14th Annual Research Day
at West Chester University

Program
24 March 2015

Sykes Student Union
and
Swope Music Building

Organized and sponsored by the Research Consortium and the Office of Research and Sponsored Programs
Poster Session 1:

Social and Behavioral Disciplines

When
9:00am-10:30am

Where
Sykes Ballrooms A-C

Featuring
Student Posters
Authors Corner
Videos
Displays
Policy, Implementation, and Outcomes of the Integration of the iPad: Implications for the 21st Century

Houser M.

Policy, Implementation, and Outcomes of the Integration of the iPad: Implications for the 21st Century is the result of a large-scale quantitative study that surveyed more than 200 regular education teachers, special education teachers, and P-12 administrators to examine their current practices with respect to the iPad. The purpose of the study was to gain a deeper understanding of how the iPad was currently being used in regular and special education settings and its degree of success in public P-12 schools in the United States. Participants were electronically mailed a 100-question survey. The results of this study indicated that iPad use is widespread across both regular education and special education settings with a moderate degree of success. Recommendations for further studies were discussed.

Evaluating the Effectiveness of Club Deportivo Dan: Findings from Voices4Perú

Antonio M. and Amaya A.

Incidents of gang-related crime and the severity of violent behaviors are intensifying on a global scale. In many instances, children and adolescents are actively recruited to join a gang. Some youth willfully join a gang because of the desperate conditions in which they live, while others are forced into the gang lifestyle. Currently, there are organizations and advocacy groups throughout the world trying to combat these social atrocities. Voice4Perú (V4P) was founded specifically to address issues of social injustice, provide basic humanitarian aid, and restore hope for a better future for families and children impacted by violence and oppression. V4P developed a series of initiatives to help children and youth in need. Through a series of events, Club Deportivo Dan was developed to promote and manage organized soccer teams to entice children and adolescents to replace self-destructive, injurious behaviors with socially acceptable alternatives to become contributing members of society. However, to date no rigorous, empirically based evaluation has been performed to determine the effectiveness of the club. The present analysis remedied that problem by examining the effectiveness of the soccer program on participants' willingness to seek out educational opportunities, address mental health needs, follow preventative medical procedures, and take precautionary measures to decrease teen pregnancy and prevent the spread of sexually transmitted diseases. Moreover, program outcomes measured in terms of involvement in criminal activity and/or gang-related crimes were assessed. Findings will be discussed.
Easel #3

Does information about SES bias ratings of child behavior based on brief observations?

Brown E., Burlew L., Di Stefano A., and Garnett M.

This study focuses on how people assess child behavior based on brief observations. Specifically, we are interested in how information about child socioeconomic status (SES) may influence these assessments. A variety of professionals as well as undergraduate and graduate students assess the behavior of preschool children based on brief (e.g., 5-30 minute) observations, and the results sometimes have significant consequences. A host of research in social psychology suggests that our assessments of others’ behavior are biased by information about social groups they belong to. The research also suggests that information about someone’s social group has the greatest impact on our assessment we have relatively little other data to go on (for example, if we have only observed them for a short period of time). Yet little research examines how information about socioeconomic status may bias assessments of child behavior, and no published studies examine how such information may bias assessments based on brief observations of child behavior, even though such observations are common in preschool settings. The present experimental study was approved by the WCU IRB. In this study, participants are told that the study focuses on how people assess child behavior based on brief observations. They are told they will be shown a brief video clip of a preschool child and then asked to rate their behavior. After providing informed consent, they are randomly assigned to one of two conditions. Those in the low SES condition are given background information that suggests the child they will view is of low SES. Those in the middle SES condition are given background information that suggests the child they will view is of middle SES. The participants all view the same video clip and are asked to rate the child’s behavior on a well validated measure, the Conners' Rating Scale. They are then debriefed as to the full purpose of the study. Thus far, we have data from 50 participants. They are students in PSY100 Introduction to Psychology and the majority are female. We expect 100 participants by March. Preliminary analyses including an Analysis of Variance (ANOVA) suggest that participants may rate child behavior as more problematic when they believe the child is of middle SES. The implications concern potential biases in ratings of child behavior based on brief observations. We propose to present full results and further discuss their implications at Research Day.

Easel #4

Creating Self-Regulated Learners: Adopting a Blended, Flipped Learning Approach in Higher Education

Isaacson P., Kenney J., and Newcombe E.

A professor implemented a blended, flipped approach in her undergraduate educational psychology course in an effort to increase student preparation, participation, and content competence. The format consists of online readings, assignments, and quizzes each Tuesday, followed by in-class instruction and review of previously learned material each Thursday. Because students are required to have completed assignments on course content prior to attending class, they have the opportunity to take a more active rather than passive approach to
learning. After each semester, students complete a confidential survey rating their thoughts about the learning approach and factors that could serve as barriers to successful learning. The barriers most often mentioned by the students are related to self-regulation skills. Research indicates that self-regulation skills are an important factor for success (Dabbagh & Kinsantas, 2004). In recent semesters, the survey was updated to assess students’ self-regulation skills, typical routines for completing course work, and helpfulness of instructional tools incorporated for promoting self-regulation. This poster analyzes the last two semesters of survey data examining the experience of students using this instructional approach in Dr. Kenney’s 3-credit course, EDP 250: Educational Psychology. The data presented shows whether self-regulation influences the types of learning/technology tools that students feel are helpful and how self-regulation can influence preferences for online learning. The poster includes how self-regulation is becoming a critical part of professional success, how instructors can incorporate tools within their courses to promote self-regulatory practices in students, and provides a model for developing a blended instruction course.

**Easel #5**

Attitudes toward Offenders and Support for Treatment Programming among Agents Employed by Pennsylvania

Nalaschi B. and Antonio M.

Inmates are always watching and learning from correctional staff and research has shown that staff can have a significant impact on inmate recidivism rates. For these reasons, it is important to understand the attitudes and beliefs of staff who work in the criminal justice system. The purpose of the present analysis was to examine the knowledge, attitudes, and beliefs among correctional staff about modeling appropriate behaviors for offenders and showing support for offender treatment program initiatives. Specifically, this research evaluated the attitudes of Parole Agents (PA) working in Pennsylvania’s Board of Probation & Parole (PBPP) about displaying appropriate behavior when interacting with offenders, understanding treatment principles related to reoffending and supporting PBPP ideals for community reentry and effective correctional interventions. Data used in this analysis was gathered during three new employee orientation training sessions at PBPP. These trainings occurred in April and October (2014) and January (2015). Approximately, 20-40 new agents were enrolled in each session, which lasts five days in duration. PBPP allowed access to the staff training sessions in order to administer a self-reported survey to all new agents. It was believed that PA employed by PBPP would report appropriate behaviors related to: supporting offender treatment programing; promoting good behavior among offenders; and knowledge of criminogenic factors related to recidivism. Recognizing the direct impact that staff attitude and behavior has on rehabilitative and treatment outcomes may help to ease the impact of community reentry for many offenders released from prison.
Easel #6

Poverty, instability, chaos, and cortisol levels for young children

Brown E., Garnett M., Anderson K., Laurenceau J., Ackerman B., Holochwost S.

Abundant evidence suggests the toll of poverty on physiological systems that respond to stress. Recent research suggests that poverty-related instability helps to explain the physiological effects. The present study builds on past work by examining specificity in relations to cortisol for income poverty and several theoretically distinct aspects of instability. The four aspects of instability included in the present investigation facilitate drawing two important distinctions. First, we distinguish daily household chaos from neighborhood risk and discrete destabilizing events such as changes in where and with whom children live. Second, we distinguish between those discrete destabilizing events that do and do not disrupt primary or secondary attachment relations.

Method The investigation included 315 children attending a Head Start preschool. Mean age was 4 years, 1 month (SD = 7.81 months). Approximately 52.3%% were female, and 10% were Caucasian/European American. Of participating families, 60% were poor and an additional 30% low-income. Parents completed the CHAOS measure (Matheny et al.) and demographic interviews that provided the instability variables including several factors used for an index of neighborhood risk. Child cortisol was measured in duplicate via salivary assay at morning baseline and three additional time points across the day on six days, resulting in 15,120 observations. Duplicates were averaged, reducing the number to 7,560.

Results and Discussion Results of hierarchical linear modeling (HLM) suggest that household chaos and disruptions to primary and secondary attachment relations as well as racial/ethnic minority status related uniquely and positively to morning baseline cortisol, whereas income, neighborhood instability, and non-attachment-disruptive changes in where and with whom children live did not. The latter three variables did relate uniquely to trajectory across the day. Results add to evidence that instability helps to explain income effects on child stress physiology and suggest the unique importance of instability in children’s daily routines and closest attachment relations.

Easel #7

Experimental Archaeology with the Kylix: Drinking and Playing Kottabos

Snyder A. and Sharpe H.

Scholarship on Greek symposium vessels is extensive, not least of which on the drinking cup called the kylix. From studying scenes painted on Greek vases, we are well aware of its function as a symposium vessel, and decades of research on its form and painted decoration have provided a chronological framework and an understanding of local and regional trends as well as the painting styles of individual artists. Further information may be gained specifically on the functionality of the kylix through experimental archaeology. For this project, the two investigators seek to understand such practicalities as the most suitable kylix size for drinking and investigate the mechanics of playing the drinking game kottabos. Using modern copies we will demonstrate how functional kylikes of varying sizes were and specifically address whether larger kylikes were too large to be truly used as drinking vessels or whether they were intended primarily to be display pieces. Secondly, taking into consideration the many representations of
symposiasts engaged in playing kottabos, attempts will be made to understand the skills necessary to play kottabos using a modern kylix produced using a 3-d printer (and therefore not prone to breakage). While kylikes have been traditionally viewed by many scholars primarily as works of art with concerted attention directed towards analyzing their decoration, it is worthwhile to consider the kylix’s utilitarian function. Our study analyzes the kylix in light of its original symposium context in an effort to elucidate its principal role as a drinking vessel.

**Easel #8**

**Case Conceptualization for Counselors Using a New Holistic Approach: The Temporal/Contextual Model**

Zubernis L. and Snyder M.

The T/C case conceptualization model introduced in this poster presentation is a road map for gathering client information and exploring client problems and strengths. It was developed as part of a textbook the presenters are co-authoring for Sage publication's textbook series called Counseling and Professional Identity. The model draws from various theoretical approaches commonly used in counseling, including Padesky's Five Aspect Model, Bronfenbrenner's bioecological model, and Prochaska's stages of change. The T/C model expands on these existing theories, however, by taking a holistic approach and encompassing not only the internal mechanisms of personality, but also taking into account external influences both past and present. This is a completely new model developed from the literature on case conceptualization, counseling theory, and theories of human development. The model, while drawing from diverse theoretical approaches, is itself atheoretical. This allows counselors who practice from multiple theoretical perspectives to utilize the model effectively. It also takes into account clients diverse backgrounds, experiences, and internal psychological mechanisms. In addition, the T/C model is practical in its implementation, designed to facilitate goal setting and intervention, as well as conceptualization.

**Easel #9**

**Examining Offenders' Perceptions of Judicial Fairness and Likeability**

Malandra T. and Antonio M.

