McKibben

Presenter: student

Faculty Mentor Name: Dr. Jodi B. A. McKibben

Title: Effects of Psychological Distress, Health Status, and Financial Accessibility on Perceptions of Mental Health: 2013 Behavioral Risk Factor Surveillance System

Keywords: Perceptions of Mental Illness, Psychological Distress, Chronic Disease, Financial Accessibility

Purpose: Understanding perception of mental illness and its treatment is a necessary component for pinpointing the reforms necessary to reduce outward and self-stigma and to inculcate mental health treatment use when indicated. This study was a replication and extension of Kobau and Zack (2013).

Methods: This study used 2013 data from the CDC's Behavioral Risk Factor Surveillance System as compared to the 2007 and 2009 data used by Kobau and Zack (2013). We examined the relationship among chronic illness, serious psychological distress, current mental illness treatment, and financial accessibility of treatment with the perceptions of mental illness and its treatment effectiveness after adjusting for demographic variables.

Results: In the replication study, using generalized ordinal logistic regression (N=21,695), those with serious psychological distress and those currently receiving mental health treatment are less likely to agree that treatment is effective. Those with serious psychological distress and chronic illness were also less likely to agree that people are caring and sympathetic toward those with mental illness whereas those currently in treatment were more likely to agree that people are caring. In the extended study examining financial accessibility, those who could not afford the cost of health care were less likely to agree that people are caring.

Conclusion: Plausibly, those most likely to need mental health treatment tend to disagree that people are caring toward those with mental illness and tend to disagree that treatment is effective. Targeting these subgroups for interventions is critical to reduce stigma regarding mental illness.

EASEL #34

Dr. Eleanor D. Brown, Dr. Mallory Garnett, Kate Anderson, Jessa Malatesta and Dr. Jean-Philippe Laurenceau

Presenter: faculty and students

Title: Arts and Cortisol for Children Growing Up in Poverty: Does More Arts Matter?

Keywords: Children, Poverty, Arts, Cortisol

Children growing up in poverty face a host of poverty-related stressors. These stressors place a cumulative wear and tear on physiological systems that respond to stress, such as the hypothalamic-pituitary-adrenal or HPA axis. The functioning of the HPA system can be measured via the stress hormone cortisol. In an initial study, our research lab found that, after an initial adjustment period, children tend to show lower cortisol after participating in a music, dance, or visual arts class than after participating in a homeroom class. In the present study, we examined a follow up question of whether children receive added cortisol benefit from participating in multiple arts classes on a single day. The participants were children attending an arts-integrated Head Start preschool. We used a within-persons experimental design in which children participated in different numbers of arts versus homeroom classes on different days. Cortisol was measured after the classes via salivary assay. Results of multilevel modeling suggested that, at a marginally significant level, a greater number of arts versus homeroom classes predicted lower cortisol. Implications concern alleviating the impact of poverty on physiological systems that respond to stress, and optimal dose of arts-based intervention.

EASEL #35

Dr. Eleanor D. Brown, Dr. Mallory Garnett, Lauren Burlew, Masataka Mitsuzuka, Peter Ippolito, Anna Di Stefano and Julie Beiling

Presenter: faculty and students

Title: Does Socioeconomic Status Information Bias Ratings of Child Behavior?

Keywords: Children, Poverty, Stereotype, Behavior

Professionals often rate child behavior based on brief observations. These quick judgments are particularly vulnerable to the impact of stereotypes. However, few studies examine the impact of cues about child socioeconomic status (SES) on observer ratings of child behavior. The present study employed an experimental design to examine whether cues about SES may bias observer ratings of child behavior based on brief observations. Approximately 200 participants were randomly assigned to receive cues that the child they would observe was of low SES or middle SES. They then watched a brief video clip of the child playing in a preschool classroom and were asked to complete ratings of child behavior. Results of a one-way ANOVA revealed participants who believed the target child was of a low SES rated the target as displaying more problem behaviors. Implications concern stereotypes of children in poverty and biased ratings of child behavior.

EASEL #36

Dr. Eleanor D. Brown, Dr. Mallory Garnett, Quinn Rabenau, Devin Kirby and Larisa Wardlaw

Presenter: faculty and students

Title: Music Education Associated with Visual-Spatial Skills for Children Facing Economic Hardship

Keywords: Children, Poverty, Music, Cognition

Economic hardship places children at risk for cognitive and academic difficulties. This study examined growth in visual-spatial skills correspondent to participation in a music education program for elementary school children facing economic hardship. Visual-spatial skills were measured with a mental folding task in which participants were asked to make visual-spatial judgments based on imagined folding of two-dimensional figures into three-dimensional representations. Children enrolled in the music education program completed the mental folding task at the start and end of an initial year of music education program participation. A comparison group of demographically similar children not participating in the music education program completed the task at the same time points. A repeated measures analysis of covariance (ANCOVA) showed a significant group by time interaction: At start-of-year, children in the music education program produced mental folding scores that did not differ significantly from their comparison group peers, but by end-of-year, the scores of children in the music program were significantly higher. Implications concern the impact of music education for the development of visual-spatial skills for children at risk via economic hardship.

EASEL #37

Shelby Davey

Presenter: Student

Faculty Mentor: Dr. Wan-Yi Chen

Title: Examining field response to “A Call for Change” to Recovery Orientated System of Care (ROSC) in a Southeastern Pennsylvania County behavioral health system

KEYWORDS: Recovery-oriented, person-centered, natural supports, mental health services

Background: In 2004, Pennsylvania Office of Mental Health and Substance Abuse Services issued "A Call for Change" for publicly funded behavioral health services to focus more on recovery-oriented care, instead of the conventional medical model of service delivery. Limited systemic effort has been conducted to understand the implementation of this recovery-oriented service model in Pennsylvania.

Study Purpose: This research focuses on examining the implementation of a recovery-oriented mental health service system for adults in a Southeastern Pennsylvania County.

Methods: Using a secondary data analysis design, existing survey data from a non-profit, consumer based agency regarding adults' experience of publicly funded behavioral health services across four years will be analyzed. Through random sampling methods, adults from multiple behavioral health services were interviewed in person or by telephone. Data relevant to two domains of the Recovery Oriented System of Care (ROSC) model – connection to natural supports and person-centered treatment –will be examined. Connection to natural supports will be measured by 15 survey questions such as “Does your case manager help you develop or strengthen relationships with people who can “be there” for you?” Person-centered treatment will be measured by 11 survey questions such as “Does your treatment/recovery plan include treatment goals you chose for yourself?” All data has been de-identified for analysis purpose. Data analysis will be conducted both cross-sectional and longitudinally. Factors related to implementation of recovery-oriented model will also be examined. Study results will shed light on shift in service delivery model and factors relevant to further improving policy implementation.

