

RADFORD UNIVERSITY

*22<sup>nd</sup> Annual*

*Undergraduate/Graduate*

*Student Engagement Forum*



*April 16<sup>th</sup> - 18<sup>th</sup>, 2013*

## *Forum Coordinators*

P. Niels Christensen, Associate Director  
Kaley Thacker and Devon Rice, Graduate Assistants  
Honors Academy

*The following individuals and offices are  
acknowledged for their contributions:*

Nancy Houff, Honors Academy Administrative Assistant  
Tracy Pantry, Honors Academy Graduate Assistant  
Matthew Martin, Honors Academy Work Study Student  
Sally Cox, Event Planning Manager  
RU Printing Services  
Lora Gordon, University Photographer

## *Forum Sponsor*



## *Special Acknowledgement*

For longer than many younger faculty (and essentially all students) can remember, the Forum and undergraduate research have been supported by Dr. Joe King. Whereas Joe originally signed-on to lead the Honors Academy at RU, that position came with the de facto responsibility for the Forum, undergraduate travel, and the printing of professional posters. Indeed, few Kinkos employees have printed as many posters as he has. As Radford University will soon welcome a separate office for undergraduate research, we all owe Joe a debt of gratitude for carrying this mantle for so many years. Thank you for your service to the student scholars and faculty mentors of Radford University!

## Program Table of Contents

Acknowledgements.....	ii
Welcome.....	5
Forum At-A-Glance.....	6
Graduating Highlander Scholars.....	7
Sessions (chronologically) with Authors and Abstracts	
Tuesday, April 16 <sup>th</sup> .....	20
Wednesday, April 17 <sup>th</sup> .....	36
Thursday, April 18 <sup>th</sup> .....	73
Index of First Authors.....	92

## *Welcome!*

Welcome to the 22st Annual Undergraduate and Graduate Student Engagement Forum - Radford University's celebration of student and faculty collaborative scholarship. The Forum is a testimony to the hard work of our students and the dedication of our faculty to an educational experience grounded in collaborative scholarship. We are proud to report that student engagement is alive and well at Radford University in the laboratory, library, classroom, field, and studio. Indeed, this year's event includes over well over **300 presentations**, including oral presentations, videos, and over 200 poster presentations. To our knowledge, this is the largest number of presentations in the history of the Forum.

The Forum provides concrete evidence that scholarship is contagious and, in fact, emerges from a wide variety of academic programs including study abroad, internships, service learning and a variety of campus leadership initiatives. Therefore it is the privilege that the Honors Academy plays a lead role in coordinating this event. The Honors Academy exists as an instantiation of collaborative scholarship and we are represented by the work of our graduating Highlander Scholars. Take a moment to read the abstracts of our Highlander Scholars' Capstone Projects, which are the culmination of years of collaborative work with their professors both in and outside of their majors. The professional and personal friendships that resulted from these collaborations will remain with both parties for many years to come.

The Forum could not be such a success without the time devoted by students and their faculty mentors. In addition, countless hours of behind-the-scenes work was required for an undertaking of this magnitude. First, we thank Provost Minner who has already demonstrated his appreciation for collaborative scholarly activities. Special thanks also to Ms. Carolyn Turner from Printing Services and Ms. Sally Cox from Student Events. Sally continues to excel in the daunting task of reserving the necessary rooms for the different presentations. Carolyn's patience and professionalism allowed us to prepare a most professional program. Her willingness to wait for last minute photos and abstracts is truly appreciated. Such collaborators as these are truly a gift for which we should be thankful.

The real work supporting the Forum is performed by an amazing team of students and staff in the Honors Academy office. We thank Kaley Thacker, Devon Rice, and Tracy Pantry for their enthusiastic commitment and hard work in putting this event together. This program and the entire Forum are a success largely due to their diligence. Thanks also go out to student volunteers from our Honors Academy Student Organization (HASO) who worked at our Forum helpdesk. Finally, thanks to Nancy Houff and Matt Martin who keep the Honors Academy office running while much attention and time were diverted to planning the Forum.

It is a privilege to put together these works from our campus community. Enjoy the celebration!

Dr. Niels Christensen  
Associate Director, Honors Academy

Dr. Joe King  
Director, Honors Academy

## Forum At-A-Glance

All Presentations Are in the Basement of Heth Hall**Tuesday April 16**

Nursing Poster Session (Heth 14) .....	1:00-3:00pm
Digital Art Exhibit (Heth 16) .....	4:00-5:00pm
Multidisciplinary Poster Session (Heth 43) .....	4:00-5:00pm
Social Science Symposium I (Heth 19) .....	4:00-5:00pm
Chemistry Poster Session (Heth 43) .....	5:00-7:00pm
Biology Poster Session (Heth 14) .....	5:00-6:15pm
Biology Symposium I (Heth 14) .....	6:30-9:00pm

**Wednesday April 17**

CORE 102 Poster Session I (Heth 43) .....	9:00am-2:00pm
Special Session - Place Based Education (Heth 18) .....	10:00am-11:00am
Communications Research Methods Poster Session (Heth 16) .....	1:00-2:00pm
Sociology Research Methods Symposium (Heth 22) .....	1:00-4:00pm
Information Technology Special Session (Heth 19) .....	2:30-3:00pm
CORE 201 Poster Session (Heth 43) .....	3:00-4:00pm
Social Science Symposium II (Heth 18) .....	2:30-3:30pm
Humanities Symposium (Heth 19) .....	3:30-5:00pm
Education Symposium (Heth 18) .....	4:00-5:00pm
Geology, Geospatial Science, and Physics Poster Session (Heth 16) .....	4:00-5:00pm
Psychology Poster Sessions I and II (Heth 43) .....	4:00-6:00pm
Psychology Symposium (Heth 46) .....	5:00-6:00pm
English Panel Discussion (Heth 22) .....	5:00-6:00pm
Biology Symposium II (Heth 14) .....	5:00-9:00pm
MSW Poster Sessions I and II (Heth 43) .....	6:00-9:00pm

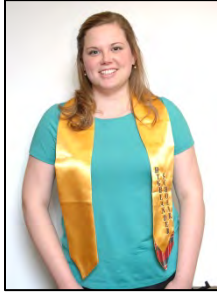
**Thursday April 18**

Forensic Anthropology Symposium (Heth 14) .....	9:00am-12:15pm
CORE 102 Poster Session II (Heth 44 and 45) .....	10:00am-3:00pm
Communications Special Session (Heth 18) .....	12:00-12:15pm
CORE 202 - Social Media Ethics (Heth 19) .....	12:30-1:45pm
Leadership and Communication Poster Sessions (Heth 18, 19, 45, and 46) .....	3:30-4:30pm
Political Science and History Symposium (Heth 19) .....	5:00-6:15pm
Nursing Special Session (Heth 18) .....	5:00-5:30pm



## Hannah Anderson

Capstone mentor: Timothy Poland, English



### **The Pastoral Ideal: The Preconceptions of Pastoral Idealism**

Much of early American Literature dealt with the pastoral ideal in conflict with the hitherto unaccounted-for presence of a wilderness in the New World. A bold contrast to the pastoral ideal, the wilderness posed a threat to it as well, and the European settlers of New England, plagued with unfamiliarity and ignorance about the presence and constitution of the wilderness landscape, proceeded in accordance with their existing presumptions and fantasies to explain what their idyllic perspective could only view only as an incomprehensible wilderness. This fantasy took the form of a narrative tradition that elevated white, European, Judeo-Christian culture, existence, and ideology above those of the native community, thereby altering perceptions of the native, the wilderness, and the natural landscape itself. Far from short-lived, this narrative has played a role in literature and art throughout time and continues to serve the purpose of labeling what is unknown, unfamiliar, and frightening as evil, uncivilized, and savage. This essay seeks to examine the narrative at work in early American Literature and to unravel its

assumptions, which were strongly influenced by pastoral idealism, in order to expose a more realistic understanding of the wilderness—its landscape, its inhabitants, and its culture.

## Emily Blodgett

Capstone mentor: Kenna Colley, Teacher Education and Leadership



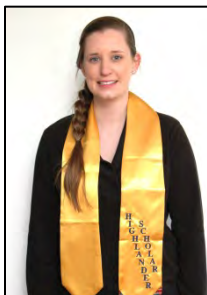
### **Disability Awareness**

The education system has changed drastically throughout history. Looking in to the future, technology and media will only increase, causing the education system to change just as much. No longer only special education teachers work with students with disabilities, but also general education teachers are having these individuals in their classroom, too. More and more schools are moving into inclusive classrooms and teachers need to be prepared to work not only with students with disabilities but also with those who may be in general education classes. Individuals with disabilities are having much more impact in their own lives and the direction of their own futures. They are being included in their individualized education plans and offered transition planning for after high school. By researching the past, we can discover the paths that have improved education and the paths that put education on the decline. To learn the lessons by studying the records of the past we can transform the lessons of the future of elementary education. I will do a meta-analysis on the history of the education and the education of students with

disabilities. After learning the lessons of the past, I will propose a pathway to transform the future of the elementary education classroom.

## Jessy Bryant

Capstone mentor: Sharon Gilbert, Teacher Education and Leadership



### **Using iPads to Assist Learning in Young Children with Special Needs**

This capstone project that is being proposed will be to identify if there are any academic benefits to using iPads with young children that have special needs. If benefits are found, it will be used as research for how iPads can be used to increase academic achievement in young children with special needs. These objectives will be achieved through selecting preschool age children with various special needs and allowing them to use academic applications on iPads. There will be over 30 hours of video taping on the children using the iPads. The videos will be reviewed by the team working on the project and the team will look for themes, problems, and interesting findings. The team will summarize the findings and research other studies to write an article that will be submitted to request publication in an academic journal selected by Faculty Mentor.