The present analysis examined perceptions among offenders awaiting trial in the Chester County Prison. Specifically, offenders’ opinions about individual judges were explored. The existing literature indicated there are varying characteristics associated with one’s perception of judges. For example, positive or negative perceptions may be based on the individual offender’s characteristics, such as race, age, sex, gang affiliation, etc. or on the characteristics of offenders’ crime, such as property versus violent, likelihood of conviction, amount of monetary damage, criminal history, etc. Additionally, offenders’ perceptions about judges may be based on the individual justice’s characteristics, such as race, age, sex, etc. or based on the judges’ personality or behavior, such as showing respect, fairness, consistency, etc. In the Spring 2015, a 20-question self-administered survey was delivered to offenders awaiting trial at Chester County Prison in order to uncover their perceptions of judges presiding over cases tried
in Chester County. In general, offenders’ perceptions would assess overall fairness and likeable of eight judges hearing cases in the Courthouse. This study will provide insight about those factors that most impact perceptions of fairness in criminal justice system. It was expected that offenders who perceived the judge as fair, who were convicted of less serious crimes, and who had no prior criminal history, would rate the individual judges more positively in terms of fairness and likeability. Findings and policy implications will be discussed.

Easel #10

Parents’ implicit theories of intelligence predict preschool children’s responses to academic challenge

Brown E., Menon A., and Garnett M.

Individual’s implicit theories of intelligence, and particularly the extent to which they view intelligence as fixed, hold significance for educational outcomes. According to Dweck & Leggett (1988), those who view intelligence as a fixed entity (“entity theorists”) hold goals of performing or proving their ability. They tend avoid challenge and give up if they cannot easily succeed. In contrast, those who view intelligence as malleable (“incremental theorists”) hold goals of learning and mastery. They tend to seek challenges and to persist. Implicit theories predict school achievement above and beyond initial ability, and are of particular importance for economically disadvantaged children who face disproportionate school challenges. Preschool children generally cannot articulate theories of intelligence but show emergent tendencies to give up easily or persist in the face of academic challenges. The present study examines parents’ implicit theories of intelligence as a predictor of preschool children’s approaches to challenge. Although parent attitudes have been shown to predict children’s approaches to challenge in elementary school and beyond, we know of no prior studies that examine these variables in the preschool years. The investigation included 315 children attending a Head Start preschool. Mean age was 4 years, 1 month (SD = 7.81 months). Approximately 52.3% were female, and 10% were Caucasian/European American. Of participating families, 60% were poor and an additional 30% low-income. Of the participating primary caregivers, approximately 90% were the children’s biological mothers. Parents completed Dweck and Leggett’s brief (6-item) rating scale of implicit theories of intelligence. Children were asked to complete Dweck’s preschool puzzle task, which includes three challenging puzzles and one easy puzzle. Their responses to this task provided information about responses to challenge. Results of a hierarchical linear regression analysis indicated that, with controls for key demographic variables, parent implicit theories significantly predicted child responses to challenge. As expected, children of parents who viewed intelligence as fixed tended to give up more easily whereas those who viewed intelligence as malleable tended to persist. Results extend the work of Dweck and colleagues and suggest the importance of parent views of intelligence for predicting children’s responses to academic challenge as early as preschool.
Easel #11

I Love My Job, but... Job Satisfaction and Burnout among Forensic Interviewers

Chiarelli-Helminiak C.

Forensic interviewers, specially trained professionals who conduct structured interviews with children who have made allegations regarding abuse, may be particularly vulnerable to burnout as a result of their work. The proposed research poster presentation focuses on findings from an electronic survey that gathered information on organizational factors, burnout, and job satisfaction from forensic interviewers. The 148 respondents were associated with Children’s Advocacy Centers located in the Northeast region of the United States. While the quantitative and qualitative findings of this research indicated forensic interviewers were satisfied with their work a substantial number were experiencing burnout. The results suggested the amount of control a forensic interviewer has in relation to work is related to higher job satisfaction. Job satisfaction and support were both found to have inverse relationships with burnout. This research expands on the few studies on forensic interviewers and job-related stress. Organizations must develop policies to mitigate the conditions associated with burnout among forensic interviewers. The suggested policy and practice implications will enhance organizational support, increase job satisfaction, and reduce burnout which will in turn lead to a stronger workforce. Such implications impact children – and in the largest sense, society as a whole – as forensic interviewers will be more effective.

Easel #12

Organizational Response to Police Officer Stress

Klotz T. and Tucker J.

Over the years, the topic of police officer stress has gained much attention. Researchers have documented the sources, types, and various consequences associated with police officer stress. A wide variety of programs and services have emerged to assist officers in dealing with the stress inherent with the occupation. While there is overwhelming evidence that police officer stress is prevalent in today’s law in the law enforcement occupation, there is little information on the typical organizational response to police officer stress. The current study uses a mixed-method design to explore how police departments in Southeastern Pennsylvania respond to police officers in stress. A survey will be used to obtain important information about stress intervention services police departments provide to their police officers. In addition, the study involves qualitative review of department policies and procedures to explore the various organizational responses to the problem of police officer stress. The study hopes to develop a stronger understanding of the organizational response to police officer stress, an area that has not been sufficiently explored in the literature on police stress.
Poverty, instability, chaos, and cortisol levels for young children

Brown E., Morris A., and Garnett M.

Abundant evidence suggests the toll of poverty on physiological systems that respond to stress. Recent research suggests that poverty-related instability helps to explain the physiological effects. The present study builds on past work by examining specificity in relations to cortisol for income poverty and several theoretically distinct aspects of instability. The four aspects of instability included in the present investigation facilitate drawing two important distinctions. First, we distinguish daily household chaos from neighborhood risk and discrete destabilizing events such as changes in where and with whom children live. Second, we distinguish between those discrete destabilizing events that do and do not disrupt primary or secondary attachment relations.

Method

The investigation included 315 children attending a Head Start preschool. Mean age was 4 years, 1 month (SD = 7.81 months). Approximately 52.3% were female, and 10% were Caucasian/European American. Of participating families, 60% were poor and an additional 30% low-income. Parents completed the CHAOS measure (Matheny et al.) and demographic interviews that provided the instability variables including several factors used for an index of neighborhood risk. Child cortisol was measured in duplicate via salivary assay at morning baseline and three additional time points across the day on six days, resulting in 15,120 observations. Duplicates were averaged, reducing the number to 7,560.

Results and Discussion

Results of hierarchical linear modeling (HLM) suggest that household chaos and disruptions to primary and secondary attachment relations as well as racial/ethnic minority status related uniquely and positively to morning baseline cortisol, whereas income, neighborhood instability, and non-attachment-disruptive changes in where and with whom children live did not. The latter three variables did relate uniquely to trajectory across the day. Results add to evidence that instability helps to explain income effects on child stress physiology and suggest the unique importance of instability in children’s daily routines and closest attachment relations.

Inner Borders within the United States as Policy Participation Indicators

Crossney K. and Flores G.

The border as a geographical concept is one of such complexities. Border zones are most commonly perceived as manifestations of simply natural or national dividers, but, in reality, a division occurs in space when attributes of those places cause different senses of identity. These attributes, and resulting sentiments, essentially reveal measurable divisions that allow our academic understanding of the border to transcend the definition of a border as simply a natural or national divider. Natural or national phenomena can certainly contribute to border making and the creation of a border dynamic in a place, but they usually correspond with differences in attributes and thus identity. Keying into these differences that cause divisions, factors can be identified and mapped to identify the inner borders present in the United States for a specific time period. These borders can then be tested by a policy to see if there is variance in how the policy plays out within those regions that the inner borders create. In this
study a policy called Deferred Action for Childhood Arrivals will be used because it is a recent executive order which provided administrative deportation relief for youth amongst other administrative benefits. Application for the program amongst youth was, and continues to be, voluntary. This means that the willingness and, arguably, the necessity of people in an area to apply for relief from deportation is very telling about the place. This project will look specifically at how a mapping of attributes of the legal system, the economic market, and the cultural identity at the state level will create borders and then test those borders to see how and if the division plays out. The occurrence of variance in the two year Deferred Action for Childhood Arrivals application rate amongst regions identified by the created borders would validate the borders identified by showing that there is indeed a division because behavior on either sides of these borders are measurably different due to the differences in identity that a division in place attributes inherently causes.

**Easel #15**

Third Spaces: The healing power of community

Tahmaseb-McConatha J., Corcoran M., Atley C., Corbett S., Oliver A., Zieber L., Frans E., Jones M., and Williams S.

No one can age “well” alone. The responsibility for maintaining health and well-being lies with the individual, his or her family, the community, and the culture and society. The World Health Organization (WHO) and communities across the world are partnering to make their communities more age-friendly through the WHO Global Network of Age-Friendly Cities and Communities. This presentation addresses the community supports and challenges that older men and women face in their attempt to maintain health and happiness in later life in West Chester, PA as outlined by the WHO Global Network of Age-Friendly Cities and Communities. The Borough of West Chester, PA recently earned an Age-Friendly Community designation from the World Health Organization. This membership requires a comprehensive assessment of the “age friendly” components of our community. Our presentation will focus on an overview of our activities including the results of interviews with a diverse group of elders living in the community. We will discuss the theoretical background driving this project and present the results of ethnographic analysis based on criteria established as “age friendly” components by the World Health Organization. Assessments have focused on the changing nature of life in the community, day-to-day activities, diversity and social inclusion, as well as personal resources and supports, and overall well-being and life satisfaction.

**Easel #16**

Can the arts get under the skin?

Brown E., Garnett M., Anderson K., Laurenceau J.

Thirteen years ago, Sonia Lupien and colleagues asked whether poverty could get under the skin (Lupien, King, Meaney, McEwen, 2001). The answer was yes. Poverty influences physiological systems that respond to stress, as indexed by the hormone cortisol. The result is a host of negative emotional, cognitive, and physical health outcomes for low-income children. We
now ask whether the arts can “get under the skin” and alleviate poverty’s toll on physiological functioning for children attending a Head Start preschool. Present Investigation In Study 1, we ask, “Can a single arts class change cortisol?” Using a within-subjects experimental design, children were randomly assigned to participate in a music, dance, visual arts, or homeroom classes at different times on different days. Cortisol was measured at morning baseline and after each class. This facilitated a comparison of the impact of an arts versus homeroom class on cortisol. In Study 2, we ask, “Does more art result in more cortisol change?” Using a within-subjects experimental design, children were randomly assigned to participate in one, two, or three arts versus homeroom classes on different days. Cortisol was measured before and after the four classes. This facilitated examining the impact of the number of arts versus homeroom classes on cortisol. The investigation included 315 children. Mean age was 4 years, 1 month (SD = 7.81 months). Approximately 52.3% were female, and 70% were African American, 10% Latino/Hispanic American, 10% Asian American, and 10% Caucasian/European American. Approximately 60% were from families with incomes below the federal poverty threshold and an additional 30% were from families with incomes less than two times this threshold (i.e., low-income). Cortisol was measured in duplicate via salivary assay at four time points on six days, resulting in a total of 15,120 observations. We used hierarchical linear modeling (HLM). For Study 1, we examined the impact of a single arts versus homeroom class, controlling for average daily cortisol trajectory. Participation in an arts class was associated with lower cortisol than participation in homeroom. For Study 2, we examined the impact of the number of arts versus homeroom classes, controlling for average daily cortisol trajectory. More arts related to greater reduction in cortisol. Results suggest that the arts can get under the skin, alleviating the impact of poverty on physiological systems that respond to stress.

Easel #17

Bullying in the United States: An Exploratory Study of Intervention and Anti-Bullying Legislation

Lambertsen B., Espinoza R., and Dente C.