EASEL #38

Dr. Christine Moriconi, Dr. Cheryl Schlamb and Dr. Barbara Harrison

Presenter: faculty

Title: Down Syndrome and Dementia: A case study

Keywords: Down Syndrome, Dementia, Alzheimers, Nurse Practitioner

A case study will be presented of Betsy. She was a 64 year old women who had Down syndrome. She died in 2014 following a progressive decline in health due to Alzheimers disease (AD). Betsy's case, offers the nurse practitioner and other health care providers a practical and realistic summary of prodromal signs of AD as it unfolds with the majority of patients who have Down syndrome (DS). Many individuals with DS are living into middle and older adulthood and experiencing chronic health problems related to DS as well as aging. Described as "the triple challenge," adults with DS have baseline cognitive and functional deficits, experience accelerated aging, and are at high risk for development of Alzheimer's disease (AD). With a median life expectancy of approximately 60 years, up from just 12 years in the 1950s, nurse practitioners (NPs) are now evaluating aging persons with DS who have chronic disease along with new cognitive deficits. The clinical signs of AD may not be as obvious in adults with DS, due to their baseline cognitive impairment, and often present cognitive decline as a change in function, behavior, or performance of activities of daily living. Our purpose in this study was to describe the common primary care health problems, tools, and diagnostics useful in evaluating new-onset cognitive, behavioral, or functional (CBF) changes as well as health management of middle-age and older adults.

EASEL #39

Dr. Christina Chiarelli-Helminiak and Olivia Iaquinto

Presenter: faculty and student

Title: Advancing Human Rights through Social Work Education

Keywords: curriculum, human rights, social work

While social justice has been at the forefront of core social work values (NASW, 2008), the concept of human rights is demanding more attention in social work education. In 2008, CSWE identified the need to "advance human rights and social and economic justice" in social work education (EPAS, 2.1.5). Healy (2008) suggests that human rights are at the foundation of the profession; yet defining human rights and providing meaningful ways to engage human rights-based practice in the classroom, remain subjects of some contention.

While there have been recent publications on the importance of integrating human rights into various aspects of social work education, how this is being accomplished and to what effect have yet to be fully examined. This poster provides insights into findings from exploratory, qualitative research on social work educators' efforts to incorporate human rights perspectives into the curriculum.

Findings indicate that the integration of human rights throughout social work curriculum is often based on individual professors' interest. Many interviewees focused on challenges to infusing human rights in the curriculum, including lack of resources for professional development, reluctance on the part of other faculty members, and lack of consensus on the meaning of human rights and how it relates to social justice in a U.S. context. Yet, interviewees also expressed the importance of the "human rights turn" in social work and the desire to incorporate rights-based learning and practices more fully, in part to reinvigorate earlier mandates for social justice work as the underpinning of social work values.

EASEL #40

Dr. Anne Bradley Mitchell and Dr. Matin Katirai

Presenter: faculty

Title: GIS Mapping: Bridging the Community Perspective and Objective Findings of Neighborhood Walkability

Keywords: Mapping Urban Walkability Older Adults

The purpose was to compare the perception and objective findings of neighborhood built environment features such as crime, traffic, sidewalk conditions, and proximity to retail and services on the amount of walking performed by older African Americans in a northeastern U.S. city.

The study was a descriptive, cross sectional, non-experimental survey with a sample of 140 African American community dwelling older adults. Quantitative data collection consisted of four survey instruments measuring the participants' demographic information, perception of health, perception of the neighborhood built environment and the amount of self-reported walking. Multiple regression models were used to analyze the statistical significance of the variables for the amount of transport and leisure walking. GIS mapping methods were used to create maps indicating the participant perception findings.

Access to services was positively associated with transport walking ($p = .04$). Spearman correlations revealed a low association between crime and transport walking ($r = .08$) and leisure walking ($r = .06$); and traffic and transport walking ($r = -.01$) and leisure walking ($r = -.08$). Objective crime statistics indicated an assault rate ten times higher in the study neighborhood than the state average.

The perception of crime and traffic differ from the objective findings. Older adults who reside in neighborhoods for several decades may employ smart strategies to navigate the built environment for neighborhood walking. GIS mapping of neighborhoods can be used to enhance nursing research to translate findings to the public and policy makers to identify specific indicators that can influence health promotion.

EASEL #41

Dr. Jeanette Benigas, Elisabeth Edelman, Shannon Daniels and Sarah Dungan

Presenter: faculty and student researchers

Title: Use of Visual Aids During Spaced Retrieval Training: A Comparison of Procedures

Keywords: Speech-Language Pathology; spaced retrieval; dementia; memory loss and gerontology

Spaced retrieval (SR) is a therapy technique that has been found to improve memory in peoples with dementia (Camp, 1998). As a cognitive modality SR teaches people with memory loss to retain new information or relearn previously familiar information. The technique involves the practice of remembering the target information over increasing time intervals until the successful storage into long-term memory. Brush and Camp (1998) first provided a visual aid during the implementation of SR in support of information learning and retention. Benigas (2013) furthered this work by implementing a continuous visual cue (CVC) during SR training in a more systematic way. Although no evidence has been produced, Camp (n.d.) suggests for a visual aid placed face-side down and only turned over when the person with memory loss cannot remember the target information during SR training.

This study used a single subject crossover design to compare the effectiveness of both recommended visual aid procedures among a sample of 5 participants with mild-moderate dementia in an adult day care setting. In addition, the rate of learning was examined for both treatments. This research will serve to strengthen the SR protocol for practical clinical use and provide caregivers with the most effective way to improve retention and recall of information in persons with dementia. Currently, data is undergoing statistical analysis for conclusions.

EASEL #42

Marcus L. Bost Jr.