## Alexandra Carter

Capstone mentor: Tal Zarankin, Management



### **Building Leaders of Tomorrow: Linking Childhood Parenting Styles to Goal Orientation, Social Intelligence, and Motivational Behavior**

The purpose of this quantitative, correlational research study is to discover the effects, if any, that childhood parenting styles have on the goal orientation and social intelligence of student-leaders, and the corresponding impacts that these paradigms have, if any, on their student-followers'—or subordinates'—motivational behaviors. The study will employ a survey research method in which 15 student-leaders of on-campus organizations at Radford University will be assessed for parenting styles that were exposed to them during childhood, as well as their current goal orientation and social intelligence. Although discovering the links between a childhood environmental element and both goal orientation and social intelligence is beneficial to the field of management as understanding these links can enable parents to purposefully adjust the ways they control and care for their children so as to enhance leadership potential, the relationships that are more significant to this field of study involve those between leaders' goal orientation and social intelligence and their followers' sources of motivation. In order to assess these relationships, the Parental Authority Questionnaire (Buri, 1991), the General Causality Orientations Scale (Deci & Ryan, 1985), the Achievement Goal Questionnaire (Elliot & McGregor, 2001), the Tromso Social Intelligence Scale (Silvera, Martinussen, & Dahl, 2001), and the Motivational Sources Inventory (Barbuto & Scholl, 1998) were utilized. Moreover, while this study pertains to student-leaders, specifically, people at any level of authority can potentially benefit from its outcomes.

## Elizabeth Castaneda

Capstone mentor: John Kell, Biology



### **Fecal Microbiota Transplantation**

Clostridium difficile infections are the cause of thousands of deaths each year in the United States alone. Due to the overuse of antibiotics, antibiotic therapy alone can no longer stop this recurring infection from being fatal. Fecal Microbiota Transplantation (FMT) is a new controversial treatment being implemented by some alternative medicines health systems. This therapy replenishes the normal flora of the patient's body allowing for total recovery. This method of treatment is relatively new and has raised the need of further investigation. Although there is still research being conducted about the effects of this therapy, the high success of this treatment could potentially place it as a better cure for recurring Clostridium difficile infections than antibiotic treatment.

## Ayla Combs

Capstone mentor: Kate Brennan, Nursing



### **Thrombophilia in Pregnancy: Review of Current Practices for Thrombosis Prevention**

In pregnancy, venous thrombosis is a leading cause of maternal death in the United States (Davis & Branch, 2010). The risk of thrombosis is only further complicated for women with inherited and acquired clotting disorders, known as thrombophilias (Bates, Greer, Middeldorp, Veenstra, Marie-Prabulos, & Vandvik, 2012). Currently, evidence based guidelines for thrombosis prevention in these women is limited. Therefore, current practice encompasses the knowledge of medical experts with a limited number of observational studies (Bates et al., 2012). This presentation highlights the current best practice for screening and thromboprophylaxis for women with thrombophilia in pregnancy.



## Mary Dickerson

Capstone mentor: Melinda Wagner, Sociology



### **High School Students, University Mentors, and Community Partners: Place-Based Education at Floyd County High School**

Exploring Place-Based Education Educational reform has become quite a hot topic of late. There is little agreement as to what should be done to remedy the system, beyond the idea that something needs to change. This paper does not seek to answer the question as to what should be done to fix the current educational climate, but merely suggests place-based education as one option for improvement. Place-based education is an educational approach that draws on local history, culture, and environment as a curriculum source that serves to connect students to a community. Place-based education allows students to participate in learning outside of a traditional classroom setting by using the available resources of a community. This paper examines definitions, antecedents, methods, benefits, and obstacles associated with place-based education, as well as data from specific successful programs, and a case study of the Floyd County High School Place-Based Education Oral History Project.

## Rebecca Eastman

Capstone mentor: Margaret Devaney, Dance



### **Dancing Healthier for Longer**

Many dancers tend to neglect aspects of their training and self-care routines. Focusing solely on dance technique and rehearsal, dancers leave out important supplemental workout routines, leading to imbalances in the body and therefore injuries. Dancers also tend to neglect proper nutrition and proper dance technique—also leading to injuries and a shortened professional career. This project, “Dancing Healthier for Longer” seeks to inform dancers of the benefits of taking care of the whole body by providing statistical evidence of said benefits and basic elements of an improved body care regimen. Research into these benefits was investigated, along with personal experiences and observation of fellow dancers in the Radford Department of Dance. A survey of dance injuries and problems was also conducted to gather feedback on the most common injuries of this group of dancers. The final product was a lecture/demonstration presented during dance technique classes, reaching the majority of the Department, including professors. The lecture/demonstration included a participant informational packet,

anatomical diagrams, demonstrations of strengthening exercises, and functional tests. Based on oral feedback from participants, this presentation provided a wealth of new information and achieved the goal of encouraging students to be more knowledgeable of the workings of the human body and more proactive about their wellness as a dancer. (Fall 2013 Graduate)

## Ashley Fenner

Capstone mentor: Mark Wagstaff, Recreation, Parks, and Tourism

### **Challenge Course Outcomes and Effective Evaluation Methods**

For the purpose of understanding participant outcomes and effective evaluation methods related to challenge course programming, this project serves as a literature review of current and past research. This project consists of a number of studies reporting participant outcomes after a challenge course experience; including RU ABLE’s (Radford University Adventure Based Learning Experience) evaluations from the past eight years. Today, challenge courses are used to develop teambuilding skills within groups and to promote a safe and positive atmosphere (Borland & O’Connell, 2008). Due to lack of statistical research, the question of challenge course effectiveness on participants has become a “hot topic” in adventure education (Gillis & Speelman, 2008). This project will delve into the body of research related to challenge course experiences and outlines effectiveness of challenge course programs. RU ABLE sent evaluations to each group after the participation in a challenge course experience. The evaluations were not conducted for the purpose of this research project, but for the goal of improving RU ABLE. The researcher received all completed evaluations after the start of this study. Evaluations were not collected after the start of this research due to IRB restrictions. Numerical data was entered into a Microsoft Excel spread sheet to further analyze the information. Written responses for open ended questions were recorded in a Microsoft Word document. This project will expand on the information presented in the Excel spread sheet and Word document and provide suggestions based from the literature review on effective evaluations for RU ABLE to improve their evaluation methods. / Key words: RU ABLE, evaluations, challenge course, experience /

## Chelsea Frascoia

Capstone mentor: Angela Mickle, Exercise, Sport, and Health Education

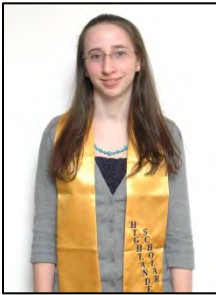


### **How to Create a Concussion Teaching Module**

In this presentation I will cover the process of creating a teaching module for concussions at the third grade level. I will discuss the need for more programs of education like the one I created and show a step by step process of how to go about doing so. The module includes a topic background, goal and objective section, activity descriptions, and assessment sections, among other resources necessary to educate youth on concussions.

## Emily Gaines

Capstone mentor: Joan Dickinson, Interior Design and Fashion



### **Designing Hotels for Tornadoes**

This project examines methods that can be used to design hotels to better protect against tornadoes. A hotel was chosen because it is an unfamiliar, multi-story environment that can become unsafe during an emergency situation. The intent was to create a safe environment in an otherwise unsafe situation in order to protect the occupants within the building. Three key areas of design including materials, wayfinding, and space planning were examined to consider how these aspects can be utilized to provide safety within a hotel. The project consisted of designing a 5 story hotel/conference center that includes safe rooms to use during tornadoes, wayfinding to help the guests quickly find safe rooms, materials used in the building's construction, and space planning to protect those within rooms other than the designated safe rooms. The project also includes features that can be adapted for use during other emergency procedures as well, which will be beneficial in the hospitality and commercial industries.

## Stephanie Goad

Capstone mentor: Jennifer Juul, Theatre



### **Life Within the Mask**

Actors throughout history have used masks to convey characters within rituals and performances. This Capstone performance uses the techniques of mask work and physical theatre based on the teachings of two well-known artists, Jacques Lecoq and Rudolf von Laban. This study applies the neutral mask training by Lecoq, and is combined with exercises of states of mind and drives provided by Laban. Through this training the actor's body has a better understanding of how movement can tell a story, as well introducing a character through the uses indirect and direct movements and efforts. The Moving Body: Teaching Creative Theatre by Jacques Lecoq and Actor Training The Laban Way by Barbara Adrian are the tools for this study. The outcome of this capstone will be a performance in the Hawes Studio at Radford University where Stephanie Goad will perform an original movement work based on the teaching of Lecoq and Laban. Performing with the character mask she has developed and created out of these exercises. Following that, there will be a talk back to the audience seeing if the character was executed to the audience accurately and the story was understood.

## Stephanie Gusler

Capstone mentor: Ann Elliott, Psychology

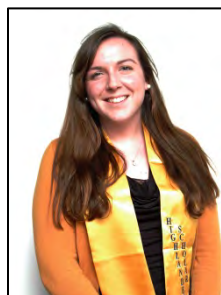


### **Childhood Poly-Victimization and Perceived Family Environment**

There is a growing body of evidence expressing the necessity of examining multiple victimizations when studying childhood victimization histories. Several studies have found poly-victimization (i.e. high cumulative levels of victimization), common in non-clinical samples and is associated with greater trauma symptomatology than experiencing a single type of victimization (Finkelhor, Ormrod, & Turner, 2007; Richmond, Elliott, Pierce, Aspelmeier, & Alexander, 2009; Saunders, 2003). This study examined the relative contribution of six different categories of childhood victimization and poly-victimization in predicting the Conflict and Cohesion subscale scores of the Family Environment Scale (FES). In a sample of 330 female college undergraduates, the results showed that victimization was common in a non-clinical sample, and that most participants who endorsed one type of victimization also endorsed multiple types. Poly-victimization also contributed significant variance in participants' perceptions of their family Conflict and Cohesion, but these contributions were small to moderate. Child maltreatment (e.g., physical abuse, psychological or emotional abuse, neglect, and custodial interference or family abduction) was also found to be a particularly important victimization to examine in relation to perceptions of family environment. Further research should examine the relationship and determine causality between family environment and poly-victimization.

## Amanda Hawkins

Capstone mentor: Dana Rose, Teacher Education and Leadership



### **A Critical Review of Co-Teaching**

Co-teaching is a teaching practice that originated in the Special Education field. Co-teaching takes place in the classroom when two educators, typically a general educator and a special educator, share a classroom. This method of teaching is becoming more and more prevalent in inclusive classrooms across the country where all students, regardless of disability, are placed in general education classrooms. In my early field experience I was co-placed in a classroom with a special education intern, where I was able to experience and practice co-teaching first-hand. From this experience, I saw many benefits of this method of teaching for students. This paper contains my critical reflection of co-teaching. I researched various studies of co-teaching practices in schools. I researched both qualitative and quantitative studies to find benefits and challenges associated with this teaching practice. This particular approach is still relatively new to education, but this teaching method can change the way schools educate students with special needs.