Bullying is a very important issue in the United States. There are many studies and information regarding bullying and its effects; however, little information exists on the impact and existence of anti-bullying legislation. This quantitative exploratory study examined the relationship between the number of bullies and victims reported in the 2000 and 2010 United States Census data and the existence of anti-bullying legislation. Anti-bullying legislation was identified by exploring state databases. Results from this study indicated that there is a relationship between anti-bullying legislation and the number of children involved in bullying. In 2000, it was calculated that about fifteen percent of children were reported as being involved in bullying; in 2010 that number had dramatically dropped to approximately nine percent. Comparatively, in 2000 it was found that only two states had developed anti-bullying legislation and in 2010 that number had increased to forty-five states. The significance of this study shows that there may be a positive impact of anti-bullying legislation and raises questions about the reasons for lower rates in 2010. Recommendations for future research include deeper exploration of each state’s legislation and how individual bullying statistics are affected by that legislation. In addition, future research may explore the impact of bullying on both victims and bullies. By conducting further studies, more nuanced investigation may confirm these findings or uncover evidence that bullying might not be decreasing. This knowledge will increase the understanding of bullying and the impact of anti-bullying legislation.
Easel #18

Coming Together - Sharing Together - Working Together - Succeeding Together

Beyer A.

The strength of the team is each individual member. The strength of each member is the team.
- Phil Jackson    The CORAL pedagogy fosters the development of skills in using computer and video-technology as tools to enhance effective collaboration in college courses. The CORAL model cultivates four major objectives:  *Integrates several different teaching and learning styles, thereby providing a more inclusive learning format.  *Structured by the professors, but led by the students fostering independent thinking and active learning,  *Promoting interdependence by having students share the division of labor by formulating roles and tasks that compel students to reach consensus.  *Fosters the distinction between Collaborative and Cooperative learning as an indispensable preliminary step when designing an operational collaborative learning and workplace environment!  Individual commitment to a group effort - that is what makes a team work, a company work, a society work, a civilization work. - Vince Lombardi

Easel #19

Student Experiences with Disability: What Was Learned from Interviews

Schofield D., Sanchez A., Price P., and McCarron C.

Student Experiences with Disability: What Was Learned from Interviews of People with Disability and Their Support Personnel.    Students in the introductory course Foundations of Special Education (EDA 103) are assigned to interview an individual with disability about the supports they receive or interview a person who provides the support to people with disabilities. The interviews from the students in my classes have been wide-ranging, querying siblings, speech-language pathologists, in-home support personnel, and individuals with disabilities themselves, among others. The purpose of this poster presentation is for students to share what they learned from the interviews. Topics will include availability of support services, self-determination, quality of life and strength-based views on disability.

Easel #20

Job Analysis for the classification of a Retail Salesperson

Bost M. and Mishra V.

Job Analysis is the process of gathering, analyzing, and structuring information about a job’s components, characteristics and requirements, which results in a job description and specification for a given job. These job descriptions and specifications are used in organizations for the purposes of recruitment, selection and development of performance criteria. The current paper details the steps utilized to conduct a job analysis for the job of a Retail Salesperson. The first step in a job analysis includes collecting information regarding the job to be analyzed.
For this purpose the Occupational Information Network (O*NET) was consulted as a preliminary source for gathering general information regarding the tasks, knowledge, skills, abilities and other characteristics (KSAO's) required to perform the job of a Retail Salesperson. Subject Matter Experts (SMEs), those identified as having relevant knowledge of the position, were also interviewed to collect job relevant information. A total of three SMEs were interviewed during this information gathering phase; a store manager who was hired as a retail salesperson and promoted after 1 year, and two incumbents each with over 1 year of experience in the role. Based on the information collected from SME interviews and O*NET, a job analysis questionnaire containing a list of relevant task and KSAO statements was developed. Specifically, the questionnaire included a total 57 statements; 20 Tasks, 8 Knowledge, 12 Skills, 10 Abilities and 7 Other Characteristics associated with successful performance on the job of a Retail Salesperson. This questionnaire was administered to the three identified SMEs, who rated each task and KSAO statement with regard to importance and frequency of use on the job. The resulting data was analyzed by computing average importance and average frequency rating for each statement. These averages were added to obtain a combined average rating for each statement, which was compared against a designated cutoff score of 3.5 and was used to determine if a statement was to be retained or eliminated from the analysis. Eighteen statements received scores that were below the designated cutoff and were therefore excluded. The retained KSAO statements were linked to each of the retained task statements with respect to their necessity in performing those tasks. The resulting information was then utilized to create a job description for the position of a Retail Salesperson.

Easel #21

An Investigation into the Ways in Which Middle Grades Mathematics Teachers Perceive the Adoption of the Common Core State Standards Have Impacted the Learning Experiences of Their Students


In relatively brief period of time the adoption of the Common Core State Standards (CCSS) has had a significant impact on the content, pedagogy, and assessment enacted on k-12 mathematics classrooms. The CCSS has called for a new level of rigor, mathematics teachers are being asked to “significantly narrow and deepen the way time and energy are spent in the classroom” (CCSS, 2010). In response to the integration of the CCSS, the Pennsylvania Department of Education has asked teachers to “focus less on teacher talk and more on actively engaging students. When planning instruction, design lessons that actively engage students in learning” (Author, 2013). The CCSS has also influenced the assessment of student learning and teacher evaluation. The U.S. Department of Education provided $350 million to develop two assessment systems, the Partnerships for the Assessment of Readiness for College and Careers (PARCC) and the SMARTER Balanced Assessment Consortium (SMRTER).

It is clear that the intent of these reforms are to provide students with a rich and rigorous educational experience that has clear measures. What is unclear at this point is how these reforms are impacting the day to day classroom experiences of students. The study discussed here examined how the adoption of the CCSS in Pennsylvania has changed the experience of
middle grades from the perspective of teachers who they themselves been responsible for the implementation of the new content and pedagogical reforms.

The sample for this study consisted of 12 middle grades mathematics teachers. Data was collected through interviews and classroom observations. Participants discussed the way in which they perceived the CCSS impacting their student's classroom engagement with and experiences learning mathematics. Interviews were recorded, transcribed, and analyzed using a constant comparative approach. Classroom observations were conducted to provide an additional insight into the instructional experience structured by the teacher. Results indicate that students experience in the mathematics classroom a significant state of flux.

Easel #22

Understanding Methods that Improve Communication and Team Work

Tunstall C. and Hodge L.

The purpose of our research was 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, four 50-minute group counseling sessions were held over a four-week period with the West Chester University’s Women’s Softball Team. The participants consisted of 25 team members, 12 of whom were new to the team as first-year students. In each session, we shared personal stories, conducted small group activities and engaged in large, open group discussion. We anticipate participants would improve communication skills to build a stronger team dynamic through large, open group discussion. Each session was evaluated by participants immediately following the session to measure if session objectives were met, if topics were relevant to teambuilding and which aspects of each session was most valuable. Following the final session, the Coach was sent a rubric to evaluate if team members communicated more openly and positively among themselves and with the coach. The coach also evaluated if dialogue improved between existing and new members. Overall, we intend to use the outcome of this research in planning future group counseling sessions with the Women’s Softball team. We would like to conduct group counseling sessions in the future with other women’s sports teams at West Chester University based on our research.

Easel #23

Improving Undergraduate Academic Success

Machonis A. and Stephenson J.

The purpose of our research with the established Learning Assistance and Resource Center's Academic Success Workshops is to improve students' knowledge of useful, proven techniques specific for effective note taking, test taking, and reduction of test anxiety to help them experience more success in college. The Academic Success Workshops are run each semester because in the past, many students came to the LARC in search of help with four major topics: Time Management, Note Taking, Test Taking/Test Anxiety, and Short Essay Writing/APA.
Format. The topics that were the most popular in the Fall 2014 semester were Note Taking and Test Taking/Test Anxiety. Therefore, our research focuses on these two workshops. The participants were undergraduate students ranging from first to fourth-year. We want to reach as many students as we can in a group format. We used a mixture of Lickert scale questions and open-ended questions to determine results before and after each workshop. The open-ended questions were in the form of pre-tests and post-tests. We would like to see if the results show students learned during the presentations. For instance, we would like to know if students were able to identify more strategies for managing test anxiety after the workshop than they were before the workshop. We plan to follow up with the students who participated in the workshop to see if they have used the techniques we presented, and if their grades have improved. We hope to conclude the information presented is being learned; however, there is room to add more helpful techniques approached from theoretical points of view to help students succeed. Further conclusions can be made after students receive their grades for the Fall 2014 semester, and after we survey them in the Spring.

**Easel #24**

**Celebrity Offenders: Are They Really 'Just Like Us'**

Keith B.

The average citizen is unfamiliar with the intricacies of our criminal code. In fact, many attorneys who practice in the field are unfamiliar with the various violations and their corresponding sentences. Why then, does it seem that when people hear about a celebrity committing an offense, are we so quick to accuse that person of receiving a lesser or more lenient sentence? This study will in fact determine whether recent celebrity offenders (Amanda Bynes, Khloe Kardashian, Paris Hilton, etc.) in fact did receive more lenient or lesser sentences proscribed by statute. This study will also take into consideration the fact that many citizens, regardless of celebrity status, receive lesser sentences in light of the overcrowding in our nation’s prisons. Accordingly, government data comparing actual time served to initial sentences will be measured against the celebrity sentences imposed. In short, the study will compare celebrity offenders in light of statutory requirements, and data collected measuring actual time served, to determine whether celebrity offenders indeed receive lesser or more lenient sentences than “the rest of us.”

**Easel #25**

**Diversity 411**

Badrane C. and Martin G.

Diversity411 is a program that came as an initiative to spread diversity awareness at West Chester University campus after a survey conducted by Dr. Rankin revealed that students from underrepresented groups felt unwelcomed. Women, students of color, LGBTQQA are likely to experience discrimination and harassment in its different forms. Diversity 411 is a 50-minute workshop that attempts 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. In addition, all group
members should benefit from an increased knowledge of how to interact more positively with the people they meet at WCU and beyond.

Our workshop focuses on three core concepts related to communication in a diverse society, and the list of the 35 Dumb Things Well-Intended People Say based on Dr. Maura Cullen's book. We hope that by understanding these core concepts and discussing the list of the 35 statements, the students will be better prepared to interact appropriately with individuals from different backgrounds. The level of understanding of the participants is measured through a pre/post test and a survey administered to all program participants. As a result of this valuable workshop, our students should:

- Define Diversity and its role in bridging the gap between people from different backgrounds.
- Demonstrate that even well-intended people may cause harm to others with words.
- Identify communication alternatives that should be used in response to the concepts that may widen the diversity

**Authors Corner**

Fan Phenomena: Supernatural

Zubernis L. and Larsen K.

Fan Phenomena: Supernatural is a book of recently published essays written by both fans of the television show and the cast and crew who make the show. Fans, actors and the show’s cinematographer analyze the appeal of Supernatural, now in its tenth season on the air. They explore the unique reciprocal relationship that has developed between the creative team and the fandom over the course of a decade. Edited by Dr. Lynn Zubernis, Counselor Education, and Dr. Katherine Larsen at George Washington University.

The First Brain

Pagán O.

Discusses why the planarian is a unique organism, and what role it has played in neurobiological research.

Accessibly written for the non-scientist reader, but contains enough detail to be useful for the scientific community as well.

Shows the variety of ways that the planarian has affected biology, zoology, and neuroscience.
iNOV8: Helping West Chester Become Innovation Ready

Penny C., McConatha D., Schugar J., and Schugar H.

Purpose: The goal of iNOV8 West Chester is to advance educational innovation and entrepreneurialism at West Chester University. Directed toward faculty, student, administrator and community collaboration, this project is designed to identify and create entrepreneurial opportunities, acquire resources, and build a greater understanding of the economic, career and social value of technological innovations using the most current technologies available.