Presenter: student

Faculty Mentor: Dr. Vipanchi Mishra

Title: Exploring the effects of Value Congruent Performance Standards on Motivation, Commitment and Performance

Keywords: work motivation, performance, value congruence, organizational commitment

In the realm of contemporary motivation literature, values have often been linked to theories such as self-determination theory (SDT). Research in SDT suggests that individuals are more committed and motivated to attain a goal that they are able to set themselves (Sheldon, 1999) because they see these congruent goals as being internally regulated and therefore pursue them by using increased levels of intrinsic motivation. This phenomenon is referred to as goal self-concordance. The current study is an exploratory study to investigate the effects of congruence in individual values and assigned value-based performance standards on work related outcomes. Schwartz's value dimensions of power and benevolence are used as a framework to investigate the effects of value congruence on task motivation, task commitment and task performance. It is expected that when individuals are assigned performance standards that are congruent with their values, they will become intrinsically motivated to pursue the goal resulting in higher performance and commitment. Furthermore, they will demonstrate higher performance provided congruent value conditions (e.g., power-power) than when provided incongruent value conditions (e.g., power-benevolence). The study design will include a between subject design where the participants will be randomly assigned to control, benevolent goal and power goal conditions. The findings of this study will have implications for the development of performance standards in the workplace. Specifically, this research may help organizations understand how value congruent performance goals can motivate employees to achieve higher levels of performance and subsequently result in job satisfaction and commitment to the organization.

EASEL #43

Dr. Patricia Davidson and Dr. Gina Pazzaglia

Presenter: faculty

Title: From Planning to Implementation: Lessons Learned Using the Flipped Classroom

Keywords: Hybrid, Flipped-classroom, Self-regulation and Perceptions

The purpose of this study was twofold: 1) examine student perceptions of their experiences with the flipped classroom approach and 2) assess student's self-regulation of online learning in the blended classroom. Four sections (N=140 students both Juniors and Seniors) participated. Each student received a packet of survey materials in an envelope that included an informed consent form and two surveys: part A (perception survey) and part B (self-regulation survey). These surveys were administered in person at the end of the Fall 2014 semester. The survey packets were collected anonymously, with no identifying information pertaining to the student. Using this distribution and collection method ensured that the investigators had no knowledge of who completed the survey and who did not complete the survey as well as the results prior to analysis. This method also ensured that the students that completing or not completing the surveys would not influence their final grade in the course. Results indicated that 83% of the students agreed that the structure of the class aided their learning and 70 % stated that they put in their best effort during the on-line activities and it enhanced their self-regulation skills. Extensive planning is essential for a successful "Flipped Classroom" for both the instructor and student.

EASEL #44

Dr. Christine Moriconi, Dr. Cheryl Schlamb, Dr. Patricia Davidson and Dr. Marcia Welsh

Presenters: faculty

Title: Healthy Mothers Health Babies

Keywords: Depression, Pregnancy, Low-birth weight, Nutrition

Low birth weight occurs at the rate of about 8.2% of live births in the United States (De Whitney, Witt, Cheng et al, 2014). Assessment of prenatal risk factors associated with low birth weight is well established. The hypothesis was, if pregnant mothers were knowledgeable about the importance of nutrition, mental health, prevention of substance abuse and breastfeeding the outcomes of their pregnancies would result in healthier babies of normal birth weight. This study targeted clients with potential risk factors including ; poor nutrition, depression, stress, substance use and abuse, hypertension, and poverty. This is a descriptive pilot study using a convenience sample of the maternal clinic population of Chess Penn in Coatesville, PA. Targeted interventions included, 4 educational modules for participants taught individually by experts in each domain (nutrition, mental health, substance abuse, and breastfeeding). All mothers were invited to participate in the program regardless of gestational age of fetus. Each participant received a minimum of four educational sessions. Consent and questionnaires were administered via ipad with a health care provider before the prenatal visit.

Complete analysis comparing Chess Penn clinic population to the general population of Coatesville is in progress pending the participants delivery.

Trends indicated a decrease low birth weight in those participating in the educational intervention as well as improvements in their dietary choices.

EASEL #45

Malik Muhammad

Presenter: student

Faculty Mentor: Dr. Gerardina Martin

Title: Embracing Diversity via the ADDRESSING Model

Keywords: Diversity, Inclusion, Identities, Intersectionality

Diversity and inclusion has quickly become a hot topic in higher education. Campuses across the country are trying to come up with innovative ways of talking about and engaging their students in dialogue on diversity and acceptance. Based on Pamela Hay's ADDRESSING Model and Dr. Maura Cullen's Book "35 Dumb Things Well Intended People Say", the Learning Assistance and Resource Center at West Chester University has introduced a new workshop entitled Diversity 411. The workshop aims to educate its participants about communication with people from different cultures in a non-offensive way. The goal is to create a more hospitable and welcoming campus for members of diverse groups. This presentation will bring forth a detailed look at Pamela Hay's Addressing Model and the empirical evidence that supports her theory. In addition, the presentation will evaluate the implications of Impact vs. Intent. Furthermore, it will discuss the practical and tangible results Diversity 411 has brought to West Chester University's campus.

EASEL #46

Amelia Hallenbeck, Brinda Anantha, Christina Pavia and Dr. Rebecca Chancellor

Presenter: student

Faculty Mentor: Dr. Rebecca Chancellor

Title: The Influence of a Novel Arboreal Trail System on Captive Gorilla Behavior

Keywords : Gorillas, Activity budgets, Arboreal trail system

The Philadelphia Zoo debuted its Gorilla Treeway Arboreal Trail System, the world's first exploratory trail system for gorillas, in spring of 2015. Our study investigated the possible influence of this novel trail system on the activity budgets of the zoo's population of five western lowland gorillas (two adult females and three adult males). Our focal studies, spanning 79.7 hours total, employed various observational research methods including instantaneous and "all occurrences" sampling. Behaviors such as feeding/foraging, resting, traveling, socialization, and aggression were recorded, in addition to those that were stress-induced. Our findings indicated that the gorillas spent a greater proportion of time feeding/foraging while in the indoor enclosure (48%) than they did while in the trail (21%). Four of the five gorillas were more active in the trail, traveling more and resting less, compared to their activity level while in the indoor enclosure. We used the Gorilla Behavioral Index, developed by Gold and Maple (1994), to interpret our exploration of individual differences in response to the novel trail system. We also considered the behaviors we observed in the context of wild gorilla behavior. Our research contributes to the growing body of literature on captive gorilla welfare.