## Jasmine Jackson

Capstone mentor: Georgia Hammond, Biology



### **Analyzing arsenic resistance gene expression using different growth conditions that model the environment from which they were isolated**

The arsenic resistance gene, *arsC*, converts arsenate to arsenite. This reduction reaction provides the bacterial cell with the potential to oxidize organic compounds and gain energy from the process. Arsenate is toxic to bacterial cells because it shuts down energy production; arsenite, the more toxic of the two forms, destroys protein folding. Many bacteria then eliminate the arsenite out into the environment using a membrane-bound transport protein. I have taken soil samples from the arsenic mine in Floyd County and grown the bacteria from the samples in nutrient broth. My capstone uses PCR to analyze the gene expression of *arsC*, *arrA*, and *aoxAB*. The 20 bacteria that I have isolated will be identified using DNA sequencing reactions. Wave-forms will be used to analyze the data of the sequences and the sequences will be compared to other identified bacterial species that are located in different databases. By identifying the 20 bacteria, I am able to find out which bacteria contain the different genes that were analyzed.

## Justine Jackson

Capstone mentor: Jeff Saperstein, English

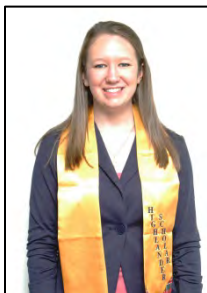


### **Moby-Dick and Pop Culture**

Herman Melville's *Moby-Dick* is one of the greatest American novels, but many people shy away from reading this whale of a tale. However, *Moby-Dick* is a significant pop culture icon that continues to appear in TV shows, commercials, movies, and more. By explaining the significance of *Moby-Dick* in relation to pop culture, I can offer a new and creative way for teachers to approach *Moby-Dick* in the classroom.

## Kendahl Kean

Capstone mentor: Suellen Miller, Nursing



### **Examination of the Role and Importance of Acute and Primary Care Nurse Practitioners in Southwest Virginia**

As a capstone endeavor to my undergraduate nursing career at Radford University, I chose to examine the multidimensional roles that nurse practitioners are fulfilling across the healthcare continuum. Originally, the focus was targeted to defining the role of Adult-Gerontology Acute Care Nurse Practitioners [ACNP-AG] because of personal career interests. However, after reviewing current literature and gathering knowledge about the Affordable Care Act of 2010, I chose to broaden my focus. Rather than solely defining the role of acute care nurse practitioners within the hospital settings, my outcome goal moved to investigating the impact which acute and primary care nurse practitioners have in the medically underserved areas of Southwest Virginia. / To evaluate the nurse practitioner's role and their augmentation to healthcare, I performed extensive literature reviews of scholarly nursing collections located through the Radford University Library journal database. This literature review concluded the future of acute care and primary care nurse practitioners is firmly secured and invaluable to the future of healthcare. Nurse practitioners enhance both direct and indirect healthcare delivery in many settings. Nurse practitioners are educated and fully-equipped with a wide range of skills encompassing both the art and the science of nursing. Nurse practitioners, when afforded opportunity to practice to the full extent of their education and credentialing, serve the community alongside physicians to provide efficient, high-quality, patient-centered care at a lower financial burden in both acute and primary care settings. This partnership is essential when considering the current healthcare shortage in the United States, including Southwest Virginia

## Dante Lavender

Capstone mentor: Tracy Cohn, Psychology



### **Men Who Have Sex with Men and the Influence of the church**

Our society seems to hold a stigma when it comes to words such as gay, homosexual, and/or bisexual. Of course it's understood that when we think of negative attitudes towards homosexual relationships and sexual activities, the foundation for these arguments always based on religious beliefs. The research that I'm doing not only examines the LGBTQ community, but it takes a look at the interactions and motivations of self-identifying heterosexual men who engage in sexual activity with other men. From what the research shows, there seems to be a division in sexual acts which these men are willing to perform and their roles with other men seem to be influenced by race and perceptions of dominance. There seem to be common themes such as hyper-masculinity and avoiding gay men even though the activities that are pursued would be considered homosexual in nature. We can see that the term "Down-Low" was once the phenomena seen only in the Black community however it seems to be spreading towards the White community as well; this seems to be the case when White males are seeking the company of Black males and/or dominant White males are pursuing alpha males of various races. Even though these men may not be religious, the church plays a strong role in breeding internalized homophobia and encouraging it with society. Even when these men are in accepting environments, there is still a fear of judgment and social persecution.

## Emily Lee

Capstone mentor: danah bella, Dance



### **Unfettered Motion**

This project explores the relationship between movement and mental and emotional healing. I challenged myself and other choreographers from the Dance department to use our personal experiences and ideas to create work that best exemplifies how dance can impact lives. Drawing inspiration from choreographer Bill T. Jones' documentary, *Still/Here*, I constructed the final group dance as a piece in which the entirety of the choreography came from the dancers. They explored a time when dance has affected them, translated that into movement, and then I staged and constructed the piece. What I found through this process is that dance can be used as a form of healing not only for the choreographers, but also for the dancers and audience members who witness what is happening in the performance space. The final product was a two night dance performance, each followed by a talk-back session with the audience. My goal was to give back to the community through this project, and I believe I achieved that goal not only through the choreography and the talk-back, but also by fundraising for the Crohn's and Colitis Foundation of

America. This project explored the idea of healing through movement, and it was successful in its endeavors.

## Danielle Malkos

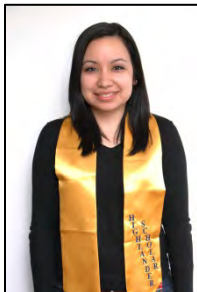
Capstone mentor: Richard Straw, History



In 1905 the first Nickelodeon opened in Pittsburgh, Pennsylvania. Since this point one Pittsburgh has, in a way, become the Hollywood of Western Pennsylvania. With all of the films being made in and around Pittsburgh there have been several awards won. In my virtual museum I intend to captivate the film industry in and around Pittsburgh. There are several films that have been created in and about this great city; along with all of these films there is also the wonderful world of Mister Rogers that so many have grown up on. There will be exhibits that show the beginning of film in Pittsburgh, as well as award winning films in Pittsburgh, and an exhibit devoted entirely to Mr. Fred Rogers and his Land of Make Believe. Many of these sites can still be seen in Pittsburgh today. I intend to show you these sites as they once were and how they still are today.

## Caroline Martinez-Carranza

Capstone mentor: Blas Hernandez, Foreign Language



### **Mara Salvatrucha-13: Más allá que los tatuajes**

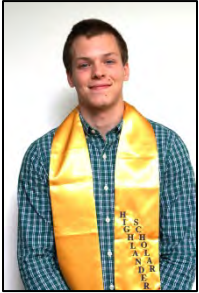
Mara Salvatrucha-13 is one the world's highly organized, violent and massive gangs out there today. It originated during the Salvadorian Civil War in Central America in the 1970s. Because of the atrocities tormenting El Salvador, it became a popular trend to for Salvadorians immigrate to the north, making its gradual stops in Honduras, Mexico and finally the United States. Salvadorians that were raised and even fought in the civil war brought with them a sense of entitlement and paranoia. Once in unknown territories, certain groups of these Salvadorian created a unity and trust among each other with the mentality of "us verse the world". The gang soon started to use violence and crime as a defensive mechanism and soon transformed into an attack tactic. The crime committed by this group has been classified as in inhuman, immoral and beastly. The crime and expansion has reached every corner of the United States; the Federal Bureau of Investigation (FBI) has created a special unit focused on reducing and eliminating gangs such as this one. This literature will encapsulate the origin, language, organization, crime and violence

committed by, who are now known as, MS-13. MS-13's crimes stretch from extortion to rape to mass murder in cold blood. This gang has become a global phenomenon that is now expanding from the Americas to Europe, specifically Spain. This literature will be written in Spanish and presented in English. This will be evidence of the author's mastery of the Spanish language as well as in translation and presentation of the literature.



## Christian Mason

Capstone mentor: Tod Burke, Criminal Justice



### **Responding to Persons with Mental Illness: Can Screening Checklists Aid Law Enforcement?**

On a daily basis, law enforcement officers may interact with persons suffering from various forms of mental disorders. Accordingly, officers must be well-prepared to recognize and appropriately respond to indicators of mental illness. The purpose of this presentation is to recommend a checklist that can be used by frontline officers to quickly screen for mental disorders.

## Heather Newsome

Capstone mentor: Jack Call, Criminal Justice



### **Fourth Amendment rights v. Drug Detection Dogs**

Currently, there has been an issue rising in the courtroom about the use of drug detection dogs to search an individual's home and whether or not this violates an individual's Fourth Amendment right to unreasonable search and seizures. Drug detection dogs have been used for hundreds of years by law enforcement officers to determine the presence of contraband. It is not uncommon for drug detection dogs to be used to search items in a public area and motor vehicles. However, when considering the use of drug detection dogs at an individual's home, questions remain on the legality of the issue. Depending on an individual's own interpretation of the Fourth Amendment of the Constitution two arguments can be made concerning the use of drug detection dogs. The first argument is that drug detection dogs are a sense-enhancing tool and that law enforcement officers would not have been able to obtain specific information with his or her ordinary powers. The second argument is that drug detection dogs only reveal the presence or absence of contraband and the imminent details inside the home remain unknown, which

does not violate an individual's Fourth Amendment right. My research focused on a specific court case, Florida v. Jardines, which is currently before the Supreme Court. The issue is whether the use of a drug detection dog to sniff for drugs at the front door of a residence is a Fourth Amendment search. Being that this is a new and upcoming issue in court cases I wanted to find out how many court cases have encountered this issue and what the outcomes of the cases were. A poster board presentation will be presented on my standing of the issue.