Rationale: Without a doubt the educational and entrepreneurial marketplace is changing, and we need to prepare students for a future in the digital economy. Everyone acknowledges that the job market, and career opportunities, for our students has changed dramatically. Thomas Friedman, in a piece for the New York Times ("Need a Job? Invent It" 3/30/2013), observes that today’s students should be “Innovation Ready” And rather than forcing them to take existing jobs (assuming they’re open) we must also try to encourage them to consider the prospects for entrepreneurship -- students creating their own jobs -- as a great alternative and serious possibility for their future. There is no better niche now for entrepreneurship than in technology. Just think about the early adopters who created the innovative tools and apps of the last decade and how 10 years ago there was no such thing as “app development”. With novel technologies currently on the market now such wearable and 3D printers -- this project, and table display at WCU Research Day, hopes to assist in helping to invigorate faculty and students who are limited only by their own imaginations.
Oral Presentation Session 1:

Social and Behavioral Disciplines

When
10:45am—12:30pm

Where
Sykes 254

Featuring
Faculty and students orally present research ranging from childhood development to LGBTQ+ topics
10:45-11:10 AM

Adolescent exposure to community violence and depressive symptoms among adolescents and young adults

Chen W.

Background & Purpose: Although empirical studies have established the connection between adolescent exposure to community violence and the development of mental health issues, little is known about the type of community violence victimization experiences that lead to mental health service utilization, and at what life stage an individual might seek mental health services help. The present study aims to: (1) assess whether adolescent’s victimization is linked to mental health service use during adolescence and later in life after controlling for important background information; and (2) examine the role of mental health service use in attenuating the short term and long term negative psychological influences from these early adverse life experiences. Methods: Four waves of data from the National Longitudinal Study of Adolescent to Adult Health were analyzed with weighted mediation analyses to investigate the link between adolescent’s various types of community violence victimization, mental health service use, and depressive symptoms during adolescence and young adulthood respectively. Results: Associations between adolescent community violence exposure and mental health service utilization vary by types of exposure at various life stages. Use of mental health service did not significantly attenuate the influence from direct victimization on adolescent depressive symptom; however, a marginal mediating effect by adult use of mental health service was observed between combined adolescent victimization experience and adult depressive symptoms. Conclusions and Implications: These findings emphasize the need to distinguish productive gateways to adult mental health services while delineating comparable or unique strategies tailored to adolescents’ access to mental health services.

11:10-11:35 AM

Gender-based coping resources and challenges in a combat zone

Fisher K.

This exploratory study focuses on the lived acculturation experiences of United States (US) female career military expatriates who worked and lived in combat settings across five war zones. Based on an analysis of oral histories that spanned over 60 years, the research revealed that these pioneering women had a strong commitment to their profession, and that this, along with camaraderie, facilitated their adaptation to living conditions characterized by extreme danger, nominal domestic comforts, and unrelenting work requirements in culturally unfamiliar contexts. The research highlights the multiple physical and psychological stressors of living and working as a female in a war zone and the variety of coping strategies employed, particularly the prominent role of communication with family and friends, friendships with other military expatriates, and religion, as strategies for acculturation. As extant expatriate research has overwhelmingly focused on male executives in multinational corporations, this research is significant in extending the literature to an analysis of the public sector, specifically women deployed overseas in highly dangerous settings and who were pioneering in both their roles in the military and as non-traditional expatriates at a time when few women worked internationally.
11:35-12:00 PM

The Phenomenon of LGBT-Affirming Black Churches and their Responses to the HIV / AIDS Crisis

Lewis T.

There is a psychosexual health crisis in the African American community, with disproportionate rates of HIV / AIDS infections and poorer medical treatment outcomes for Black men and women. In contrast to the homophobic responses of most Black Churches, some Black Churches are offering an affirmative ministry for lesbian, gay, bisexual, and transgendered (LGBT) individuals. In this dissertation, I examined the development of these ministries and the responses to the HIV/AIDS health crisis. Using the Heuristic methodology, I explored the historical, theological, and practical dimensions of four Black Churches’ LGBT-affirming ministries. During a period of four to six weeks with each church, I conducted two narrative interviews with the pastors, 15 to 20 hours of observations, and a church documents review. Using narrative analysis and grounded theory, I analyzed the interviews, documents and observational field notes for evidence of the LGBT-affirming ministry. I constructed holistic profiles of each church and a composite profile of the four churches. All four pastors credited formal theological education, divine revelation, and personal experiences with the LGBT community as foundations of their LGBT-affirmative theologies. All four pastors wanted to provide a ministry that healed the psychological, spiritual, and physical harm that homophobic Black churches inflicted on LGBT Black individuals and their families. All four pastors wanted to discourage behaviors that contributed to the proliferation of HIV/AIDS. Each pastor offered LGBT affirmative strategies for decreasing LGBT stigmatization and HIV infections in the Black community.

12:00-12:25 PM

Mental Health Status and Mental Health Care Accessibility in LGBTQ+ College Students

Martin V. and Gatenby T.

The topic of this session is mental health status and access to mental health care for LGBTQ+ college students in Pennsylvania. The purpose of the session is to educate the audience on the health disparities which exist for LGBTQ+ college student. The authors’ research was conducted in collaboration with the West Chester University Summer Undergraduate Research Institute. The authors collected data on perceived mental health status and access to care through an online survey, distributed by LGBTQ student groups and service providers. The data from the survey was compared with data from state and national surveys of the general population. The study found that LGBTQ+ college students experience mental illness at a significantly higher rate than the general population, and experience lower access to care than the general population. The authors concluded that mental health service providers must reach out to the LGBTQ+ college student population, become culturally competent in LGBTQ+ student issues, and take steps to make their practice accessible to the LGBTQ+ college student population in order to decrease health disparities.
Parents' Perceptions of the Supports Received for Their Children's Problem Behaviors

Schofield D.

Individuals with intellectual disabilities (ID) are more likely to engage in problem behaviors than are people with milder disabilities or with no disability. It is widely considered that behavior problems serve a communicative function for individuals with severe ID and limited communication skills. Severe and chronic problem behaviors often interfere with a person's ability to learn, to participate in community events, and to enjoy a satisfactory quality of life. The individual's problem behaviors also affect family members and care-providers in similar ways. For both the family and the individual, there were disruptions in regular routines, social isolation, and reduced quality of life. This study involved six parents representing five different families of children with ID and problem behaviors whose ages ranged from 7 to 16-years-old. The interview data were examined to determine each parent’s perception of the behavioral support their child received; whether the parent was satisfied or dissatisfied with the behavioral support; and how well the support matched with their parental and familial values, skills, and needs. Results indicated that, parents’ perceptions generated four themes: (a) the children exhibited frequent challenging behaviors, (b) the parents desired support from trained professionals, (c) the parents reported feeling let down by support providers, and (d) the parents felt isolated, needing to take matters into their own hands to get behavioral supports. Implications for ways to provide behavioral support to families with members who have ID and problem behaviors are discussed. Suggestions for personnel who support families in similar circumstances are also provided.
Poster Session 2:

Humanities and Applied Sciences

When
1:30pm—3:00pm

Where
Sykes Ballrooms A-C

Featuring
Student Posters
Authors Corner
Videos
Displays
**Easel #1**

Seasonal Changes in Fitness Levels of Marching Band Members

Stevens W.C., Drozd N., Hunsinger A., Fattori N., and Yozviak A.

PURPOSE: The physical fitness level of marching band members was investigated over the course of one academic year to see if changes occurred. METHOD: Ten females and 11 males (19 and 22 years) were recruited during August’s “band camp”. These same subjects were retested in at season’s end in November. A subset (N=9, 5 males, 4 females) were tested the following April. The study had institutional IRB approval. BMI, waist-to-hip ratio and percent body fat were calculated from anthropometric measurements. CV fitness was estimated by the YMCA Submaximal Bike Ergometer test. Performance on the YMCA bench press, half sit-up tests and sit and reach was recorded. RESULTS: There was no statistical significance although trends can be noted. CV fitness decreased over time (25.5 to 22.9 ml/kg/min n=21; 25.4 to 22.5 to 22.1 ml/kg/min n=9) while upper body muscular endurance increased (14.6 to 16.9 reps n=21; 15.2 to 17.6 to 18.0 reps n=9). Core muscular endurance (43.5 to 44.1 reps n=21; 41.2 to 42.3 to 39.8 reps n=9) and flexibility (20.3 to 27.6 inches n=21; 20.1 to 24.3 to 20.3 inches n=9) both improved by the end of the season but levels fell in the spring. Measurements of percent body fat followed the same trends (20.5 to 19.1 %BF n=21; 20.5 to 18.3 to 19.4 %BF n=9). CONCLUSIONS: These results indicate that these band members start the season in poor shape, show some general signs of improvement (except CV fitness) but then regress close to original levels of fitness.

**Easel #2**

Wind, Ice & Bugs: Impacts on the Gordon Natural Area Ecosystem

Hertel G. and McMillin K.

On October 29, 2013 Hurricane Sandy moved inland and the result was 26 tree blowdowns in the Gordon Natural Area. That was fewer than expected, but it encouraged us to begin to monitor all live trees that come down from wind or ice storms. Since Sandy, we have recorded 40 additional tree falls. Tree species, diameter at 4.5 ft and total height are recorded. Carbon storage removal is determined and plant succession is being monitored. We also have the possibility to look at tree decay over time. A new tree planting policy was implemented in the spaces left by the tree fall. A much larger impact than wind and ice storms threatens the Gordon Area. It is the emerald ash borer, a beetle accidentally imported from China, and it will kill all of our 2200 white ash trees. A management plan has been completed and will be implemented in the spring of 2015.
Assessment of Articulatory Deficits in Individuals with Parkinson’s disease

McGonigle N. and Anand S.

Rationale: Parkinson’s disease (PD) affects speech production. Imprecision in consonant articulation has been reported as the hallmark speech characteristic in these individuals. Current rehabilitative programs for improving communication in individuals with PD largely emphasize on improving speech intelligibility. Detailed analysis of articulatory imprecisions is of principal significance because research suggests that articulatory disturbances predominantly affect judgments of speech intelligibility. Aim: Given that articulation and speech intelligibility are highly correlated, the purpose of the present study is to characterize and quantify articulatory deficits in individuals with PD. Methods: Two participants with PD and two age-matched healthy controls will be recruited for the current study. All participants will read “The Grandfather Passage” (Van Riper, 1963). Speech samples will be recorded using a digital sound recorder fitted with a head-worn microphone in a sound treated room. For acoustic analysis, we will use “cepstral” coefficients to quantify the range and rate of articulatory movements. For phonemic analysis, we will assess overall consonant accuracy, relative frequency of specific error subtypes (e.g. substitution error, “wed” for “red”). We will quantify the proportion of errors occurring in different word positions (e.g. initial vs. final). Results & Discussion: It is hypothesized that individuals with PD will demonstrate a significant reduction in measures of articulatory range and rate. It is also hypothesized that the type of consonant imprecision will be unique for individuals with PD. Results will be discussed based on physiological underpinnings and clinical implications. These trends will be further investigated with a larger population in future studies.

Data Mining for Important Trends in Stream Water Quality

Shorten C., Baylor K., Michini T., Primavera F., Schweitzer K., Smith A., and Whelan K.

During the fall semester 2014, students in Environmental Health at West Chester University examined water chemistry in PA and NJ rivers and streams to assess the effects of site geography and regional activities. Specifically, variables including the presence/absence of hydrologic fracturing near monitoring sites, golf course runoff, runoff from road de-icing chemicals, urban/suburban watersheds and deposition of persistent organic compounds were investigated. Each project used statistical techniques such as linear regression, ANOVA, two-sample or paired-t tests to determine significant relationships. Each project also attempted to systematically assess the effects of potentially confounding variables in data interpretation. These projects are important because students learn about and direct the entire research process from problem formulation through data collection, analysis, interpretation and presentation.
Easel #5

A Teaching and Learning Tool for Student Teachers

Gedge K. and Gaffney D.