EASEL #47

Shane A. Fiorenza

Presenter: student

Faculty Mentor: Dr. Shawn Pfeil

Title: A self assembly route to size controlled pores for nano-photonics

Keywords: nanofabrication, self-assembly, biophysics

Nanosphere Lithography (NSL) offers an attractive route to fabricating periodic structures with nanoscale features without the use of e-beam or deep UV lithography. In particular, it is uniquely suited to the low cost fabrication of large, repeating arrays of pores or pillars, which are created by taking advantage of the interstitial spaces in close-packed monolayers of nano- to micro-scale beads. However, the size, shape, and spacing of these pores cannot be controlled independently. We present both a robust method for producing large, approximately 1 cm², close-packed monolayer films of 1 micron diameter polystyrene beads on glass substrates, as well as a thermal treatment procedure to modify the pore size of these films. In the latter, films are melted at 107 ± 2 °C, near the glass temperature, T_g , of polystyrene, which allows the beads to coalesce without fully melting over, reducing the interstitial space and therefore final pore size in the array. This builds on earlier work showing that pore size can be modified for colloidal crystals formed at a liquid gas interface [2]. These processes promise a simple, reproducible, and low cost route to periodic pore arrays for nano-photonics applications such as zero mode waveguides (ZMWs)

EASEL #48

Anderson Amaya

Presenter: student

Faculty Mentor: Dr. Michael E. Antonio

Title: Evaluating *Voices4Perú*: Findings from one-on-one interviews with *Club Deportivo Dan* soccer players

Keywords: collaboration, crime, efficacy, gangs

The present analysis reveals several of the major themes that emerged from one-on-one interviews, conducted via the internet using skype, with youth participating in the *Club Deportivo Dan* (CDD) soccer program located in Ventanilla, Perú. CDD is an afterschool soccer program that was established in 2008 and is sponsored by the *Voices4Perú* (V4P) organization. The purpose of the program is to provide youth with a pro-social activity to combat involvement in gangs and delinquent behavior.

Individual interviews with soccer players lasted approximately 30 minutes in duration. Close examination of the interview responses revealed several important themes. First, the concept of collective efficacy (CE) was explored. CE refers to groups working together in order to achieve social control and community stability. Another theme examined was responses about terminology associated with gang membership. For example, youth differentiated between the terms/phrase “gang” and “neighborhood group” and between “affiliation” and “involvement” when discussing gangs and gang members in their local communities. Finally, the impact that CDD had on the local community and the residents was explored. Findings from this analysis will assist the V4P organization and staff to better meet the needs of individual soccer players, adolescents, and residents of Ventanilla.

EASEL #49

Andrew Lannutti and Shane Metivier

Presenter: student

Faculty Mentor: Dr. Michael Di Giovine

Title: St. Pio and the 21st Century: Sustaining Popularity and Devotion

Keywords: Sustainability, Popularity, Devotion

Popularity is a complex social phenomenon that has no true definition, even within the Communion of Roman Catholic Saints. In relation to saints, popularity is demonstrated through devotion. Saint Padre Pio of Pietrelcina is a 20th Century Saint and stigmatic that inspires worldwide devotion and cult-like following. Through a combination of ethnography and archival research, both in the United States and Italy, this paper argues that, despite the emergence of newer, more high-profile saints like Pope John Paul II and Blessed Mother Teresa of Calcutta, Saint Padre Pio of Pietrelcina will be able sustain popularity and devotion in the coming years. Because of the way Padre Pio's message has and continues to be passed on by word of mouth from devotees and not through more traditional channels, similar to the way the teachings of Jesus Christ, Padre Pio's popularity will be able to be sustained.

EASEL #50

Chanel Turner-Wright

Presenter: student

Faculty Mentor: Dr. Gerardina Martin

Title: Academic Success Workshops

Keywords: Retention, engagement, student success

Academic Success Workshops (ASW) provide diverse learners with proven methods of enhancing student success and retention. ASW is a resource for students at West Chester University who seek the extra push to be academically successful. These workshops are designed to increase student engagement and highlight the necessary skills set students need to succeed at the postsecondary level. Students require essential time management skills to develop organizational habits and effective study routines in order to succeed academically. Proven systems of efficient note taking skills, as well as methods of test taking, overcoming test anxiety, and general writing skills are discussed to enable students to increase their academic performance. Additionally, the workshops cover possible testing formats used by faculty, as well as how to utilize corrected tests and essays to study for future exams.

One of the goals of the Academic Success Workshops is to increase student engagement and knowledge of campus resources, events and programming. ASW uses a collection of surveys and pre-post-tests to determine its effectiveness in achieving this goal by illustrating the difference in student understanding of campus resources prior to and after attending an ASW session. Additionally, ASW collects demographic information about its participants, specifically pertaining to their course performance per semester and per year. Our presentation will include research analyzing previous semester demographic data, which indicates the majority of students who have participated in ASW programming are already academically successful. A goal of the ASW program is to reach students who could benefit the most from the strategies and skills presented via the workshop, and so recommendations and future considerations on how to improve the attendance of those targeted populations will be discussed.

EASEL #51

Jaya Anderson

Presenter: student

Faculty Mentor: Dr. Gerardina Martin

Title: Working to Empower Minority Males

Keywords: empowerment, retention, challenges for underrepresented minority males

The Brother II Brother (BIIB) program is a West Chester University initiative focused on positively leading, empowering, and influencing minority males on campus. BIIB utilizes Academic Ambassadors, upper-class minority male students committed to academic excellence, to provide individualized and unique academic support to other minority male students. Our Academic Ambassadors help BIIB achieve its overall goal of increased WCU minority male retention, campus involvement and academic success. Last year (Fall 2014-Spring 2015), Brother II Brother identified academic and personal challenges faced by minority males on campus through campus surveys, secured financial aid and funding for students' course registrations and textbooks, engaged in community outreach and presented campus events. During this time, BIIB also attended Shippensburg's 100 Men in Black Conference, hosted high school students from Bridge Intensive Prevention Services, and collaborated with other campus organizations to present on how minority students can thrive in college.

One of the goals of the BIIB program is to identify factors which contribute to or impede the matriculation of minority males in higher education, such as achievement, persistence, and support. Ways BIIB accomplishes this goal is through conducting on-campus research, and collaborating with similarly focused campus organizations to hold discussion sessions and open forums. This semester we will be conducting focus groups, campus surveys and analyzing previous semester feedback to further understand the issue of retention among minority male students at West Chester University. These results will be presented at Research Day along with recommended steps and action items BIIB will take in future semesters to address and improve minority male success on campus.

EASEL #52

Dr. Scott Heinerichs, Dr. Stacie M. Metz, Austin Prewitt, Dr. Paul Geisler, of Ithica College and Dr. Taz Klicklighter, of Lee University

Presenter: student

Faculty mentor: Dr. Scott Heinerichs

Title: Clinical Reasoning Abilities of Athletic Training Preceptors Using the Diagnostic Thinking in Athletic Training Inventory.