## Claire Percoco

Capstone mentor: Cassidy Yoder Urista, Anthropological Science



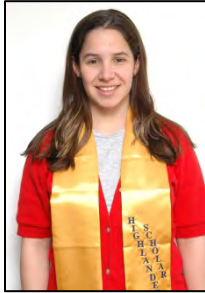
### **Evaluating Markers of Occupational Stress (MOS): A Historic Sample**

Anthropologists have long used Markers of Occupational Stress (MOS) to assess the differences in occupational roles within a population. Markers of Occupational Stress refer to skeletal manifestations of daily activities, exhibited by osteoarthritis, osteophytes, lipping, eburnation, and porosity of bone. These manifestations often occur in regions of the skeleton that are used most commonly throughout an individual's life. By determining which individuals possess which MOS, anthropologists should be able to discern which individuals participated in which activities. This project sets out to synthesize evidence of MOS on individuals from a 19th century slave population, the Robinson Cemetery Collection. Adults from this population were analyzed for location, degree, and severity of MOS to determine what types of activities individuals from this population were engaged in, and whether or not these activities were allocated differently by age or sex.



## Anita Puerto

Capstone mentor: Kevin Ayers, Exercise, Sport, and Health Education



### **Academics and Athletics: An Examination of Conflicting Interests**

Collegiate sports have been a part of our social fabric since at least the mid-19th century. The National Collegiate Athletic Association (NCAA) governs all aspects of collegiate sport, including the rules and regulations regarding the education of student-athletes. A conflict of interest arises from one governing body controlling both academic and athletic policy, without a separate system of checks and balances. Athletic departments house its own academic advisors, who are pressured with keeping the student-athlete eligible in the classroom. This causes major academic violations to occur for the sake of keeping the student eligible as an athlete. One solution would be to remove academic advising from under the roof of the athletic department, into the hands of faculty, thereby reducing the conflict of interest. This proposal could help student-athletes feel more connected to their education, would give faculty more control, and may truly put academics first. However, the athletic department staff may feel they have less control and could begin pressuring faculty to becoming knowledgeable of both academic and athletic requirements. Examples of past NCAA academic violations will be given to support the conflict of interest theory. Personal interviews were conducted with members of important reform groups as well as representatives from the NCAA. Secondary research has also been conducted and all of the information offered will be used to draw a final, reinforced conclusion. There has been a forced connection between academic integrity and athletics, the result of which is the detriment of higher education.

## Curtis Rash

Capstone mentor: Jeanne Mekolichick, Sociology



### **Death Attitudes, Alcohol Consumption, and Religiosity**

*There have been multiple studies that examine Death Attitudes and Religiosity; however, few studies have examined these two variables with the amount of alcohol consumption. This project expands upon a pilot study to examine the relationship of these three variables. Based off of the pilot study, I propose that the death attitudes, approach acceptance, death anxiety, and escape acceptance, have a negative correlation with the amount alcohol consumption and that religiosity reinforces this relationship with a negative correlation with alcohol consumption. I also propose that neutral acceptance and avoidance of death do not have a positive or negative correlation with the amount of alcohol consumption. To test this, I used a convenient sample of individuals from a rural area, gathering data from an online survey. Results to be discussed.*

## Emily Redd

Capstone mentor: Jolanta Wawrzycka, English



### **Ulysses and the Law: An Investigation of Legal Significance**

*Ulysses and the Law / The subject of my paper and presentation for the Undergraduate Research Forum is the examination of the censorship and obscenity cases which occurred in the 1930's in the United States and explain their legal and literary significance. In order to complete my objective, the paper provides a brief history of Anglo-Saxon censorship law, an explanation of the decisions found both in the original decision reached in United States v. One Book Called 'Ulysses' and the decision reached in the subsequent appeal of the case, and, lastly, a researched analysis of the implication of these decisions in both the literary and legal circles. / This paper is of significance to my field because it combines the research of both legal and literary scholars in a new way, while also including significant amounts of primary source research of appropriate laws, codes, court decisions, and James Joyce's Ulysses in order to create a comprehensive document which reflects both serious scholastic merit and the creation of a new type of research document on this topic. /*

## Leanna Rippey

Capstone mentor: Donald Secreast, English



### **The Swinging Bridge**

My Honors Capstone project was based on my desire to continue creative writing into my future classroom. The objectives that this project focused on were the use of grammar and style, mechanical construction, and plot development of fiction. Grammar and style was better developed by the continuous development of the series and by the use of mentor feedback on the pieces, which were provided by Dr. Secreast. Together, we compiled a set of four drafts of the story that I began with him, completed a fifth with no feedback, a small researched essay on the genre I wrote in, and the list of changes that were made from each draft. The presentation will involve an explanation of the project and an excerpt of the story. A discussion and any questions may also be answered. I also want to stress that this is a work in progress, which will be continued in the future to be molded into a short novel manuscript for publishing. The total project is 104 pages. The major focus was the creation process of a short fiction story and how a writer must go through a drafting process for publication. Dr. Secreast worked as my editor

to provide me with feedback and knowledge of the writing styles that would make this successful. Together we decided to continue the work into a manuscript because we realized that the story has much more life. For the purposes of the Capstone though, I used the already completed drafts to complete a final version of the story. This final draft was the main task, amounting to more than an extensive research paper. I hope to prove that creative writing does have a place and it is a skill that is to be fostered by careful attention to details and feedback, as this project demonstrates.

## Elizabeth Rizzuto

Capstone mentor: Mary Ferrari, History



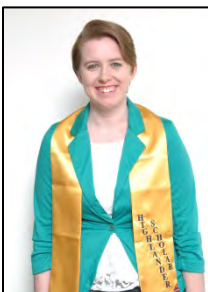
### **Mixing Cultures: White Captives in Colonial America**

In the sixteenth and seventeenth centuries, Indians captured hundreds of whites throughout the English colonies. Whites feared Native Americans would brutally take them away in the night. However, even though there were violent encounters, in most situations the Natives captured whites to replace family members that died, either by natural forces or conflict. Eventually the captives would integrate into Native society, but that was not always common. Most would bide their time until they could return home, either by escaping or being bought by their families. Women and children were captured more often than men but there were still great numbers of men captured. Children were also more likely to stay with their adopted families than return home. In one instance, out of fifty-two prisoners, thirty-four were children and fourteen were women, most of whom were mothers to the children. While some wished to return home, others viewed their new life as a safe haven and a new beginning. Women in particular experienced more freedom in the Indian way of life than in their old lives, although because of

societal norms, most rejected their new way of life. This research will examine captive narratives through numerous women, namely Mary Rowlandson, a Puritan woman, Elizabeth Hanson, a Quaker woman, Mary Jemison, one of the most famous accounts of a woman who stayed with the natives, along with Eunice Williams, another woman who stayed, and Susannah Johnson, captive sold to the French.

## Kayla Saunders

Capstone mentor: Julie Temple, Interior Design and Fashion

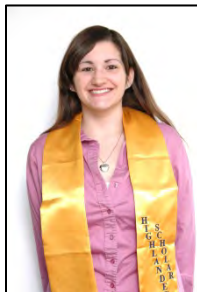


### **The Rocky Coast Exhibit Design**

Many people find zoos to be fun and entertaining but they do not realize the educational impacts and the conservation efforts these trips can have. Also many zoos do not use their educational power to the full extent when they are able to update their exhibit design. What exactly do most consumers remember when they visit a zoo? Research shows that consumer actually takes away what they saw home and can recall this even six months after the visit. They also learn more about an animal and enjoy their time better if the exhibits are more natural to the animals. This study examines the effects that the experience and visual materials in an exhibit can have on the consumers experience and they can gain more an educational result than was expected. These findings will be taken and used to create a better Rocky Coast Exhibit for North Carolina Zoological Park which shows an example on how using these approaches can produce a better design.

## Stephanie Smith

Capstone mentor: Ruth Riding-Malon, Psychology



### **An investigation between self-esteem and memory**

Self-esteem is a highly important concept to the western world, particularly in the United States. Self-esteem is the way we feel about ourselves and our abilities to do tasks, whether familiar or not. Previous literature has discussed the relationship between school success or achievement and self-esteem. However, no study has investigated the relationship of self-esteem and memory. This study proposes to examine whether there is a connection between one's self-esteem and the types of words (positive or negative) one remembers and interprets. Based on studies already performed on self-esteem, it is predicted that college students with high self-esteem as measured by the Rosenberg Self-Esteem Scale will recall more words classified as 'positive'. Conversely, those students with low self-esteem as measured on this scale will recall more words classified as 'negative'. We expect to see that self-esteem will indeed have an effect on the types of words recalled.

## Amanda Sowder

Capstone mentor: Sharon Gilbert, Teacher Education and Leadership



### **Using iPads to Assist Learning in Young Children with Special Needs**

This presentation will discuss a Capstone Project that met the following objectives. First of all we evaluated how iPads could be used to assist children who have disabilities and whether or not they could be effective teaching tools. Our team of participating faculty advisor (Dr. Sharron Gilbert), along with two undergraduate students (Amanda Sowder and Jessie Bryant) gathered videos of preschool aged children who have disabilities interacting with iPads. The team collected the videos and reviewed them in order to discuss qualitative data about how the children interacted with the technology, how their interactions were similar to a conventional use of the iPad, and whether or not they seemed engaged by the iPads. The presentation will also review scores from the children's assessments that their teacher administered at the beginning of the year and weighed them against their scores at the end of the year to see if the scores improved. Additionally, the presentation will review literature found about iPads and children to see what has been discussed about the effects of the iPads on children's learning. / This project combined the presentation participants' field of study, Early Childhood Development/Early Childhood Special Education, with a look at today's ever changing and evolving technology. In a world where technology continues to advance in complexity it is important to look at how it affects children. It has the potential to be used as a great tool, and the presentation team wanted to analyze the children's interactions with iPads to see how children with disabilities would respond to the technology as a teaching tool. The results and a reflection of the process of the study will be discussed in the presentation.