Our poster shows the template that the Secondary Social Studies Education program developed to guide student teachers to more effective lessons in all ten National Council for the Social Studies social science themes. We developed it with the help of instructors, supervisors, and co-operating teachers in the last five years and implemented it in the Secondary Social Studies Methods course and in the student-teaching internship. We collected and analyzed data for five semesters and earned National Recognition for our program. One of our students used the template with particularly effective results this fall, 2014, and will share her positive experiences using it to plan and assess lessons for her 7th grade US History class.

Easel #6

AR as Digital Ekphrasis

Fletcher R.

With the development of ubiquitous computing, the Web 3.0, and the so-called "internet of things," the implications of augmented reality (AR) for our understanding of digital storytelling and post-human subjectivity have begun to preoccupy a number of cultural theorists and artists. AR routinely elicits ambivalent responses of fascination and fear. This uneasiness recalls one that has been attached to the rhetorical trope of ekphrasis, the verbal representation of a visual representation. Augmented reality offers a platform for understanding the complexities of what Cecilia Lindhé has termed digital ekphrasis, and the research behind this poster presentation explores both the production and the criticism of Augmented Reality texts, the most intriguing example of which is the AR poem "Between Page and Screen," by Amaranth Borsuk and Brad Bouse.

Easel #7

Fat or Carbohydrate Oxidation during the Alpha Cardio Focus T25 Workout: A Pilot Study

Jones H. and Whidden M.

The Shaun T Alpha Cardio Focus T25 workout is a 25 minute high-intensity aerobic workout. It is promoted as a calorie-burning, sweat-drenching workout designed to burn fat. However, the standard exercise prescription for metabolizing fat is moderate intensity for a prolonged period of time (>30 minutes). PURPOSE: The aim of this pilot study was to examine fuel oxidation and the lactate threshold in fit individuals during the alpha cardio Focus T25 workout. METHODS: Six active college-aged students performed the Focus T25 workout every other day for one week and data was collected on the third day. Subjects followed the Focus T25 DVD and performed moves like jumping jacks, pivot lunges, heel taps, lateral sprints, mountain climbers and control squats. Subjects moved for the full 25 minutes. Heart rate (HR) and non-
protein Respiratory Exchange Ratio (npRQ) were measured every 30 seconds using a k4B2 mobile metabolic analyzer. Blood lactate was analyzed at 3 minute intervals via a finger prick and Lactate Plus analyzer while ratings of perceived exertion (RPE, 1-10 scale) were recorded every 5 minutes. RESULTS: Heart rate increased dramatically within the first few minutes of the workout and came close to reaching maximum levels via the standard maximum heart rate equation. Highest HR averaged 182 ± 14 bpm. The average npRQ during the workout was 0.95 ± 0.14, indicating primarily carbohydrate oxidation. Blood lactate levels averaged 5.2 ± 0.65 mmol/L just 4 minutes into the workout and peaked at 10 ± 1.44 mmol/L 12 minutes in. Subjects reported the highest RPE (6 ± 2) during the last ten minutes of the workout. CONCLUSION: This preliminary study indicates that individuals who perform the Alpha Cardio Focus T25 workout will 1) exercise at a high-intensity, 2) primarily burn carbohydrates, and 3) possibly feel the sensation of fatigue rather early into the workout.

Easel #8

Enhanced algal growth on bio-electrochemically derived biogas

Pisciotta J. and Panov N.

Industrial growth over the last one hundred years has caused an increase in human dependence on cheap, available sources of fossil fuel energy. The finite nature of fossil fuels presents an unsustainable long-term model for energy sourcing that is compounded by climate change. Sustainable, alternative methods for producing energy-rich fuel are needed. Deriving biodiesel from algae is one option. The low concentration of carbon dioxide in air (0.04%) is a challenge. Strategically sourcing cheap CO2 to reduce input costs could give momentum to the nascent algal biofuel industry. Recent developments in electrically-boosted anaerobic digestion technology have made it possible to accelerate biogas production from waste. Utilizing biogas for its high carbon dioxide content (up to 40%) can facilitate growth of algae, while cutting operational costs. To explore if algae can be grown on bioelectrochemically [BEC] generated biogas, we examined the effect of [BEC] biogas on the growth rate of Chlorella sp. Results showed growth rate on BEC-derived biogas was comparable to growth rate of Chlorella sp on 10% carbon dioxide and significantly greater than on air alone. Data supports further exploration of utilizing biogas as a cheap source of carbon dioxide for enhancing the growth of algae.

Easel #9

Spanish Noun Phrase Elaboration in Spanish-English Bilingual Children

Swasey Washington P. and Iglesias A.

This study examined the development noun phrase elaboration in the Spanish of kindergarten to third grade Spanish-English bilingual children. Participants were 70 typically developing Spanish-English bilingual children in kindergarten (13), first (18), second (20), and third grade (19) enrolled in transitional bilingual programs in Texas. Each child produced at least one story retell narrative. Narratives were digitally recorded and transcribed by trained assistants using the Systematic Analysis of Language Transcripts (SALT) conventions for bilingual samples. Several types of noun phrase elaboration were examined. Statistical analysis was conducted
using a One Way Analysis of Variance (ANOVA). Consistent with our hypothesis only certain types of noun phrase elaboration increased with grade. These preliminary data could be used to inform future studies on noun phrase elaboration with Spanish-English bilingual children, as well as assist in identifying targets for evaluation and intervention.

**Easel #10**

Case study of the effects of road salt usage by WCUPA on adjacent waterways

Crossney K. and Griffiths J.

Determining the effects of WCUPA’s use of road salt on water quality in the Plum Run is critical to ensuring the viability of the Brandywine Creek Watershed. Since stream water conductivity reflects landscape and anthropogenic interactions (Scott et al 2014), obtaining specific conductivity data for the study area was absolutely critical. This data is made available through WCU’s Department of Environmental Health and Sciences. The Department has installed stream monitoring equipment that measures temperature, pH levels, turbidity, and specific conductivity (mS/cm) in both the east and west branches of the Plum Run, a first order stream that serves as a tributary to the Brandywine Creek located in southeastern Pennsylvania. One significant limitation to this dataset however is that water quality data is only available between January 2012 and October 2013, offering only a limited window of available water quality data. Because mS/cm is a practical indicator of the presence of chlorides in water it will be useful in comparing periods of climatic anomalies to spikes in mS/cm, in order to better understand whether or not a relationship exists. WCU is located at the headwaters to the Plum Run and the west branch of this stream originates in storm water sewers underneath WCUPA. Whatever chemicals are applied to the roads, walkways, and grounds have the potential of being transported downstream by means of storm water runoff. Campus maintenance records and road salt application methods are also reviewed to determine how much road salt was used each year of available data and then compare that to an estimation of the total square footage of impervious surface on campus. Doing this may help to contextualize the amount of salt being used per square foot, per student, per school day, etc. It will then be necessary to identify WCU’s current salt use practices, mitigation techniques, as well as any infrastructure being utilized to manage storm water runoff and compare its salt use practices there is potential to gain valuable insight into the campus’s impact on the environment. Additionally, by identifying winter maintenance practices in need of improvement, there exists an opportunity to reduce the amount of road salt being applied on campus and thus improving the water quality of Plum Run and the Brandywine Creek.

**Easel #11**

The Drop: A Descent from "Living In" to "Living Over" the World

Holmes J. and Eltringham K.

As observed by various 20th Century philosophers, many milestones in the zeitgeist modern thought are indebted to the works of the ancient Greek Socratics whose scientific approach to philosophy created systems of categorization of nature and the natural world. As pointed out by
the late 20th Century British thinker Alan Watts in his text Nature, Man, and Woman, there is a significant folly to the rigidity of this system: classifying and exerting dominion over nature and the facets of the natural world significantly detracts from one’s ability to appreciate them. He cites Christianity as a vile culprit, using the story of creation in Genesis as serving as an impetus for man not to live in the natural world, but to exercise ownership over a planet that he was created being inherently superior to. A similar trend can be found in a different vein of thought with the German Martin Heidegger’s 1927 work, Being and Time. He attempts to construct his own system of ontology, stating that the work started by the Socratic school starts a plummet for ontological studies. Heidegger firmly asserts that the likes of Aristotle, with his scientific approach to categorizing nature through concepts of recognizable forms are a step in the wrong direction from thinkers like Heraclitus, whose notion of Panta rhei depicts a human race in unity with the natural world, as his aphorism is denoted as “everything flows.” Heidegger’s works aside, Heraclitus’ fragmented text, entitled Logos, sets ups a structure for an objectively knowable universe with true knowledge, championing empirical observation. Getting back to Heidegger, this “drop” from the philosophy of a thinker like Heraclitus establishing that man should live in nature as opposed to an Aristotelian living over nature separates many different thinkers, and the likes of Heidegger and Watts, as different as they appear at first, both appear to be in-line with Heraclitus and Xenophanes, as well as the Milesian school of thought that proceeded them both in an attempt to appreciate the beauty of the natural world, as they once did centuries ago.

Easel #12
From Submission to Publication: College Literature Models an Essay’s Progression

MacPhee G., Grzybowski M., and Mathews L.

In this poster presentation, graduate assistants from College Literature will outline the process of publication in scholarly journals for WCU students and faculty. Published since 1974, College Literature is a journal of critical literary studies published by West Chester University in partnership with Johns Hopkins University Press. Using the College Literature submission, review, and acceptance process as a model, the GA’s will explain the journal’s double-blind peer review, editorial process, and manuscript revision. The poster presentation will both clarify the publishing process and adjust potential misconceptions about publication. This poster presentation is particularly relevant for those students who plan to advance in their academic careers because they will likely be expected to publish in their fields. Equally, the poster aims to give faculty a better understanding of the mechanics of the editorial process.

Easel #13
Photosynthetic gas exchange in serpentine barren grasses and an encroaching vine in southeastern PA

Havrilchak N. and Schedlbahr J.

Remaining serpentine barren grasslands in the Mid-Atlantic region are threatened by forest encroachment, often preceded by invasions of dense waves of Smilax rotundifolia. Grassland
invasion by this vine, which typically grows in the shaded forest understory, likely modifies the light and edaphic environment for grass species specializing in this unique ecosystem, thereby altering photosynthetic efficiency of these species. We examined changes in photosynthetic gas exchange parameters of S. rotundifolia growing in shaded understory and open grassland encroachment areas, as well as Schizachyrium scoparium and Sorghastrum nutans growing in open grassland and in areas overtopped by S. rotundifolia throughout the 2014 summer growing season at three sites in southeastern Pennsylvania. Net photosynthetic rates of S. rotundifolia declined over the growing season and were considerably greater in grassland plots, while net photosynthesis of S. rotundifolia in shaded plots remained stable throughout the summer. Net grass photosynthetic rates were strongly affected by month of study with values plummeting in July. Water use efficiency declined in all species throughout the summer growing season. The only species that demonstrated a difference in water use efficiency by light environment was S. scoparium, with plants performing better in overtopped plots. Smilax rotundifolia likely benefitted from increased light availability early in the summer, allowing for increased photosynthetic capacity and efficiency, ultimately aiding the species’ spread into open grassland. Since photosynthesis in the grasses was unaffected by light environment, it is likely that barrens encroachment is largely driven by the growth potential of S. rotundifolia.

**Easel #14**

Campus Sustainability Map: A User Driven Approach for Identification and Display

Crossney K. and Ryck B.