Keywords: Clinical Education, Clinical Reasoning, Athletic Training Education

Objective: To assess the clinical reasoning (CR) level of athletic training preceptors. **Methods:** The 41-item Likert scale Diagnostic Thinking Inventory for Athletic Training (DTI-AT) was used to assess preceptor's level of CR. The DTI-AT produces 3 scores relative to CR skills: total diagnostic thinking (DTI-AT, max score = 246), structure of memory (SOM, max score =120) and flexibility in thinking (FIT, max score = 126). Separate independent t-tests assessed group differences on the 3 DTI-AT scores by gender, years of experience, number of co-workers, and setting. **Results:** Fifty preceptors (22 males, 28 females) completed the inventory. There was a significant difference related to setting. Preceptors in the high school setting scored significantly higher on the overall DTI-AT than those in the university/college setting; high school DTI-AT = 164.9 ± 7.3 , college = 158.8 ± 7.9 , $p = .011$. While the preceptors in the high school setting's mean scores were higher on the FIT (high school: 83.8 ± 4.8 , college: 80.7 ± 6.8 , $p = .069$) and SOM (high school: 81.0 ± 3.5 , college: 78.5 ± 5.1 , $p = .066$), there was no statistical significance. **Conclusions:** The results of this study provide early exploration into potential factors that influence preceptors' ability to engage in CR. The high school setting may promote immediate and regular reflection, metacognition and use of CR because of professional isolation and differing clinical decision priorities than university/college setting. University/college preceptors may not be taking full advantage of inherent collaborative opportunities, or have other external barriers to independent decision making in their setting.

EASEL #53

Andrea Brandt

Presenter: student

Faculty Mentor: Dr. Supraja Anand

Title: Quality of Life in Individuals with Parkinson's Disease: Current Outlook and Future Directions

Keywords: Quality of life, Parkinson's disease, Motor symptoms, Non-motor symptoms

Rationale: According to the recent statistics from Parkinson's Disease Foundation, approximately 60,000 Americans are diagnosed with Parkinson's disease (PD) annually and 7-10 million people are affected worldwide. PD is a neurodegenerative condition that primarily affects motor movements (e.g. gait, speech). Clinical research in the past decade has shown that individuals with PD also develop non-motor symptoms (e.g. olfaction; depression; sleep disturbances). Collectively, these deficits affect multiple facets of quality of life (e.g. physical health, mental health).

Aim: The purpose of this study is a) to review the literature on the impact of Parkinson's disease on quality of life and to highlight the contributions of motor vs. non-motor deficits; b) to shed light on the relationship between speech/swallowing deficits and quality of life.

Methods & Results: An electronic literature search was performed using search terms such as "Parkinson's disease", "speech", "quality of life" to identify a total of 60 peer-reviewed journal articles from 2008 till 2016. A subset of these articles were chosen based on relative importance. In this poster, we will shed light on the different types of questionnaires used for measurement of quality of life (e.g. Voice Handicap Index or VHI) as well as provide summarized results in tabular/graphical formats to facilitate comparison of studies.

Significance: This information has the potential to provide insight into improving clinical care of PD patients. Future efforts may benefit from development of rehabilitative strategies that target participation at societal level and/or development of educational strategies that focus on improving psychosocial adjustment.

Oral Presentation Session

When

2:00pm—4:00pm

Where

Sykes Room 209

Featuring

Faculty and students orally present research ranging from Law enforcement and criminal misconduct to treatment of females to dialectical behavioral therapy to group advising and the benefits of service learning.

Oral Presentation Abstracts

ORAL PRESENTATIONS

Presentation #1

Robert McGowan

Presenter: student

Faculty Mentor: Dr. Michael Antonio

TITLE: Law Enforcement and Use of Force: Does Offender Race Play a Factor during an Arrest Incident?

KEY WORDS: police, use of force, race, arrest

The use of force by police officers across the country has become a national issue. Law enforcement officers kill far more Americans than legal executions carried out inside state and federal prisons. In 2002, 300 people were killed in shootings involving police officers compared to 67 executions inside American prisons. Today's media sources have documented the number of deaths of African American youth and adults at the hands of the police. Because of recent incidents of African American deaths by the police in Maryland, Missouri, New York, etc., many advocates have called for police reform. This presentation will report findings from archived data gathered by the "Police Use of Force in Metro-Dade, Florida, and Eugene and Springfield, Oregon, 1993-1995" study. This data was publicly available from the Inter-university Consortium for Political and Social Research (ICPSR 3152). Information about each interaction between the public and police officer is documented in a *Control of Persons* report. The report includes information such as the offender's characteristics (race, behavior, level of resistance, etc.) and the police officer's characteristics (race, type of force used, etc.). The focus of this analysis is to determine whether the offender's characteristics were related to the level of force used by the police officer during the time of arrest. Overall, this research will show racial disparities that existed in the mid-1990s and compare these findings with claims of racial disparity associated with use of force by police officers today.

Presentation #2

Dr. Michael E. Antonio

Presenter: faculty

TITLE: Afterschool Programming, Criminal Misconduct, and Delinquent Behavior: Assessing the Immediate and Long Term Effectiveness *Club Deportivo Dan*

Keywords: Gangs, Violence, Crime, Perú

Afterschool and community-based programming is widely used to combat criminal behavior, abuse, exploitation, and/or victimization of youth and adolescents throughout the world. Although findings are mixed about the effectiveness of such initiatives, some evidence indicates programs that specifically target adolescents' anti-social attitudes and behavior can impact future incidents of criminal misconduct and delinquency. The Voices4Perú (V4P) sponsored program, *Club Deportivo Dan*, was developed for the purposes of curbing anti-social and high-risk behaviors among the youth of Ventanilla, Perú.

This presentation reports findings from one-on-one interviews with approximately 50 current and former participants of CDD. Questions and statements about financial stability, perceived social support, incidents of anti-social behavior, concern about physical and psychological wellbeing, and reported sexual behavior were assessed. Multiple measures about the immediate and long-term effectiveness of the club for impacting anti-social behaviors were analyzed, including use of drugs and alcohol, incidents of fighting, stealing, and vandalism, and involvement in gangs. Also, reasons for becoming involved in CDD and the benefits players derived from involvement in the club were examined. Policy implications will be discussed.