## Nicole Swope

Capstone mentor: Jon Poole, Exercise, Sport, and Health Education

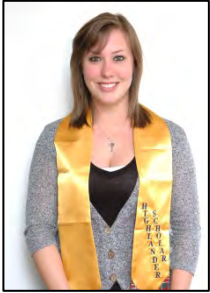


### **Physical and Health Education can Save Lives**

Physical and Health Education plays an imperative role in the lifelong health and wellness as well as overall academic success of students. However, many parents and their students do not value the physical, cognitive, and affective skills taught in Physical Education such as the five components of fitness, teamwork, cooperation, decision-making, and motor and sport skills. Children often take on the same values about physical activity as their parents. If physical educators have parent and community support, schools will see an increase in test scores and decrease in obesity rates. The goal of this project is to educate families of the importance of physical activity and Physical Education in schools by involving them in the same activities in which their children participate and enjoy. In order to address the physical aspect of this project, parents were invited to a Family Fitness Night hosted by an elementary school. They were also challenged to participate in physical activity together as a family outside of the school environment. A final review of other literature revealed that not only can Physical Education help students physically, but also academically. There is a clear connection between an increase in students who are physically active and an increase in test scores.

## Kelsey Townsend

Capstone mentor: Karen Francl, Biology



### **Survey of the ectoparasites of the invasive West Indian Mongoose (*Herpestes javanicus auropunctatus*) on St. John, U.S. Virgin Islands**

In March 2012, we completed live trapping surveys for invasive West Indian mongoose (*Herpestes javanicus auropunctatus*) on St. John, U.S. Virgin Islands. Using tomahawk live traps, we sampled three sites >400m apart from one another over a three-day period. Although the primary focus of the project was to document movement patterns and sex ratios among populations, we also surveyed captured individuals for ectoparasites. Using a flea comb, we brushed the fur of each mongoose for ca. 30 seconds and collected any ectoparasites. We combed 41 mongoose (32M, 9F), and discovered ectoparasites on 27 individuals. The most common parasite was the cat flea (*Ctenocephalides felis*; 18/27 individuals). We found no difference in the number of ectoparasites per mongoose among the three trapping locations ( $F = 1.95$ ,  $df = 2$ ,  $p = 0.157$ ), nor were there differences in the number of ectoparasites across age classifications ( $r = 0.109$ ,  $p = 0.579$ ). However, males have more parasites than females ( $t = 2.65$ ,  $df = 19$ ,  $p = 0.0158$ ). Even when mass was taken into account (males are generally heavier), this gender difference remained in place ( $t = 2.07$ ,  $df = 16$ ,  $p = 0.027$ ). We suggest the occurrence of more parasites on males may due to behavioral differences, which could be investigated in future studies. Management suggestions from this research are limited, as it does not appear that current ectoparasite loads are negatively impacting the mongoose at this time. However, these data may contribute to our understanding of the role mongoose play within their non-native ecosystem. / / / Preference: Poster Presentation / \*student presenter / Kelsey L. Townsend: Kltownsend@radford.edu ; no office number available / Karen E. Francl: kfrancl@radford.edu ; (540)831-6537 / Biology Department, Radford University, Radford, VA 24142 /

## Paige Waddell

Capstone mentor: Diane Millar, Communication Sciences and Disorders



### **A Comparison of Two Instructional Approaches for Parents Learning to Program a Communication App on an iPad2**

This study investigated the effects of two types of instruction when customizing an augmentative and alternative communication (AAC) software program on an Apple iPad 2 ®. Thirty participants who have children with a communication disorder were asked to customize the software application Proloquo2Go™ (AssistiveWare®) on an iPad2. The participants were randomly assigned into one of two groups and participated in two instructional approaches. Group 1 participated in a self-guided condition followed by an instructor-led condition, while Group 2 participated in the instructor-led condition followed by the self-guided approach. Participants were asked to complete ten skills in each instruction condition, and were given a time constraint of thirty minutes. The number of steps participants completed during each condition and the number of skills completed correctly were measured.

Additionally, satisfaction questionnaires were given at the completion of each condition.

## Christine Watts

Capstone mentor: Jessica Goldsmith, Interior Design and Fashion



### **Designing a residential space for the hearing impaired**

As interior designers we are expected to be aware of an accommodate people with a variety of disabilities, but frequently people fall through the cracks. Hearing loss is something I struggle with myself, and typically when designers deal with hearing loss they consider only total deafness when partially or selective hearing loss is far more common. The aim for my capstone project was to design a residential space for a resident with partial or total hearing loss that would selectively manipulate acoustics to deal with the problems associated with hearing loss. / This projects consists of a research component, with a paper going into the basic functions of acoustics and how these will be applied to the space, a plan set including a ceiling plan, floor plan, and annotated floor plans, renderings of the interior space, specification of materials, and presentation boards depicting the final product. /



## Yuxiu "Isabel" Wu

Capstone mentor: Mary Lalone, Sociology



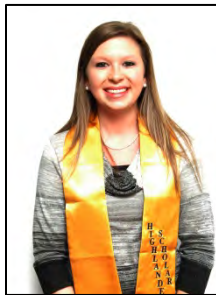
### **A Survey Study of Chinese Sociology**

As globalization has become increasingly relevant in all domains of society, global studies are gaining growing attention and importance in sociological studies. Preexisting frameworks of sociological studies may not apply to all aspects of global communities. The objective of this paper is to examine the "Chinese experience" of sociology and show a different perspective to the studies of societies. I will clarify that by delving into the history of development of Chinese sociology to demonstrate how the unique Chinese history has had an indelible imprint on Chinese sociology-- Confucianism had shaped the Chinese view of society; the doctrinal Marxism served as the basis of Chinese sociology in the pre-Reform-era; and Chinese sociology has developed distinctively during the Reform-era in the context of economic and cultural globalization. The main objective of this study is to enhance understanding of Chinese culture through the complex of history and to deal with some issues facing Chinese sociology today: modernization and globalization. Considering the reality of Chinese society, we have to adopt a different framework

to think about Chinese sociology and its future.

## Meghan Wyatt

Capstone mentor: Laura Jacobsen, Teacher Education and Leadership



### **A Case Study of 2nd Grade Word Problem Solving**

This paper describes a case study conducted in a second grade mathematics classroom in rural Southwest Virginia examining useful instructional strategies that can improve students' problem solving and understanding in solving word problems in mathematics. This classroom was comprised of nineteen students who were all in the gifted program, and the research was conducted over a six-week period where the students studied a unit on mathematical word problems and problem solving. The study aimed to find useful instructional strategies that can be used for teaching these topics to foster student understanding and engagement. Through observations with field notes, interviews, and pre- and post- tests, five very useful strategies for teaching mathematical word problems and problem solving were identified. These five strategies are: Teaching the types of word problems, using manipulatives, integrating the curriculum, using real world problem solving applications, and modeling expectations.

## Not Pictured

Rachel Simons (Fall 2013)

Sarah Harvell

Capstone mentor: Alison Pack, Art

A Fabergé egg is any one of the thousands of jeweled eggs made by the House of Fabergé from 1885 to 1917. The most famous eggs produced by the House were the larger ones made for Alexander III and Nicholas II of Russia; these are often referred to as the 'Imperial' Fabergé eggs. Approximately 50 eggs were made; 42 have survived. I have always loved these metal masterpieces which has inspired me to base my capstone off of them with a new modern and personal twist. I decided to base my metal work on the exploration of birds and everything associated with them both man made, modern, and natural. I want to concentrate on the exploration of life and death, birth, and freedom, all characteristics that I closely associate with birds. Instead of only depicting birds as people see them in their minds I want to distort the image of birds in order to present a new idea of how they are represented. For my capstone I wanted to apply every aspect of metal working I have learned thus far in order to demonstrate my skill with each technique.

## Nursing Poster Session

### ***Prevention of Catheter Associated Urinary Tract Infections***

Chandler Booth

Jacqueline Bormann

Hannah Markowitz

Rachel Shaffer

Kelley Tuennermann

Faculty Mentor: Rebecca Bryant School of Nursing

The prevention of catheter associated urinary tract infections (CAUTI) is essential in nursing practice to protect patients against additional complications, prevent prolonged hospital stays, and decrease the financial burden on hospitals. In the prevention of UTI's during catheterization, many practices are implemented to decrease the infection rate. Current practice protocols to correctly insert an indwelling catheter must be done by trained personnel, with proper hand hygiene, using sterile technique, and sufficient catheter maintenance. Hospitals provide a sterile package system that includes all equipment necessary for the catheter insertion in an enclosed tray. To increase the success rate of preventing a UTI, evidence-based research has tested different methods such as sterilization technique, early removal, and proper documentation. All of these research studies have shown positive results to decrease the incidence of UTI's in different clinical settings. These methods are feasible to incorporate into hospital settings, and decrease financial burdens on hospitals. However, further research may be necessary to make a definite conclusion since these aforementioned studies include limitations. Recommendations involving clinical practice for preventing CAUTI should include: mandatory sterility in catheter administration, daily meatal hygiene, and a requirement by hospitals that doctors assess the necessity for catheters and remove them if they are no longer necessary. The databases used to access research studies were CINAHL, MD consult and Cochrane.

*Session:* Nursing Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Tuesday 1:00-3:00pm

*Location:* Heth 14

### ***Sterile vs. Clean Technique Using Gloves***

Morgan Bohannon

Nicole Gardner

Stacey Jewell

Shelby Sprouse

Jennifer Wagoner

Faculty Mentor: Rebecca Bryant School of Nursing

Care for these wounds occurs most often in the hospital setting but can be seen in outpatient facilities (Goldwyn, & Rueckert, 1977). Improper technique for wound care can increase the patient's risk for infection which creates complications for the healing process and can prolong the patient's hospital stay. Determining whether clean gloves are effective in wound care is vital in preventing infection and other complications (Goldwyn, & Rueckert, 1977). Clean technique is used as a standard precaution and is defined as "free of dirt, marks, or stains" (Rowley, Clara, Macqueen, Molyneux, 2010). Sterile technique is defined as "free from microorganisms" (Rowley, Clara, Macqueen, Molyneux, 2010). In current clinical practice clean gloves are used for standard practice and sterile gloves are reserved for procedures requiring sterile technique. there was no statistically

significant difference in the infection incidence between clean versus sterile gloving technique. This evidence is sufficient because these findings were consistent throughout several studies performed. The results remain consistent regarding the effects of different glove types on rates of infection. Because of this, it can be concluded that sterile versus clean glove techniques do not have a significant impact on wound infection (Stotts et al., 1997). If sterile technique became mandatory for all glove-necessary procedures, this would require more time from nurses and a slight increase in cost for the gloves. However, if clean gloves were acceptable for all glove-necessary procedures, this would not allow healthcare professionals to give the patient the best possible chance against an infection. Best practice is to use sterile gloves as protocol deems necessary.