Environmental stewardship plays an important role in the current operation and future of our campus. This sustainability map recognizes the numerous sustainable initiatives in place across campus, demonstrating the diversity in location and type. Student, faculty, and community members will be able to more readily identify and recognize the role of sustainability. Key sustainability features on campus are: the geothermal pump station, Swope School of Music and Madeline Wing Adler Performing Arts Center (LEED Silver), green roofs, Outdoor Classroom Laboratory Garden, public transit, ride share, storm water basins and polisher, and the Golden Rams Trail. These features provide a comprehensive view of sustainability on campus in the forms of energy efficiency, education, and recreation. Data has been collected from the WCU Facilities, Green Legacy Project and Sustainability Advisory Council (SAC). The current map relies on data collected between 2009 and 2013, but lies the groundwork for crowdsourcing of data, and the potential for the development of even more sophisticated mapping efforts. An interactive map will eventually be housed on the SAC website with selectable layers detailing the different components of campus sustainability efforts, and links to photographs. This will allow students, faculty, and community members to further conceptualize the impact our efforts as a campus make on our surrounding environment, and to allow users to contribute to the data collection and representation as well. The goal of this map and database is to first serve as a repository of information for educational purposes related to sustainability and WCU. It is hoped that this map will be inspiring and the increased awareness will lead to crowdsourcing for more data as well as for leveraging existing resources and initiatives.
Health Literacy of Undergraduate College Students across a Range of Majors

Joseph R., O’Brien K., and Hyers L.

Overview  Health literacy is “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions,” and about 90% of Americans have some problems with health literacy (America’s health literacy, 2008). Limited health literacy has been associated with poor health outcomes and an increase in health care costs.  Purpose: To explore the health literacy level in American college students across a range of majors at a medium-sized state university. We hypothesize that health literacy will not be at 100%, and that it should be higher in health related majors.

Methodology: Undergraduate students from WCU were the participants in this descriptive study. They completed a consent form, demographic questions, and the Newest Vital Sign, a validated health literacy measure. Two hundred and thirty five students (M=83, F=152) participated in the study. The students represented Caucasians (176), African Americans (31), Asians (9), and Hispanics (19). All academic majors were represented including 21 students from Nursing.  Results: Acceptable health literacy scores were noted in 88% of the undergraduate students. There were no gender or ethnic differences in health literacy scores. Students in health-related majors had statistically significant higher health literacy scores than non-health majors.  Conclusion: The emerging young adult graduates must be properly supported to acquire higher level of health literacy for self-care and supporting others in the community. Results are discussed with regard to knowledge across majors and the impact of health literacy on personal wellbeing and health care expenditures.

Consuming a vegetable-based beverage improves cycling time to exhaustion

Karpinski C. and Reed M.

Introduction: To investigate the effect of a vegetable-based beverage on time to exhaustion following glycogen-depleting exercise and a four-hour recovery period. Methods: Twenty-eight trained endurance athletes between the ages of 19 and 50 years participated in this randomized, crossover study. Participants completed three submaximal experimental trials that consisted of a glycogen depletion session, a four-hour recovery, and an endurance trial on a cycle ergometer. Vegetable juice (VJ), a commercial sports drink (CD), and flavored water (FW) were randomly assigned to each participant for each of the three trials that provided 1.0 g CHO/kg of body mass (BM) or the placebo (FW) immediately after and at two hours into recovery. Blood lactate, blood glucose, perceived exertion, mood, appetite, and GI distress were measured. Results: Analysis revealed an interaction effect between endurance trial time and the type of beverage consumed (F = 6.05, p =0.046). Mean endurance trial time to fatigue for VJ, CD, and FW was 26.7 (SD = 14.69), 26.3 (SD = 15.14), and 21.5 (SD = 11.96) minutes, respectively. Dunnett’s test determined VJ and FW were significantly different. Mean post-endurance trial blood lactate levels were significantly lower for FW than both VJ and CD (F = 6.05, p =0.005). Mean post-endurance blood glucose level was significantly lower for VJ than
FW (F = 4.28, p = 0.019), but not CD. Conclusion: The results of this study support the recovery effects of a novel vegetable-based beverage to support recovery and subsequent performance.

Easel #17

Non-communicable diseases: The importance and urgent need for intersectoral action

Adegboyega O. and Sankaran G.

Introduction: Non communicable diseases (NCDs) are emerging as a major burden to population health. They are reportedly responsible for 36 million deaths annually of which 80% occur in low- and middle-income nations. Rapid increase in NCDs impose large human, social and economic costs, putting additional pressure on already overstretched health care and social support systems, especially in resource poor settings. Purpose: The purpose of this research was to find out the role of intersectoral action demonstrated through policies and programs that best address the reduction and elimination of modifiable contributory risk factors for NCDs. Methodology: An analysis of current policies associated with control and management of NCDs at country level, using data from international civic and development organizations, national health ministries, and peer-reviewed literature was undertaken. Results: Social determinants (such as inequalities in education, income, housing, environment, nutrition, etc.) are beyond the scope of the individual and his/her lifestyle factors. Empirical data reveal that the web of causation for NCDs can only be partially addressed by modification of risk factors at the individual level. Addressing NCDs through intersectoral action (involving health and non-health sectors such as education, labor, agriculture, etc.), is now recognized as an effective approach at the highest political and policy levels. Conclusion: A collaborative and coordinated action among different sectors that leads to synergistic effect towards addressing modifiable risk factors for NCDs is essential. Such actions need to be urgently undertaken in populations that are at greater threat for enhanced morbidity and mortality from NCDs.

Easel #18

Characterizing the expression of folic acid metabolism genes in the frog Xenopus laevis

Bianchino P. and Sullivan-Brown J.

Neural tube defects are the second most common type of human birth defects. Neural tube defects are structural defects of the central nervous system that result from the disruption of neural tube closure during embryonic development. Neural tube closure is guided by complex interactions of environmental and genetic factors. Epidemiologic studies have identified folic acid as a primary prevention strategy for neural tube defects. However, the mechanisms through which folate influences neural tube closure remain unclear. Previous studies have indicated that some folic acid metabolism genes are highly expressed in the neural tube, but a comprehensive analysis of all folic acid metabolism genes is unavailable. By using RNA in situ hybridization studies, I will analyze the expression of folic acid metabolism genes in the frog Xenopus laevis. X. laevis is often used as a model system for studying neural tube defects because many of their genes are largely conserved, as well as the cellular changes and
molecular mechanisms that drive neural tube closure. The experiments described in this proposal represent important steps toward understanding the roles of folic acid in the neural tube.

Easel #19

Knowledge and Perceptions of Genetically Modified Food in Adults Who Work in Corporations

Corrato G.

Studies have shown that consumer awareness of the presence of genetically modified food is low and knowledge of the matter is minimal. It is important to assess the awareness, knowledge, and attitudes of consumers because there is a high level of public disagreement amongst many stakeholders of genetically modified food in terms of labeling regulations and impacts to human health and the environment. Understanding consumers' attitudes towards genetically modified food is important to the biotechnology industry, food manufacturers, food retailers, and for public policy. Focusing the public's attention on agricultural biotechnology would ultimately allow decision makers to recognize the current state of public knowledge and perceptions about genetically modified food, which would help to lay the foundation for the development of specific programs aimed to increase consumer awareness and knowledge of genetically modified food and the biotechnological process behind. The goal of this research study was to determine awareness, knowledge, and perceptions of genetically modified food in target audience of adults who work in corporations. A cross-sectional survey was used with 50 participants, consisting of the corporate clients of AREUFIT Health Services, Inc. with questions from a previously existing national study. Results indicated that despite the ubiquity of genetically modified food in the marketplace, adults who work in corporations have minimal knowledge and awareness in regards to the topic of genetically modified food. The majority of participants think that foods containing genetically modified ingredients should be labeled as such, and participants have some negative perceptions of genetically modified food, regardless of their minimal knowledge and awareness of the topic. Participants also expressed greater support for the genetic modification of plants as opposed to animals. It is apparent there is a need for public education regarding biotechnology and genetically modified food. Further studies should be conducted, particularly with a broader population, and perhaps conducted outside of the Greater Philadelphia Area.

Easel #20

Using the roundworm C. elegans to study the effects of nutrients and cognitive functions

O'Donnell J. and Sullivan-Brown J.

We are interested in studying the effects of folic acid and cognitive functions. Because folic acid is known to decrease the incidence of neural tube defects, the fortification of many grain food products with folic acid is mandated. However, the relationship of folic acid and cognitive functions like memory and learning are not well understood. The roundworm Caenorhabditis elegans is an ideal model system for behavioral studies due to its simple, transparent and easily manipulated form. We will alter levels of folic acid in C. elegans and determine if cognitive
function is altered. The goals of our research are to better understand the role of folic acid during memory and learning, and how dietary specifications impacts this process.

**Easel #21**

Effectiveness of the Learning to BREATHE Program on Emotion Regulation in Adolescents

Metz S.

The purpose of this study was to assess the effectiveness of the mindfulness-based training program *Learning to Breathe* on adolescent emotion regulation, perceived efficacy in affective regulation, perceived stress, and somatic symptoms. Participants included 216 regular education high school students who participated in the *Learning to Breathe* program or business-as-usual comparison condition. Results of MANOVA analyses followed by univariate tests demonstrated that students who participated in the *Learning to Breathe* program reported significantly lower levels of perceived stress, \( F(1, 211) = 8.075, p < .01 \) and psychosomatic complaints, \( F(1, 211) = 4.131, p < .05 \), and higher levels of efficacy in affective regulation \( F(1, 211) = 19.682, p < .01 \). Students in the treatment condition also evidenced significant larger gains in several emotion regulation skills including emotional awareness, \( F(1, 211) = 5.900, p < .05 \), access to regulation strategies, \( F(1, 211) = 4.1418, p < .05 \), emotional clarity, \( F(1, 211) = 3.924, p < .05 \), and overall emotion regulation, \( F(1, 211) = 5.441, p < .05 \). Overall, participants found program content and activities to be highly acceptable and socially valid. These findings provide favorable evidence of the effectiveness of *Learning to Breathe* on the development key social-emotional learning skills during adolescence. Implications and directions for future research are discussed.

**Easel #22**

The Meaning of Clinical Competency: Prelicensure Baccalaureate Nurse Faculty and Nurse Managers

Meehan C.

Despite the vital nature of the concept of clinical competency, especially in its relation to the quality of patient care that nurses provide, there is not a widely accepted understanding of the term between the theoretical and clinical camps in nursing. Consequently, there is a continuous struggle to set standards to measure clinical competency in undergraduate nursing students. This imprecise understanding of clinical competency widens the gap between education and practice. When prelicensure baccalaureate nursing faculty and acute care nurse managers share expectations of what constitutes clinical competency in nursing students, that gap may be bridged. A shared understanding of the meaning of clinical competency through a qualitative interpretive descriptive study will help to delineate the meaning of clinical competency. Participants will include prelicensure baccalaureate nurse faculty and acute care nurse managers. The setting for this study will be mutually agreed upon and determined by the participants and the researcher. Data will be collected through semi-structured interviews with the participants, and analyzed through a constant comparative analysis. Finding a clear, distinct, and concise understanding of what constitutes clinical competency in nursing students
is critical to nursing science. It fosters a shared view of standards and performance that more clearly defines a vitally important term used in the process of evaluating nursing students by prelicensure baccalaureate nursing faculty and acute care nurse managers. Moreover, a consensus of the meaning of clinical competency will enable further research in nursing to establish the most objective means of measuring clinical competency in education and practice.