Presentation #3

Caitlin Brown, Samantha Jeune, Christa Rivers, Dr. Lisa Ruchti

Presenter: student and faculty

Faculty Mentor: Dr. Lisa Ruchti

TITLE: “Females: The Others, The Disdained, The Disrespected”

KEY WORDS: female, women, dehumanizing, contempt

“Female” is, according to Merriam-Webster’s Pocket Dictionary, 2006 Edition, an adjective that means “relating to or being in the sex that bears young.” (pg 126) It is not a replacement for the word “women.” It is an adjective in the same way that “Black” is an adjective. By interviewing women of color students, we were able to understand their experiences with the word “female”. The data from interviews showed that referring to women as “females” is as disrespectful and dehumanizing as referring to Black people as “the Blacks.” The research we have conducted has shown the implications the usage of the word “female”. The use of the word “females” disrespects women because it refers to them only for their sexual parts and assumed capabilities. It is a phenomenon that expresses a sexist level of disdain for the women that has no masculine equivalent. A simple twitter search, as pointed out by BuzzFeed.com in an article entitled “6 Reasons You Should Stop Referring to Women as ‘Females’ Right Now,” will exemplify my point. There is no shortage of women being referred to as “females” in a manner that is meant to show nothing short of disdain. But aside from the disdain, it is clear that “female” is used to as a noun. However, the most common use of the word “male” is as an adjective to describe various men. White “males,” Black “males,” young “males.” Here, the men in question are offered an identity beyond their genitalia and sexual make-up.

Presentation #4

Dr. Amber Holbrook

Presenter: faculty

TITLE: Implementation and Effectiveness of Dialectical Behavior Therapy Training in Residential Programs

KEY WORDS: Evidence-based practice; implementation research; process evaluation

Background: Dialectical Behavior Therapy (DBT) is an evidence-based practice (EBP) that reduces suicidality, psychiatric hospitalization, and substance use. However, training is required to successfully implement DBT, and maintenance relies on reinforcement by the program milieu in which it is delivered. In many residential settings, Direct Service Professionals (DSPs) provide the majority of daily care to the more challenged clients, often leading to poorer quality of client care and staff burnout. Provision of training on EBPs is important for quality of client care and workforce development.

Methods: Five residential programs participated in the training initiative from 2013-2015. The training initiative had four stages of implementation. In Phase 1, 3 days of training on DBT principles and skills was provided to DSPs and supervisory staff. Staff knowledge was measured through a quiz on the four DBT modules immediately following and 3 months post-training. In Phase 2, trainers worked with program administrative and supervisory staff to design implementation of DBT services. The Organizational Readiness for Change Part D (ORC-D4) measure and staff turnover rates were collected. In Phase 3, DBT services were provided by program staff with titrated consultation. The DBT Skills Group Observation tool and client completion of the Session Rating Scales were administered. In Phase 4, staff maintained DBT skills through communities of practice.

Conclusions: The collaboration led to clearer conceptualization of individual and organizational factors of the delivery model, and its intended impact on services. This illustrates one model of sustainable EBP implementation and a low-cost evaluation design.

Presentation #5

Dr. Diane Santori and Keri Stumm

Presenter: faculty and student

TITLE: Practitioner Inquiry: Teachers learning to investigate their classroom discourse

KEY WORDS: Teacher research, classroom discussions

This study investigates the process of teacher learning about classroom discourse in the context of practitioner research (Ballenger, 1992; Cochran-Smith and Lytle, 1993). It explores how a teacher systematically reflects on her language use as she pursues personal inquiries in her own classroom. The elementary school teacher, who is also a WCU graduate student, and a WCU professor met monthly to view, analyze, and discuss videos of reading discussions recorded in the teacher's classroom. They also scored the videos using the Dialogic Inquiry Tool (Reznitskaya, 2012). The professional development sessions were framed as practitioner research. Results suggest that teachers gain valuable insight from participating in discourse analysis. Furthermore, classroom discourse can become more dialogic and student-centered as a result. These findings are essential because while educational researchers (Nystrand et al., 2003; Reznitskaya et al., 2009) clearly articulate the need for and value of dialogic teaching, practicing teachers continue to struggle to incorporate dialogism. This study highlights an approach to sustained professional development that enables teachers to closely examine classroom discourse in a purposeful and manageable way while also supporting teachers' agency.

Presentation #6

Dr. Tina Selvaggi and Dr. Lisa Marano

Presenter: faculty

TITLE: Best Practices from a Group Advising Team. A Collaborative Effort from Literacy and Mathematics Faculty

KEY WORDS: Advising, collaboration, mathematics, literacy

Professors in the Mathematics and Literacy departments implemented group advising sessions over the course of an academic year. The goal was to promote collaboration and communication among students while enhancing the advising experience. The presentation will include the description of the framework for group advising used in each department. The presenters will explain the practical and pedagogical aspects of implementing group advising with students. One aspect will include the description of the types of questions and interactions that took place during the group advising sessions throughout the year. Another aspect will include the critical thinking and collaboration exhibited in the group advising sessions. Successes and challenges of the implementation will be shared from the perspective of the teacher candidates and the professors. The session will conclude with a dialogue about the possible application of group advising in other departments at WCU.

Presentation #7

Joel Thompson

Presenter: student

Faculty Mentor: Dr. Liz Wang

TITLE: An Extensive Analysis of the Benefits of Service in Higher Education

In the field of higher education, new innovative methods have been implemented around the world to provide students with a high quality and practical education. Service learning classes provide a practical element that engages students in an advanced understanding of each individual's field. This will be a pedagogical research study that examines the benefits of implementing a service learning aspect to distinct fields of study. The study will focus on examining health sciences, engineering, business, education and psychology. The research will rely on previous scholars who have thoroughly exhausted all research outlets in their specific field. This study will examine schools that currently have implemented service learning programs, and it will aim to look at how these programs have effected the students ability to obtain hands on experience in their specific field and how the experience translates to when the student has graduated, and are employed in that field. This study will also examine the benefits that the community and professors gain from implementing this unique teaching style. This study will aim to create methods for educating professors in higher education the benefits of implementing service learning programs. Providing education to practitioners about service learning will hope to create increased use of similar practices.

Oral Presentation Session

When

2:00pm—4:00pm

Where

Sykes Room 210

Featuring

Faculty and students orally present research ranging from Type I diabetes to team group dynamics and sports injury.