*Session:* Nursing Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Tuesday 1:00-3:00pm

*Location:* Heth 14

### ***Nursing Home Care in Relationship to Nurses Ratio***

Sarah Backof

Brooke Barnette

Faith Cromer

Lakisha Ferguson

Julia Reed

Faculty Mentor: Rebecca Bryant School of Nursing

Long-term care and nursing ratios have been a topic of the health field for some time. The effects of health care and patient outcomes correlate with the fluctuation of nursing staff to patient ratio. This will increase the effectiveness of patient outcomes while decreasing the incidence of six quality care indicators which are weight loss, bladder/bowel incontinence, pressure ulcers, problem behaviors, limited activities of daily living independence, and physical restraint. By increasing the number of RN nurses specifically, there was a significant decrease in occurrence of pressure ulcers. The information concluded that the more nurses to care for the patients will create improved patient outcomes. The RN staff should spend more hours performing patient care responsibilities instead of focusing on administrative duties. In the study completed in the United States, it illustrated that the standards should be a 1:5 direct care to resident ratio during the day and 1:15 ratio during the night. The other five articles of the different studies, all support the best evidence practice of lower nurse to patient ratios. By ensuring that all the best evidence practice of nursing ratios occurs in long term care facilities directly correlates to the improved care for patients.

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### ***Substance Abuse Among Nurses Related To Patient Safety***

Natalie Blanchetti

Cheran Burkholder

Alexis Eckerle

Breslin Fitch

Victoria Marshall

Faculty Mentor: Rebecca Bryant School of Nursing



Substance abuse among nurses leads to a compromised ability to provide care, which is a nurse's inability to perform their duties due to a chemical dependency to drugs or alcohol. This also does not allow them to abide by the standards of professional nursing which can be detrimental to patient care (Talbert, 2009, p. 17). A professional nurse must be attentive and alert to maintain patient safety from harm, as well as the public and other professionals involved when the nurse's actions seem to be compromised and impaired (Monroe, Vandoren, Smith, Cole & Kenaga, 2011, p. 417). In order to keep "track" of narcotics, hospitals use medication-dispensing machines (Swanson, 2012). These machines keep track of how much of each particular medication is distributed as well as identifying the nurse who removed the medication. Databases used are as follows: Cochran, CINAHL, MD consult and Academic Search Complete. These searches were limited to English and dated 2008-current. Six articles were included in this research analysis. Our findings show substance abuse among nurses' leads to a compromised ability to provide care (Talbert, 2009, p.17). The most effective method of treatment is with alternative programs which refrain from disciplinary action and promote recovery of the nurse, allowing them to return to work (Monroe & Kenaga, 2010). While implementing the alternative treatment programs may be a cost to the hospital it can save them from a future lawsuit. The best clinical practice for preventing harm to patients is the treatment programs, medication dispensing machines, random drug screening, and drug prevention programs to have the staff aware of their options as well as recognizing signs and symptoms of a coworker abusing.

*Session:* Nursing Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

### ***Ambulation of Intensive Care Patients***

Ashlee Blevins  
 Amanda George  
 Kayleigh Leonard  
 Katy Pettit  
 Allyson Scruggs

Faculty Mentor: Lynne Bryant School of Nursing  
 Abstract / Significance / It has been practice in intensive care to encourage rest and inactivity (Drolet et al., 2012, p.198). Modern research shows bed rest has detrimental effects such as muscle weakness. / This research is significant due to the obstacles faced by intensive care patients. Studies show decreased length of hospital stay and increased quality of life with early ambulation (Perme & Chandrashekar, 2009). / Current Practice / Patient mobilization is patient specific and progressive tolerant. If ambulation is not feasible efforts are still made to maintain range of motion. / Literature Reviewed / Databases included Cochrane EBM Reviews, CINAHL, MD Consult, Mosby's Index, PubMed, and Medline. Searches were limited to past five years, journal articles, and critical care in general. Six articles were included in this research analysis. / Summary of Evidence / Early ambulation is beneficial regarding length of stay, quality of life, and cost. These benefits will neutralize extra costs (Knoblauch et al., 2013). / Clinical Considerations / Results indicate that early ambulation is feasible and beneficial in all ICU environments. ICU patients are widely varied and require individualized ambulation plans. / Recommendation for Practice / Patient specific, progressive tolerated ambulation should be implemented within seventy-two hours of admission. If bed rest is required, efforts should be made with range of motion exercises. Further research should be conducted. / References / Bourdin, G., Barbier, J., Burle, J., Durante, G., Passant, S., Vincent, B., ... Guérin, C.

(2010). The feasibility of early physical activity in intensive care unit patients: A prospective observational one-center study. *Respiratory Care*, 55(4), 400-407. / Brower, R. G. (2009). Consequences of bed rest. *Critical Care Medicine*, 37(10), S422-S428. doi:10.1097/CCM.0b013e3181b6e30a / Drolet, A., DeJulio, P., Harkless, S., Henricks, S., Kamin, E., Leedy, E. A., ... Williams, S. (2012). Move to improve: The feasibility of using an early mobility protocol to increase ambulation in intensive and intermediate care settings. *Physical Therapy*, 93(2), 197-207. doi:10.2522/ptj.20110400 / Hopkins, R. O. (2010). Early activity in the ICU: Beyond safety and feasibility. *Respiratory Care*, 55(4), 481-484. / Knoblauch, D. J., Bettis, M. A., Lundy, F.

*Session:* Nursing Poster Session  
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*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

### ***Burn Protocol: Fluid Resuscitation***

Olivia Bouchet  
 Kaitlyn Conner  
 Lindsay Dawson  
 Sarah Hughes  
 Caitlin Nesemeier

Faculty Mentor: Rebecca Bryant School of Nursing  
 The paper investigated fluid resuscitation protocol in burn victims. The best way to calculate the amount of fluid given was researched. Inpatient burn victims were the sample population in the studies found from the CINAHL database. Evidence-based practice for determining the amount of fluid that burn patients need is calculated using the Parkland Formula (4 ml/kg/% TBSA). Current practice did not reflect proper use of the formula. Two primary sources published in CINAHL and one scholarly article were used. Exclusion criteria included articles published before 2008 and studies not specifically dealing with fluid resuscitation. CINAHL, Cochrane EBM Reviews, and MD Consult were searched. In Fahlstrom and Dulhunty's studies staff was trained to teach and implement the Parkland Formula. Both studies successfully minimized the occurrence of fluid over resuscitation in burnt victims. The studies were appropriately quasi-experimental and overall persuasive of best practice. More credibility could have resulted from greater sample exclusion criteria and a more consistent fluid administration method. Fahlstrom's sample size of 30 was too small while Dulhunty's study had an adequate sample of 80 patients. The systematic review by Zaletel supplemented the primary sources by demonstrating the relationship between fluid resuscitation and tissue perfusion. This research applies specifically to inpatient burn victims. Both primary studies were feasible and conducted by experts. Adequate resources were demonstrated and the Parkland formula was found to be transferable to most burnt victims in hospitals. As evidenced by research, best practice of fluid resuscitation in burnt victims is implementing the Parkland formula.

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*Day & Time:* Tuesday 1:00-3:00pm  
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### ***Physical Restraints in Elderly Population***

Erin Brown  
 Samantha Chase  
 Katie Cunningham

### Brittany Mattox Sam Reddington

Faculty Mentor: Rebecca Bryant School of Nursing  
 Abstract / / Significance / Restraints are anything that restricts a patient's ability to move. Due to the prevalence of restraints being used in Long Term Care facilities, nurses need to understand best practice of restraints to reduce the possible risk of injury to the patients. / / Current Practice / Under federal law, nursing homes must follow federal guidelines when restraints are used (Shankel, 2012, para. 2). Limb restraints should be used for up to four hours with elderly patients because of their increased risk of skin breakdown (Etolen, 2012, para. 2). / / Literature Reviewed / Databases used include CINAHL, Cochran MD, PubMed, and Ehow health. All searches were limited to English, full text, evidence based, peer reviewed, and dates were limited to 2008-2013, with one text used from 1999 because of its relevant information. Seven articles were included in this research analysis. / / Summary of Evidence / Physical restraints are used with the elderly to maintain proper protection and patient safety. There is controversy over whether or not elderly patients who are confused should use physical restraints. Research on this topic needs to be continued to determine proper modes for patient safety. / / Clinical Considerations / Ethical concerns on restraints should be a clinical consideration. Budget considerations include longer patient hospital stays, which could be decreased from nurses monitoring restraints. Relevant study groups include psychiatric, harmful, or withdrawal restraint patients. / / Recommendation for Practice / Evidence supports best restraint practice when absolutely necessary, with five trained professionals, for only four hours of use. This prevents skin breakdown, falls, and ensures patient safety. / / References / Etolen, N. (2012). Types of nursing home restraints. Retrieved March 2, 2013, from www.ehow.com/about\_5373384\_types-nursing-home-restraints.html / Shankel, N. (2012). Federal definition of restraint in nursing homes. Retrieved March 2, 2013, from www.ehow.com/about\_6707051\_federal-definition-restraint-nursing-homes.html / /

*Session: Nursing Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 1:00-3:00pm*  
*Location: Heth 14*

### **Umbilical Cord Nursing Care**

Marion Carneal  
 Danielle Combs  
 Carrie Rutledge  
 Laura Smith  
 Rebacca Stables

Faculty Mentor: Rebecca Bryant School of Nursing  
 Abstract / Significance / Umbilical cord care is important because if infection were to occur there would be an increase in cost for care, chance of morbidity and mortality, and anxiety of the patient's caregivers. It is important for nursing care to identify a safe practice and prevent any umbilical cord complications. / Current practice / Care of the umbilical cord has been widely debated; strategies for care include triple dye, antiseptics, salicylic sugar, and human milk; however, natural drying is the most current practice. It is believed that antiseptics prolong cord separation time, but on average the separation time is the same, around two weeks (Liu, Lee, Kuo, & Lien, 2012). / / Literature Reviewed / Databases for the research included CINAHL, MD Consult, and Cochrane. The articles searched were narrowed by keywords such as umbilical cord care, infection, and nursing. The articles searched were limited to the past five years. A total of three articles were cited in the paper. / Summary of Evidence