**Easel #23**

An Observation of Fruit and Vegetable Plate Waste among Students at Great Valley School District

Handforth K. and Gilboy M.

Purpose Recent changes to the National School Lunch Program requires children to choose either a fruit or vegetable at lunch. The purpose of this study was to assess the fruit and vegetable plate waste at Great Valley School District across factors including grade, grade level, gender, and school. Methods A previously-validated digital photography method was used to collect fruit and vegetable plate waste data at two elementary schools, one Middle School, and Great Valley High School. Post-consumption photographs were compared to photographs of pre-portioned standard servings. Estimations of fruit and vegetable consumption were rounded to the nearest 10 percent. Differences in consumption related to grade, grade level, gender, and school were ascertained using one-way parametric and nonparametric analysis of variance (ANOVA). Results High school students had significantly higher consumption of whole fruit and cut fresh fruits than elementary and middle school students ($p = 0.000$, $p = 0.000$). Conversely, elementary school students consumed significantly more fruit juice than older students ($p = 0.004$). Finally, young elementary school students (grades 1-3) and middle school students (grades 6-8) had significantly lower consumption of cooked vegetables than older elementary school students (grades 4&5) and high school students ($p = 0.018$). Conclusion The results of this study may be used to influence nutrition professionals to adopt alternative fruit and vegetable menu items for elementary school students in order to increase consumption. A self-serve fresh fruit bar is an example of a successful strategy to increase fruit at the high school level.

**Easel #24**

Evaluation of Youth Mental Health First Aid Training in Coatesville, PA: Preliminary Results

Metz S. and Casola A.

Children living in the Coatesville Area School District (CASD) are disproportionately impacted by child neglect, abuse, and delinquency issues including drug, alcohol, and assault offenses. Likewise, the publicly accessible Pennsylvania Youth Survey 2009 and 2011 data demonstrated that in comparison to Chester County as a whole, there is a higher percentage of youth from CASD who do not graduate from high school and report feeling depressed/sad on most days in the past month. Therefore, the Brandywine Health Foundation in collaboration with regional partners has implemented the National Council on Behavioral Health’s Youth Mental Health First Aid (YMHFA) training program in Coatesville, PA. The YMHFA is an in-person 8-hour educational training program designed for adults to learn about mental illnesses and addictions,
inclusive of warning signs, risk factors, and ways to bolster confidence in helping youth aged 12-18 with a mental health or substance use problem. The purpose of this initial analysis was to assess the effectiveness of the YMHFA program on adult attendees’ pretest to posttest mental health knowledge, attitudes, and confidence in dealing with youth experiencing mental health problems and challenges. Participants included adults living, volunteering, or working in Coatesville, PA, with many employees of CASD. Preliminary evidence demonstrated moderate statistical improvements in mental health knowledge, attitudes, and perceived confidence in dealing with youth experiencing mental health issues. Moreover, participants found program content and activities to be highly acceptable, with the majority recommending the program to others. These findings provide promising evidence of YMHFA program effectiveness. Implications for program improvement are discussed.

Easel #25

The roles of folic acid during development in the roundworm C.elegans

Thiel R. and Sullivan-Brown J.

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 in 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 C. elegans. Furthermore, C. elegans is a simplified system, with a functional folic acid pathway that we are able to observe and study. To begin our research, I identified folic acid metabolism gene homologs in C. elegans. We will disrupt folic acid metabolism gene homologues, and observe the phenotypes which are produced. This phenotypic characterization 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 #26

Qualitative Analysis of Nutrition Education Provided by Supermarket Registered Dietitians

Clarke K. and Davidson P.

Background: A healthy diet is at the core of prevention and management of chronic disease but it is difficult for people to implement. In response to this, many food stores have employed Registered Dietitians (RD) to assist their customers in meeting their nutrition and diabetes education needs. The purpose of this research was a qualitative analysis of the impact of alternative nutrition education as provided by supermarket Registered Dietitians. The inclusion criteria included being a RD, employed at a supermarket. Methods: The role and efficacy of the RD for nutrition education was obtained from responses of a focus group composed of a snowball sampling of RDs drawn from a 100-mile radius of West Chester Pennsylvania. A range of six to ten RDs participated in each focus group. A structured set of questions was used for
each session, with allocated time to ask spontaneous questions allowing for clarification and discussion from the participants. Results: 73% of the available supermarkets employing RDs were represented in the study. The focus groups were audio taped and analyzed utilizing qualitative analysis software to determine themes. Themes identified included demographics of the population, dietitian, and the store; intervention and promotional procedures; and the store’s outcome measurements. Conclusion: Supermarket RDs are important in improving self-management of chronic diseases. Their services include point-of-sale education and individual or group consultations. Due to the rapid increase in obesity and diabetes, more research is needed for exploring alternative nutrition education avenues.

Easel #27

Tuberculosis practice patterns of pharmacies and urgent care facilities in Chester County

Dhananjaya M., Achenbach J., and Sankaran G.

Background: Latent TB infection (LTBI) is a major challenge among racial minorities and recent immigrants to the United States. The lifetime risk of reactivation of LTBI to an active tuberculosis (TB) disease, for individuals with positive PPD skin test, is 10-20%. The Centers for Disease Control and Prevention, Division of Tuberculosis Elimination recommends diagnosis and prophylactic treatment of LTBI among high-risk groups to prevent reactivation. Purpose: This project aims to identify all retail pharmacies and urgent care facilities in Chester County that provide PPD skin test, assess the knowledge of providers about LTBI, analyze patterns of their TB focused practice, and determine their use of Chester County Health Department’s (CCHD) TB clinic as a referral source. Methodology: In January-February, 2015 a pre-tested, 32-item self-administered survey covering TB testing and referral practices will be offered to providers in facilities that offer PPD skin test in Chester County. Data collected will be analyzed using SPSS (version 22.0) statistical package. Results: Knowledge about LTBI and TB clinical practice characteristics including TB testing, follow-up after positive PPD, and referral to CCHD TB clinic will be analyzed. Conclusion: The findings will provide CCHD with the needed baseline to develop a plan of action to address barriers and gaps in TB prevention and control practices. This plan, when implemented, will increase awareness of CCHD TB clinic services, and promote a partnership between CCHD and pharmacies and urgent care facilities to work together to eliminate TB from Chester County.

Easel #28

Implementation Process of the Prevention of Diabetes Evidence Based Practice Guidelines (EBPG)

Davidson P.

Background: Implementation research has been limited by a lack of objective methods for comparing clinical care to EBPG, and self-reports of implementation are subject to social desirability bias. Our objective was to create a process measure by translating EBPG recommendations into expected care plans (ECP), a standard against which practiced care could be compared. Methods: Six experts in EBPG development, the Nutrition Care Process
(NCP) and its standardized terminology, and diabetes care mapped each of 13 intervention recommendations of the EBPG for Nutrition in the Prevention of Type 2 Diabetes to ECPs. Each complete ECP consisted of NCP term options for clinical assessments, nutrition diagnosis, intervention, and desired outcomes. ECPs were drafted initially for high sensitivity (selection of many terms to capture all possibilities that represent care reflective of the EBPG) by individual experts and progressed through small group review to full panel consensus. Draft ECPs were refined for specificity (reducing risk of false positives—care that matches the ECP but does not reflect the EBPG) and distinctiveness (reducing overlap across ECPs for similar recommendation) by repeating the three-stage review process. Results: Final ECPs contained 13.3±2.5, 4±2.63, 26.9±8.5, and 8.2±5.8 options (mean±standard deviation), representing 3.3%, 3.0%, 21%, and 2.6% of available NCP terms for assessments, diagnoses, interventions, and outcomes, respectively. Conclusion: Defining ECPs a priori reduces the risk of confirmation bias when making such comparisons. Evaluations of knowledge and care prior to and after dissemination interventions can be used to quantify the relationships between changes in knowledge and care to evaluate implementation and guideline efficacy.
Oral Presentation Session 2:

Humanities and Applied Sciences

When
3:15pm—4:30pm

Where
Sykes 254

Featuring
Faculty orally present research ranging from martial arts to memory activism
The Impact of a “Healthy Body Program” on First-Year College Students

Monahan L.

Background Overweight and obesity in the United States is epidemic in adolescents and young adults. The transition from high school to college is a critical period for weight management and health promotion interventions as it is a time of developing beliefs, support systems and lifestyle behaviors. Objective Among first-year WCU college students, what is the impact of a 12-week, peer-led program on anthropometrics and Social Cognitive Theory (SCT) diet and physical activity constructs? Design Prospective, randomized, controlled design. Intervention/Participants Weekly online health bulletins and in-person education sessions with nutrition peer educators. Fifty-seven students completed the study (n = 31 Intervention, n = 26 Controls). Outcomes SCT constructs: self-regulation, social support, self-efficacy, outcome expectations and anthropometric measurements: weight, percent body fat, percent lean body mass, waist circumference at baseline and 12-week post-intervention. Statistics Repeated measures analysis of variance (ANOVA). Results Intervention decreased calories and fat (p=0.034) and negative expectations for physical activity (p=0.028). Significant increases in both groups for self-regulatory behaviors: decreasing calories and fat (p=0.001), planning/tracking diet (p=0.001) and self-efficacy behaviors: planning/tracking diet (p=0.019), increasing fiber, fruits, vegetable intake (p=0.039). Independent of group assignment, weight (2.46 lbs., p=0.000), percent body fat (1.03%, p=0.002) and waist circumference (1.05 in., p=0.000) increased significantly with a decrease in percent lean body mass (1.05%, p=0.002). Conclusions A 12-week, SCT-based, peer-led intervention increased diet self-regulation and decreased negative physical activity expectations in first-semester college students compared to controls. Self-regulation may be an important component of health interventions in college students.

“New Directions, New Questions: Memory Activism in the Argentine Post-Dictatorship”

Corbin M.

From 1976 to 1983 Argentina experienced a brutal military dictatorship that secretively disappeared, imprisoned, and tortured thousands of citizens. Since that time, the country has struggled to recover the “truth” and historical memory of that past. The initial turn to recovering these truths through the voices of survivors (through their testimonies) has, in recent years, morphed into a focus on recovering past spaces of violence – former detention and torture centers – in an effort to create spaces of memory to be used to transmit knowledge about the horrors of the dictatorship on to future generations. In 2013, a group called “Huella Digital,” in collaboration with the government program the Instituto Espacios Para la Memoria (IEM) created a website that allows viewers all over the world to interact with one of the most famous former torture centers in Buenos Aires: The Escuela de Mecánica de la Armada (ESMA). Similar to the previously existing Google Earth Project, traumatourism.net, this 3D re-creation of the ESMA facilitates cybervisits to the former torture center and exemplifies the recent “connective turn” (Andrew Hoskins) in the interaction between technological advances and memory studies.
This presentation examines the turn away from classic forms of testimony and toward cyberspace as a new venue for recovering the past, using the cases of the ESMA in 3D and the Google Earth Project traumatourism.net to discuss the ethical questions posed by this new horizon of memory activism in Argentina.

4:05-4:30 PM

The Six Pillars of Martial Arts Identity

Metivier S. and Di Giovine M.