Oral Presentation Abstracts

ORAL PRESENTATIONS:

Presentation #1

Rachel Jackson

Presenter: student

Faculty Mentor: Dr. John Smith

TITLE: "An International Football Player's In Season Management of Type I Diabetes Mellitus"

KEY WORDS: Diabetes Mellitus Management, International Collegiate Athlete, Implementation of Protocol

Background: A 23-year-old male collegiate football player from the UK was evaluated in February 2015 for an insidious onset of hair loss, alopecia areata. Further testing showed a final diagnosis of Type 1 Diabetes Mellitus. Within 3 months of his diagnosis (August 2015), he moved to the U.S. This presented a challenge to the athletic training staff to implement a plan based on the *NATA Position Statement: Management of the Athlete With Type I Diabetes Mellitus* due to limited experience in monitoring his diabetes. **Treatment:** We implemented the NATA Position Statement as a guideline for the management of this athlete. All necessary paperwork was obtained through email from his parents. The athlete was required to give a symptom history and blood glucose reading prior to every practice. Due to this plan, the athlete never experienced a diabetic emergency. **Uniqueness:** Because this was an international student, obtaining critical medical documents and converting his diabetic supplies to American Standards presented as challenges. Additionally, this was his first experience in managing his diabetes in a competitive sports environment. **Conclusion:** This particular athlete presented unique challenges. This included implementing the NATA Position Statement, obtaining medical history documents, and adapting American Blood Glucose Standards. Overcoming these challenges created an environment for the athlete to perform on the field while knowing his disease was properly managed.

Presentation #2

Brayan Robles Rivas and Amber White

Presenter: students

Faculty Mentor: Dr. Gerardina Martin

TITLE: WCU Women's Softball Team Group Dynamics

KEY WORDS: group dynamics, communication, student athletes

The purpose of our research is to better understand which method - sharing personal stories, conducting small group activities, or engaging in large group discussion - during group counseling sessions is most effective at improving communication skills to build a stronger team dynamic.

To conduct our research, eight (8) 60-minute group counseling sessions will be held over an eight (8) -week period with the West Chester University's Women's Softball Team. The participants consist of 24 team members of different ages and academic levels. In each session, we will share personal stories, conduct small group activities and engage in large, open group discussions. We anticipate participants will improve communication skills to build a stronger team dynamic through large, open group discussions.

At the end of the eight (8) sessions, we will measure if the team's objectives were met, if topics were relevant to teambuilding and which aspects of each session was most valuable. Overall, we intend to use the outcome of this research in planning future group counseling sessions with the Women's Softball team.

Presentation #3

Sara O'Dell and Dr. Lindsey McGuire

Presenter: student and faculty

Faculty Mentor: Dr. Lindsey McGuire

TITLE: Spontaneous Resolution of Complex Regional Pain Syndrome in a Division II Collegiate Women's Rugby Player

KEY WORDS: CRPS, athlete, case study

Background: A 20-year-old female NCAA women's rugby player complained of shooting pain over dorsum and lateral aspects of foot. Patient had decreased L4 and S1 reflexes and a diminished dorsal pedis pulse. Patient also had paresthesia and allodynia of entire lower leg, foot, and toes. There was a notable decrease in skin temperature compared to unaffected side. **Differential Diagnosis:** Lower leg compartment syndrome, blood clot, lumbar spine pathology, lumbar spine nerve root injury. **Treatment:** The patient was diagnosed by the team physician and athletic trainer with complex regional pain syndrome (CRPS). Treatment with desensitization techniques included contrast baths, and light touch desensitization with a cotton ball, progressing to a reflex hammer. The patient's signs and symptoms began to spontaneously resolve, even with delayed treatment. With the exception of paresthesia and allodynia, all signs and symptoms improved to baseline one week after clinical diagnosis and with just four days of treatment. The patient's condition fully resolved including paresthesia and allodynia in less than one month post-diagnosis. **Uniqueness:** CRPS is typically a syndrome with necessary and lengthy treatment protocols, but this patient returned to baseline with relatively little treatment. **Conclusions:** CRPS should be considered when a patient presents with pain out of proportion or not consistent to the underlying trauma. Due to the rapid onset of symptoms, it is important for health care providers to recognize signs and symptoms as CRPS and start treatment immediately. **Relevant Evidence:** Diagnosing CRPS is difficult and involves many different strategies, but clinical evaluation is key.

Oral Presentation Session

When

2:00pm—4:00pm

Where

Sykes Room 252

Featuring

Faculty and students orally present research ranging from Spirituality to Puerto Rico to various Central American county issues.

Oral Presentation Abstracts

ORAL PRESENTATIONS:

Presentation #1

Mohammed Kaba and Dr. Michael Di Giovine

Presenter: student and faculty

Faculty Mentor: Dr. Michael Di Giovine

TITLE: Spirituality and Well-Being among Devotees to St. Padre Pio of Pietrelcina

KEY WORDS: Padre Pio, well-being, alternative healing

The World Health Organization—along with most anthropologists—argues that well-being entails more than simply biological health; it also has distinctive socio-cultural components. In addition, spirituality is an essential component of well-being for many individuals, and frequently spiritual healings are used in conjunction with bio-medical (or “cosmopolitan”) healing. Indeed, scholars have pointed to the distinctively social basis of spirituality—on the one hand, spiritual healing entails a relationship between the afflicted and the divine; on the other hand, research on pilgrimage and popular devotion point to social networks that help sustain spirituality. In popular Catholicism, saints are part of the sociocultural fabric of daily life, which frequently manifests itself as personal and explicit devotion to a particular saint who will be called upon in times of illness to directly intercede (or heal) the sick. Based on ethnographic research at the National Center for Padre Pio in Barto, PA and at his shrines in Italy and Vatican City, this paper explores the intersections between bio-medical and spiritual healing in the cult of St. Padre Pio through a detailed analysis of the narratives and perceptions of his pilgrims and devotees in the United States and Italy. What are the mechanisms that attract devotees to healing-based relationships with the saint? What do his teachings and life journey means to those who are dedicated to him? What do his teachings and life journey means to those who are dedicated to him? And how do devotees correlate bio-medical healing practices with their spirituality?

Presentation #2

Michaela Zaborowski and Erica Walters

Presenter: students

Faculty Mentor: Dr. Michael Di Giovine

TITLE: Continuing the Sustainability of Padre Pio's Pilgrimage Sites

KEY WORDS: Padre Pio, sustainability, pilgrimage

This presentation will focus on the Italian town of Pietrelcina, hometown of St. Padre Pio. The presence of Padre Pio in San Giovanni Rotondo, where the saint settled and did the majority of his work, increased the popularity of the town; as a result, the regional economy grew. Pietrelcina saw this as an opportunity to also capitalize on their relationship to Pio, although San Giovanni Rotondo had already developed a well-established cultural identity surrounding the popular Saint. This created tensions between the two towns and inspired the townspeople of Pietrelcina to re-orient their livelihood to utilize their connection to Padre Pio by way of agriculture, foodways, and history – rather than focusing on the immediate presence of the recently canonized Saint, as did the people of San Giovanni Rotondo. Based on ethnographic research in Pietrelcina and San Giovanni Rotondo, including interviews with repeat pilgrims and site managers, the paper will compare and contrast the socio-cultural and economic sustainability of these towns' development, especially as new charismatic individuals are being canonized.