/ Evidence exists that there are benefits to allowing the umbilicus to dry naturally. Alternate cord care practices are relatively new and therefore, little research is available. / Clinical Considerations / Participants in the studies were newborns in a hospital setting. Other considerations were birthing methods, climate, setting, time of cord clamping, socioeconomic status, and education of the caregiver. / Recommendations for Practice / Maintaining a clean, dry cord from birth and the days following in the home environment is effective in preventing cord infections and increases cord detachment time. /

*Session: Nursing Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 1:00-3:00pm*  
*Location: Heth 14*

### **Burn Treatment Options**

Kenley Carter  
 Allison McCoy  
 Kelsey Page  
 Murphy Reedy

Faculty Mentor: Lynne Bryant School of Nursing  
 Abstract / / Nurses play a critical role in the recovery process for victims suffering from burns. The physiological and psychosocial aspect of care has become the cornerstone for nursing practices for burn victims. The treatment of facial burns is more demanding than the treatment of other body burns because of the faces high vascularity (Hoogewerf, 2013, para. 12). / Burn centers are the facilities providing the specialized care and support for patients recovering from surgery (Elshaer, Enab, Elmanawi, 2011, p.474). Hall (2012) stated, "the focus lies on preventing and identifying complications," since the first line of defense is compromised (para. 2). / The American Burn Association and has established management of burn patients by promoting and supporting all burn related research (Holmes, 2008, p. 1). When burn patients enter treatment, nursing care shifts to maximizing functional status and abilities, to help adjustment to major life changes (Hall, 2012, para. 4). Current practice is reflective of the evidence since wound care is important function of nursing in dealing with burn victims. / Databases used include CINAHL, Cochran, EMB Reviews, MD consult, and Medline. All searches were limited to English, evidenced-based, peer reviewed, and dates were limited to 2008-2013. Seven articles were included in this research analysis. One of the research materials by Holmes, the abstract was solely used in the research analysis. / Through a case study the article found that a priority of nursing is to teach about the effects of burns on the skin and specified a benefit in involving all parties in clinical decisions (Hall, 2012, para. 25). Another article discussed an observational study that found post facial reconstruction to be a common treatment option however one of the most challenging procedures today. (Elsher, Enab, Elmanawi, 2011, para. 2). In the article by Bishop (2013), the study performed a survey that asked for feedback regarding a burn victim's hospital stay (para. 27). In spite of the research, the evidence was overall based on limited sample groups and lack of a controlled environment. / Through the research analysis age, socioeconomic status, and health status need to be considered. The more money put into burn centers, the more beneficial and cost effective the care will be. The prospect of better clinical practices for burn victims is low because /

*Session: Nursing Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 1:00-3:00pm*  
*Location: Heth 14*

## ***Substance Abuse Among Nurses Related to Patient Safety***

Alexis Eckerle  
Breslin Fitch  
Natalie Blanchetti  
Victoria Marshall  
Cheran Burkholder

Faculty Mentor: Rebecca Bryant School of Nursing

*Session:* Nursing Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

## ***Fall Risks Related to Patient to Nurse Ratio***

Afton Jamerson  
Breanna Bartos  
Molly Teper  
Tara Dean  
Jenny Lanzara

Faculty Mentor: Lynne Bryant School of Nursing

*Significance /* The nurse-to-patient ratio is steadily becoming a bigger concern, especially when considering the risk of patient falls. The more patients that each nurse has to care for leads to an increased risk of a patient falling. Evidence has been found that supports the theory that the fewer patients each nurse cares for, decreases the risk for falls. / *Current Practice /* Most hospitals have different methods of assessing and providing each patient with falls risk category. The hospitals then have specific policies or procedures that they use in order to prevent falls in their institution. / *Literature Reviewed /* Databases used include CINAHAL, Cochran, MD consult, and Medline. All searches were limited to English, full-text, and only journals. Two articles were included in this research analysis. / *Summary of evidence /* Overall, it could be identified that it would be beneficial for hospitals to alter the approach of caring for patients. / *Clinical Considerations /* Implementing fall risk scales and limiting the amount of overtime each nurse works will not result in an increase cost for the hospitals. The hospital may encounter some issues with adequate staffing, this issue could be addressed, and ultimately would result in a hospital with less injuries related to falls. / *Recommendations for Practice /* The best clinical practice for preventing falls would be for hospitals to implement a falls risk score test for each patient. If this method fails to work, then the recommendation for practice would be to reduce the amount of overtime that each nurse is working. /

*Session:* Nursing Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

## ***Nursing Care of Enemas: Comfort Measures***

Samantha Mills  
Hannah Holladay  
Julia Corey  
Gallie Shugarman

Arlie Moore

Faculty Mentor: Lynne Bryant School of Nursing

*Significance /* The enema procedure is important in nursing practice because of the large scale of people who potentially may require this type of diagnostic testing. The main purpose of our research focuses on the importance of comfort measures during administration of an enema. / *Current Research /* Current enema practice is based on natural or field setting research, which includes descriptive research. The procedure may be done in a clinical setting or in the patient's home (Taylor, Lillis, LyMone, & Lynn, 2011). / *Literature Reviewed: /* Databases used: Cochran, MD consult, CINAHL and Medline. All searches were limited to English, full text, evidenced-bases and dates were limited to 2008-2013. Six articles and two books were included in this research analysis. / *Summary of Evidence: /* Due to the discomfort and embarrassment with this procedure, studies have been done to enhance patient experience. Social interactions and communication with the staff were documented as very important to the overall experience and particularly important in controlling the patients' embarrassment. Having a more intimate relationship with the physician facilitated better patient understanding, trust and overall satisfaction, which led to, reduced post-test anxiety(Wagner et al. 2008) / *Clinical Considerations: /* Due to the nature of this procedure, nurses must consider the patient's privacy when administering. The cost of an enema is usually covered under health insurance. / *Recommendations: /* Our main finding was that the social aspect of administration of an enema was more comfortable if the nurse formed a relationship with the patient. We recommend establishing rapport in order to make the procedure most successful.

*Session:* Nursing Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

## ***Methods of Burn Wound Debridement in Clinical Practice: Chemical versus Mechanical***

Brittany Wray  
Rachel Simons  
Lindsey Dulling  
Brittany Spence

Faculty Mentor: Rebecca Bryant School of Nursing

*Significance /* Burn debridement has become increasingly important for care of patients with severe burn wounds. It reduces the likelihood of infection by removing dead tissue to accelerate healing and promote tissue regeneration. There are two major types: mechanical and chemical. / *Current Practice /* The primary method is mechanical debridement. This consists of removing dead tissue through the use of wet to dry dressings, mechanical scrubbing, or whirlpool method. Chemical debridement is the next commonly used method. It's preferred when patients cannot tolerate mechanical debridement by using an enzymatic solution. / *Literature Reviewed /* Databases used included Cochran EBC, CINAHL, and MD Consult. The searches were limited to English, full-text, and the dates were limited from 2000 to current. We used three articles for our research analysis. / *Summary of Evidence /* Debridement is the most effective treatment for burns due to its ability to improve the healing rate and decrease the risk for infection. Mechanical debridement is recommended for rapid, efficient removal. Chemical debridement would be suitable for those who cannot withstand the mechanical procedure. / *Clinical Considerations /* It's been concluded that each method can achieve the same results, but mechanical debridement is often the

procedure of choice. In trying to better reach an understanding of which is more efficient, it would be helpful for a direct comparison to be done in a controlled setting. / / Recommendation for Practice / From the current information, it can be concluded that mechanical debridement would be the method of choice due to its effectiveness and decreased risk of infection.

*Session:* Nursing Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 1:00-3:00pm  
*Location:* Heth 14

## Digital Art Exhibit

### *Digital Painting: A Step Into the Future of Art*

#### ARTG 384 Class

Faculty Mentor: John O'Connor Art

Traditional methods of artistic creation have been practiced for thousands of years. The mediums of oil, water color, graphite, ink, and the artists that used them over the centuries have produced many of our most treasured artworks. The past decade however has seen rise in the digital medium as an art form; both in the skills of the artists who practice the craft and the sophistication and usability of the digital interface. This interface is now capable of mimicking traditional techniques of brush and paint, ink and line, texture and form. A distinction needs to be made between this form of digital art and "Photoshopping"; the artists begins with either a blank canvas or a scanned actual sketch, then moves onto digital inking and coloring or actual digital painting rather than transforming existing imagery. The subject matter can range from the typical still life with flowers or a bowls of fruit to the visualization of vast alien civilizations. The style ranges from comic book inking and coloring to painterly portraiture and landscapes. The approach using digital is the same as traditional in that form is created, value,color and texture is added, and the composition becomes a work of art, all by mixing and painting pixels rather than oils and pigment. / The students are from the new ARTG 384 Digital Painting class in the Art Department. A variety of techniques and subject matter will be covered. The differences and similarities of digital versus traditional will be discussed as well. The work will be exhibited both in print and projected form. / Approximately 10 students plus the professor will be involved.

*Session:* Digital Art Special Session  
*Presentation Type:* Artistic exhibit  
*Day & Time:* Tuesday 4:00-5:00pm  
*Location:* Heth 16-17

## Multidisciplinary Poster Session

### *A Critical Review of Co-Teaching*

Amanda Hawkins

Faculty Mentor: Dana Rose School of Teacher Education and Leadership

Co-teaching is a teaching practice that originated in the Special Education field. Co-teaching takes place in the classroom when two educators, typically a general educator and a special educator, share a classroom. This method of teaching is becoming more and more prevalent in inclusive classrooms across the country where all students, regardless of disability, are placed in general education classrooms. In my early field experience I was co-placed in a classroom with a special education intern, where I was able to experience and practice co-teaching first-hand. From this experience, I saw many benefits of this method of teaching for students. This paper contains my critical reflection of co-teaching. I researched various studies of co-teaching practices in schools. I researched both qualitative and quantitative studies to find benefits and challenges associated with this teaching practice. This particular approach is still relatively new to education, but this teaching method can change the way schools educate students with special needs.