This paper examines martial arts cultures in America, paying particular attention to the diversity of Chinese kung fu schools in the area. Based on year-long ethnographic research (participant observation, interviews, and kinship elicitation) at a local kung fu school, and supported by a West Chester University grant, I argue that American martial artist identity is used as a vehicle to navigate fields of uncertainty in the post-modern era. This process of identity creation is predicated on shifting notions of authenticity, ethnicity, kinship, ritual, heritage, and communitas; these notions provide the foundation of what I refer to as the six pillars of the American martial artist identity. Vacillating between stability and precarity, these six pillars are created and sustained through the transmission and enactment of ideas and behaviors that are mythologically established and performed. Furthermore, it becomes apparent that mechanisms of the 20th and 21st century have become so engrained in the American martial arts culture that globalization and cultural diffusion is a common feature and has had an important impact in shaping these cultural actors. Through my participant observation and interviews, I will reveal the rich narratives, and emphasize the voice and feelings, of those who participate in this culture as important contributions to the discourse, particularly as they appropriate new cultural conceptions into their mythology. The lives of these individuals revolve around many aspects that provide economic, mental, and physical dangers, but within these spheres of precarity the formation of an identity is devised and performed.
Demonstrations and Video Presentations

When
3:15pm—4:30pm

Where
Sykes 210

Featuring
Faculty and students present research using multimedia and demonstrations
3:15-3:40 PM

Goin’ North: The Great Migration and Digital Storytelling

Smucker J. and Hardy C.

Graduate students in Janneken Smucker’s seminar in digital history joined colleague Charles Hardy’s undergraduate honors students and history majors to collaborate on a digital project centered on the First Great Migration to Philadelphia, called “Goin’ North.” First, they created a digital archive in Omeka of over 400—and many previously not digitized—primary sources from regional collections including Temple University’s Special Collections and Blockson Collection, the Historical Society of Pennsylvania, Hagley Museum and Library, and the Library Company of Philadelphia. The students then created detailed indexes using the new platform OHMS (Oral History Metadata Synchronizer, from the University of Kentucky’s Louie B. Nunn Center for Oral History) of 17 oral history interviews from the 1980s conducted with African Americans who migrated to Philadelphia in the 1910s and 1920s, animating the interviews with photographs, newspaper articles, other documents, and GPS coordinates. Students used these same materials to create exhibits that double as biographical sketches, and then worked in teams to create digital storytelling projects, utilizing a variety of platforms and media. One group created a multimedia introduction to rich materials relating to the Great Migration housed at the Temple University Libraries’ Charles L. Blockson Afro-American Collection. Another group curated a tour using HistoryPin.org, guiding visitors on a journey from North Carolina to Philadelphia based on the experiences of two families, both of whom played significant roles in advancing Black Philadelphian civil rights in the early decades of the twentieth century. Other projects highlight the differing experiences of Old Philadelphians and Southern newcomers; map the journeys of southern itinerant workers as they headed north; follow the lives of three Black women from the South who labored as domestic workers in White Philadelphia homes; explore the membership of the Citizens Republican Club, Black Philadelphia’s most important civic and social association; and chart the political realignment of African-American voters from the Republican to the Democratic party during the Great Depression. Students from the course will walk visitors through the Goinnorth.org website, sharing what the Nunn Center has called a model for teaching with oral history interviews.

3:40-4:05 PM

Book History, SURI, and Special Collections: Philips Autograph Library as a Case Study

Shevlin E., Mills Z. and Wink T.

Last summer West Chester University piloted its first Summer Undergraduate Research Institute (SURI) that met with much success. This video not only presents the fruits of one such project funded by SURI 2014, Zoey Mills’ "The Boundaries of Literature and Book Collecting: A Preliminary Study of the Philips Autograph Library," but it also contextualizes the project within the larger field of book history. In doing so, it illustrates the ways in which the FHG Library’s Special Collections and the WCU Center for Book History offer a wealth of potential book history materials and topics that afford humanities undergraduates and graduate students unusual opportunities to undertake truly original research.
4:05-4:30 PM

Common Diseases and Insect pests of Pennsylvania Trees

Turner G., Hertel G., and McMillin K.

This video provides teachers with a broad tree disease and insect "topic introduction" by surveying common examples, how they affect trees, and some best practices used to monitor and manage them in Pennsylvania. It begins with an introduction as to what tree diseases and pests are, and follow with a survey of some historic examples (e.g. American chestnut blight and Dutch elm disease) and some current "poster child" examples (e.g. hemlock woolly adelgid [which affects our state tree!] and emerald ash borer ). Next comes an overview of how tree diseases and pests affect forest integrity and function and the wood-related economy (e.g. images show hemlocks and their dependent wildlife species, and impacts on valuable hardwoods like red oak). The video concludes with a message emphasizing the importance of public knowledge about tree diseases and pests and how all citizens can help monitor and manage them (e.g. by notifying DCNR, Bureau of Forestry about suspected pests) to protect our trees. The video will be web-based for access by teachers and students on desk/laptops and tablets, or via LCD or interactive whiteboard (e.g. SMART Board).

4:30-4:55 PM

Crimes on West Chester University Campus

Jaramillo C.
Research Panel: Latin American and Latino/a Studies

When
4:30pm—6:00pm

Where
Sykes 252

Featuring
Experts in Latin American studies answer your questions
Hildebrando Fuentes’s Peruvian Amazon: National Integration and Capital in the Jungle, 1904-1905

Cardemil-Krause C.

Hildebrando Fuentes was prefect of the Peruvian Department of Loreto between 1904 and 1905, a period of intense rubber exploitation in the Amazon. During his tenure, one of his objectives was to organize the Peruvian commission to define Amazon borders with Brazil. From this experience in Iquitos, capital of the Department, in 1908 he wrote a detailed descriptive work in two volumes: Loreto: Apuntes geográfico, histórico, estadístico, políticos y sociales, which is known, more simply, as Apuntes de Loreto. This work proves central to understanding how the Amazon was defined in Peru in the early 20th century by the government and capitalist entrepreneurs. In this article, I will discuss how Fuentes defines a Peruvian Amazon, and his efforts—both actual and imaginary—to bring modernity into it. In his work, he insists on the need to create an adequate governmental bureaucracy that would warrant the presence of the state on the land. At the same time, he wants to make sure that everyone agrees on how nationalistic and compromised Loretanos are with the national model as it is informed from Lima. Nevertheless, his effort betrays his intentions, since it becomes clear that there is mutual distrust from part of Lima and the people of Loreto, who had manifested their opposition to the capital in the past. Among his narrative strategies to define Loreto as a Peruvian space, Fuentes describes the work of rubber workers—the “caucheros”—as patriotic. His insistence on this, nevertheless, reveals the actual weaknesses of the Peruvian situation in the region. Also, his discursive practices, and what he silences in his arguments, generate doubts in terms of indigenous exploitation in the area, which he tries to hide to avoid a negative impact to the Peruvian position—which overall diminishes his moral position when dealing with the Amazon.

Dockworkers and Local Power in the 1930s: The History of a Dockworkers Union in a Magdalena River Port

Arredondo L.

This paper examines the process by which dockworkers in Puerto Berrio, Colombia retained control of the labor process, the workplace, and the labor market. This was the result of a particular form of dock work decasualization – the creation of a permanent and stable labor force of dockworkers. The cyclical and unpredictable nature of labor demand in waterfront work makes the emergence of a stable labor force, and the corollary discipline and supervision regimes, particularly challenging for management and state. Decasualization implies the emergence of a contractual arrangement between management and labor through the recognition of unions and the establishment of collectively bargained agreements but, the resulting terms of these arrangements depend on the power relations among labor, management and state. Conflicts over decasualization are largely conflicts over control of the labor process and the labor market, and successful decasualization schemes have meant concession of workplace control to management.
The history of dockworkers in Puerto Berrio provides an example of dock work decasualization in which dockworkers retained workplace control. In 1934, Puerto Berrio dockworkers created a union that effectively established a permanent labor force while retaining local control. This paper discusses the mechanisms through which the dockworkers union maintained control over the labor process and the labor market for over two decades. This requires placing dockworkers in the wider field of an expanding agricultural frontier and an expanding liberal state.

5:00-5:15 PM

Social Development in Latin America: Issues with Theoretical Frameworks from Above

Stevenson L.

Despite the increasing visibility of women, Indigenous, and Afro-descended peoples in some nations in Latin America, and some indicators of democracy and development affirming some aspects of modernist optimism, in too many places poverty, inequality, and asymmetries in power relations in the labor market persist. This paper provides a macro-overview of the variances in social development across the region using recent reports from the United Nations Development Programme, Freedom House, and Transparency International. The paper is designed to introduce the Latin American context in which micro-level analysis is presented from research on the responses from women and Indigenous peoples in the region to redefine the terms of power, and their work to make gains for their marginalized communities. This is part of a series of papers to be published in the journal Social Development Issues, in Spring 2015.

5:15-5:30 PM

Human Rights and Horizontalism in Practice: Examples from the Americas

Barbera R.

While discussion of human rights has become de rigueur in many circles, practices that promote and advance human rights are still lacking, particularly at the governmental level. Often those most affected by human rights violations – economic, social, political, cultural and civil - are left out of the discussion and the decision-making process. As a result, grass-roots organizations have taken human rights to the streets in order to get their voices heard and move their agenda forward. This paper will discuss organizations of poor people in Chile and the United States and their human rights work. It will examine this work as forms of participatory democracy and horizontalism, both practices that recognize that poor people can be agents for change in society. Building on work that spans 20 years, this paper will discuss how those most affected by human rights abuses – whether they are called victims or survivors – can be the protagonists to make change happen and to call the state to accountability. The paper will specifically look at two organizations in Chile - Mujeres Sin Fronteras and the Agrupación de Familiares de Detenidos Desaparecidos – and two organizations in the United States – Juntos and the Poor People’s Economic Human Rights Campaign – and their practices of advancing human rights.
Disentangling the Effects of Acculturation and Duration in the United States on Latina Immigrant Maternal and Infant Obesity

Ceballos M.

A significant body of research on minority health shows that while Latina immigrants experience unexpectedly favorable outcomes in maternal and infant health, their advantage deteriorates with increased time of residence in the United States. This study uses excessive high birth weight (macrosomia) and maternal overweight to assess two hypotheses explaining this phenomenon. A sample of Mexican immigrant women living in two Midwestern communities in the United States is used to analyze the effects of duration in the US and acculturation on birth outcomes and maternal overweight once controlling for social, behavioral, and environmental mediators of health status. Results show a significantly positive association between macrosomia, maternal overweight, and length of residence: the longer duration in the US the higher the risk of macrosomia and maternal overweight. A siblings’ analysis provides indirect evidence for the presence of a health selective return migration.
Guest Speaker: Dr. Adrián López-Denis

Academic Imperialism and Transnational Field Research in Contemporary Cuba

When
7:00pm—8:00pm

Where
Ware Recital Hall
Swope Music Building
7:00-8:00 PM

Academic Imperialism and Transnational Field Research in Contemporary Cuba

López-Denis A.

The Presidents of the United States and Cuba have recently agreed to reestablish full diplomatic relations between their respective countries. They have also agreed to disagree, at least for the time being, on how to describe the consequences of this historic move. Raul Castro insists that normalizing the relationship with the United States will allow the Cuban government to follow its own independent approach in matters of foreign policy, human rights and democracy. Barack Obama claims that under the new conditions it will be easier for the United States to push the Cuban government to implement profound changes on all of those vital areas. Expanding the depth and scope of the academic ties between both countries lies at the core of this new bilateral agenda, thus raising a series of questions about the past, present, and future of such exchanges: What can be learned from the long history of transnational field research conducted by Americans in Cuba? Did Cubans ever carry out any significant amount of fieldwork in the United States? Is academic exchange a tool of imperial soft power or a way to built authentic solidarity bridges? Could it be both at the same time? Can we take politics out of the picture here? Do we even want to? In my talk I will explore these questions not only because they are central to the current relationship between Cuba and the United States, but also because they remain crucial to researchers and educators operating in similar transnational contexts across the global south or under equivalent power asymmetries here at home.