Presentation #3

Dr. Megan Corbin

Presenter: faculty

TITLE: “Filling the Narrative Void: Representing Disappearance in Southern Cone Latin America”

KEY WORDS: disappearance, representation, materiality, anti-portrait

The political violence of the 1970s and 80s in Southern Cone Latin America left an impact that is still being worked through in Chile, Argentina, and Uruguay today. Forced disappearance of persons produced a generation marked by the uncertainty of the loss of parents, children, and friends. This presentation explores the history of attempts to represent the disappeared victims of political violence in the Southern Cone and shows how current projects have shifted the strategy of representing disappearance, attempting to represent the disappeared through material portraits comprised of objects: both remnants of the past and the personal belongings of the disappeared. I argue that in the wake of the dictatorships' use of forced disappearance of persons, collections of objects, of material things, are employed as a productive form of “anti-portrait” that fills the absence of identity, the “narrative void” (Gatti) left by the political violence of disappearance. This expanded notion of portraiture performs a didactic function, building collective memory and teaching new generations about the effects of the political violence of the past so that human rights abuses never again occur in the present.

Presentation #4

Carlos A. Morales-Ramirez and Kenylia L. Morales-Ramirez

Presenter: student

Faculty Mentor: Dr. Gary Contu

TITLE: Patriotic symbols of Puerto Rico: The Flags

KEY WORDS: flags, Puerto Rico, social studies education

Puerto Rico is an island in the Caribbean and a U.S. territory. It is divided into 78 municipalities. Each municipality has its own flag. According to social studies standards in the island, schools must teach patriotic symbols like the flag through K-12 grades. Students are exposed to the flag of their municipality and Puerto Rico since kindergarten. This study measures Puerto Rican's knowledge of the national flag and the flag of their municipality. A survey was provided to individuals in which they had to draw the flags, name all colors and all symbolisms of all its parts. In addition, a separate optional survey measured Puerto Rican's knowledge of Latin American flags. For this part, they only had to name the country each flag belonged to. This is an ongoing investigation. So far 50 individuals from all ages have participated in the surveys. Results show that Puerto Rican's know and identify the national flag. However, most do not know the meaning of the symbols. Over 50% of individuals surveyed knew the flag of their municipality but could not identify the symbolism.

Presentation #5

Ana Sánchez and María Elena Arias-Zelidón

Presenter: faculty and Temple University student

Faculty Mentor: Professor Ana Sánchez

TITLE: The “Intangible Cultural Heritage” of the Mayan in Guatemala: We are still Nepantla

KEY WORDS: Mayan heritage; Mayan rituals; Mayan syncretism; Mayan religion

Around 1579 Fray Diego Duran asked a Mayan Indigenous why their communities continued practicing their ancient customs and religious rituals, the native responded: “Father, do not be worry, we are still Nepantla”. This phrase illustrates our meeting with the community of Momostenango, in Guatemala, where the Maya-speakers are still Nepantla, because those communities continuing between pre-Hispanic and Christian beliefs.

Our case study was the town of Momostenango, where we had the opportunity to participate, as observers, in a religious event the community celebrates, the “8 Batz” or “Wakxaquib Batz”, an important day that marks the Mayan New Year.

As observers, we were not satisfied by accepting that cultural expressions and the pious devotion to Apostle Santiago were the obvious result of 500 years of Christianization. In our search for answers about the topic of the colonization of rituals and indigenous beliefs, we did a research about the issue of idolatry, and we found that the evangelizers considered that the ritual practices had lost their semantic unity and were becoming a speech of isolated formulas.

However, the truth is that the new reinterpretations that had emerged were transformed into a syncretic practice throughout the colonial period. This syncretism is what we witnessed at Momostenango, the rituals are now celebrated by migrant and non-migrant communities united by the same values and beliefs, which shows a vision of double otherness. Both subjects have commonalities that unite them, but they are also separated by social and neo-cultural factors.

Now, Maya-speakers communities continue Nepantla and create new ways of religious expressions.

Presentation #6

Dr. Leon Arredondo

Presenter: faculty

TITLE: Collective Social Action in Itagüí, Colombia during the Twentieth Century

KEY WORDS: Protest, Collective Action, Colombia

This presentation describes patterns of contentious collective action in Itagüí, Colombia during the twentieth century. It provides a long-term view of the types and characteristics of the contentious social action that became common during specific time periods, and discusses in particular the significance of the *paros cívicos* (community strikes) that took place in the early 1980s. By focusing on contentious collective action, this work is ultimately about the changing character of social conflict. This work is particularly relevant for Itagüí which is known as the industrial capital of the country. Periods of industrial development structured the history and urban expansion of the municipality. Itagüí became one of the poles of industrial expansion when the country began to industrialize in the early twentieth century. It is now part of the metropolitan area of Medellín and has a population calculated at 235,016. Research for this project consisted of archival research conducted in Itagüí and Medellín.

Presentation #7

Lech Zapata-Rotz

Presenter: student

Faculty Mentor: Dr. Leon Arredondo

TITLE: *Paros Civicos: Community Strikes for Access to Water*

KEY WORDS: Collective Action, Protest, Colombia

This presentation describes a social movement known as *Paros Civicos* that developed in Itagüí, Colombia during the early 1980s. It describes the broad social significance of the movement and the specific demands the movement presented to the local government. The presentation focuses on the centrality of access to water as the demand that brought the movement together. The *Paros Civicos* are also compared to other social movements that have taken place in Latin America around issues of access to water and water rights. Research for this project consisted of archival research conducted in Itagüí, and Medellín.

Presentation #8

Erica Walters

Presenter: student

Faculty Mentor: Dr. Leon Arredondo

TITLE: *Paros Civicos: Repertoires of Collective Action*

KEY WORDS: Collective Action, Repertoires, Colombia

This presentation describes the *Paros Civicos*, a social movement in Itagüí, Colombia during the early 1980s. The focus of the presentation is a discussion of what social historians of collective action called repertoires of contentious social action. That is, the learned forms for expressing social grievances. The presentation describes the specific actions and mechanisms that the participants in this movement employed to convey their demands and to put pressure on the local government. Research for this project consisted of archival research conducted in Itagüí and Medellín.