*Session:* Multidisciplinary Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 4:00-5:00pm  
*Location:* Heth 43

### *Identity Expression - Visual Analysis of the Self in Society*

#### Benjamin Brightman

Faculty Mentor: Edwin Page Sociology

The goal of this project is to assert the capability of photographs to provide massive sets of comparable nominal and ordinal data. This is done through observing the outward expressions of an individual within society. The way in which this is done is by photographing a person and exploring the labels inherent in the image taken without implying any information into the scene. In order to create a larger sense of label validity, a large series of images will be taken of individuals throughout a single day in to demonstrate that certain labels are consistent, some are not, and that assumptions about human behavior can be made effectively by observing these repeated sets of information about an individual. Results are collected in graphs related to each collected image and then at the end of the picture set, a table is created in order to reveal the consistency levels of the labels within each individual image. All participants are willing, over the age of 18, and aware of each photograph taken. Subjects also have the right to end their role study at any point and choose how much access the photographer has to them.

*Session:* Multidisciplinary Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 4:00-5:00pm  
*Location:* Heth 43

### *The "Power" of a Power play in the National Hockey League (NHL)*

#### William Baker

Faculty Mentor: Gary Fetter Management

The power play in hockey can be a golden opportunity for a team to score on their opponent, if they can take advantage of it. The power play gives a team the advantage of having more players on the ice for a certain amount of time than their opponent. It is generally agreed that it is easier to score when a team has a player advantage as compared to when each team has the usual 5 players and a goalie.



However, having a power play opportunity does not guarantee that a team will score, and whether or not a team scores during a power play opportunity does not guarantee that they will win the game. Although the power play is an important opportunity in the game of hockey, there are few research studies that have examined its quantitatively. This study aims to evaluate the impact that power plays in hockey have upon winning or losing a game. We present results from our statistical analysis using data from current 2012-2013 National Hockey League (NHL) games.

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Chinese Language-Learning Software Programs as Effective Learning Tools**

**Charlene Smith**

Faculty Mentor: I-Ping Fu Foreign Languages and Literatures

China is becoming the epicenter of global economic and social development. With the gigantic leaps in technology, more people are choosing to learn the Chinese language through interactive software programs. This research will evaluate the programs provided in Radford University's language lab and their features. The software features of Rosetta Stone®, Tell Me More®, IQChinese®, and other similar software programs will be evaluated for 1) compliance with the academic language-learning standards of the American Council on the Teaching of Foreign Languages (ACTFL) and 2) their effectiveness in teaching non-native Chinese speakers the Chinese language over the course of a semester. The software programs and their features will be contrasted and compared with these standards, as well as, with each other. Feedback will be collected from university-level Chinese language students regarding which software features and programs enabled them to accurately and effectively speak, read, and write the Chinese language. This research is intended to provide educators and students alike with an evaluation of whether these Chinese language-learning tools in RU's language lab are satisfactory for the need to learn and improve Chinese language in a semester. Also to be discovered are other software programs in the market today that are cost-effective and worth the investment for RU students. This research evaluates Chinese language-learning software programs and their features for 1) compliance with the academic language-learning standards of the American Council on the Teaching of Foreign Languages and 2) their effectiveness in teaching a non-native Chinese speaker the Chinese language and what the programs have to offer learners. /

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Fourth Amendment rights v. Drug Detection Dogs**

**Heather Newsome**

Faculty Mentor: Jack Call Criminal Justice

Currently, there has been an issue rising in the courtroom about the use of drug detection dogs to search an individual's home and whether or not this violates an individual's Fourth Amendment right to unreasonable search and seizures. Drug detection dogs have been used for hundreds of years by law enforcement officers to determine

the presence of contraband. It is not uncommon for drug detection dogs to be used to search items in a public area and motor vehicles. However, when considering the use of drug detection dogs at an individual's home, questions remain on the legality of the issue. Depending on an individual's own interpretation of the Fourth Amendment of the Constitution two arguments can be made concerning the use of drug detection dogs. The first argument is that drug detection dogs are a sense-enhancing tool and that law enforcement officers would not have been able to obtain specific information with his or her ordinary powers. The second argument is that drug detection dogs only reveal the presence or absence of contraband and the imminent details inside the home remain unknown, which does not violate an individual's Fourth Amendment right. My research focused on a specific court case, Florida v. Jardines, which is currently before the Supreme Court. The issue is whether the use of a drug detection dog to sniff for drugs at the front door of a residence is a Fourth Amendment search. Being that this is a new and upcoming issue in court cases I wanted to find out how many court cases have encountered this issue and what the outcomes of the cases were. A poster board presentation will be presented on my standing of the issue.

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Designing a residential space for the hearing impaired**

**Christine Watts**

Faculty Mentor: Jessica Goldsmith Interior Design & Fashion

As interior designers we are expected to be aware of an accommodate people with a variety of disabilities, but frequently people fall through the cracks. Hearing loss is something I struggle with myself, and typically when designers deal with hearing loss they consider only total deafness when partially or selective hearing loss is far more common. The aim for my capstone project was to design a residential space for a resident with partial or total hearing loss that would selectively manipulate acoustics to deal with the problems associated with hearing loss. / This projects consists of a research component, with a paper going into the basic functions of acoustics and how these will be applied to the space, a plan set including a ceiling plan, floor plan, and annotated floor plans, renderings of the interior space, specification of materials, and presentation boards depicting the final product. /

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Designing Hotels for Tornadoes**

**Emily Gaines**

Faculty Mentor: Joan Dickinson Interior Design & Fashion

This project examines methods that can be used to design hotels to better protect against tornadoes. A hotel was chosen because it is an unfamiliar, multi-story environment that can become unsafe during an emergency situation. The intent was to create a safe environment in an otherwise unsafe situation in order to protect the occupants within the building. Three key areas of design including materials, wayfinding, and space planning were examined to

consider how these aspects can be utilized to provide safety within a hotel. The project consisted of designing a 5 story hotel/conference center that includes safe rooms to use during tornadoes, wayfinding to help the guests quickly find safe rooms, materials used in the building's construction, and space planning to protect those within rooms other than the designated safe rooms. The project also includes features that can be adapted for use during other emergency procedures as well, which will be beneficial in the hospitality and commercial industries.

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Physical and Health Education can Save Lives**

**Nicole Swope**

Faculty Mentor: Jon Poole Exercise, Sport and Health Education

Physical and Health Education plays an imperative role in the lifelong health and wellness as well as overall academic success of students. However, many parents and their students do not value the physical, cognitive, and affective skills taught in Physical Education such as the five components of fitness, teamwork, cooperation, decision-making, and motor and sport skills. Children often take on the same values about physical activity as their parents. If physical educators have parent and community support, schools will see an increase in test scores and decrease in obesity rates. The goal of this project is to educate families of the importance of physical activity and Physical Education in schools by involving them in the same activities in which their children participate and enjoy. In order to address the physical aspect of this project, parents were invited to a Family Fitness Night hosted by an elementary school. They were also challenged to participate in physical activity together as a family outside of the school environment. A final review of other literature revealed that not only can Physical Education help students physically, but also academically. There is a clear connection between an increase in students who are physically active and an increase in test scores.

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Examination of the Role and Importance of Acute and Primary Care Nurse Practitioners in Southwest Virginia**

**Kendahl Kean**

Faculty Mentor: Suellen Miller School of Nursing

As a capstone endeavor to my undergraduate nursing career at Radford University, I chose to examine the multidimensional roles that nurse practitioners are fulfilling across the healthcare continuum. Originally, the focus was targeted to defining the role of Adult-Gerontology Acute Care Nurse Practitioners [ACNP-AG] because of personal career interests. However, after reviewing current literature and gathering knowledge about the Affordable Care Act of 2010, I chose to broaden my focus. Rather than solely defining the role of acute care nurse practitioners within the hospital settings, my outcome goal moved to investigating the impact which acute and primary care nurse practitioners have in the medically underserved areas of Southwest Virginia. / To evaluate the nurse

practitioner's role and their augmentation to healthcare, I performed extensive literature reviews of scholarly nursing collections located through the Radford University Library journal database. This literature review concluded the future of acute care and primary care nurse practitioners is firmly secured and invaluable to the future of healthcare. Nurse practitioners enhance both direct and indirect healthcare delivery in many settings. Nurse practitioners are educated and fully-equipped with a wide range of skills encompassing both the art and the science of nursing. Nurse practitioners, when afforded opportunity to practice to the full extent of their education and credentialing, serve the community alongside physicians to provide efficient, high-quality, patient-centered care at a lower financial burden in both acute and primary care settings. This partnership is essential when considering the current healthcare shortage in the United States, including Southwest Virginia

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*

### **Radford Sense of Place Project**

**Katherine Patterson**

**Charlene Smith**

**Aaron Laboy**

**Susan Masse**

**Madison Pitts**

Faculty Mentor: Timothy Filbert Counselor Education  
 Sarah Garrison Counselor Education

The City of Radford is more than a little city along the New River. It is a community involving neighborhoods, local businesses, Radford University, and more importantly, its citizens. Our class focuses on community engagement and bridging the gap between university students and permanent residents. Our project is intended to explore what gives the Radford community a "sense of place" based on its public spaces. We will be displaying images of these public spaces and explaining how they are currently being used. We will be soliciting ideas from all community members, from young to old, from students to lifelong residents, as to how these spaces may be utilized to further community involvement in the future. Our project is divided into three subject areas: local commerce and economic development, natural surroundings and local parks, and historic architecture and products of culture. Local commerce and economic development will focus on how local economy thrived in the past and how we can keep it thriving in the future. Natural surroundings and local parks will focus on the importance of recognizing how nature improves a community's sense of place and how we can continue to improve upon the natural look of the community. Historic architecture and products of culture will focus on historical and vacant buildings, how they are being used now, and may be used in the future to display cultural expression of the Radford artistic community. The purpose of this project is to share viewpoints of the Radford community between lifelong residents and the students and faculty of Radford University, foster a greater sense of place for all involved, and to create a unified pride in the uniqueness of Radford.

*Session: Multidisciplinary Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 4:00-5:00pm*  
*Location: Heth 43*



### ***Building Leaders of Tomorrow: Linking Childhood Parenting Styles to Goal Orientation, Social Intelligence, and Motivational Behavior***

Alexandra Carter

Faculty Mentor: Tal Zarankin Management

The purpose of this quantitative, correlational research study is to discover the effects, if any, that childhood parenting styles have on the goal orientation and social intelligence of student-leaders, and the corresponding impacts that these paradigms have, if any, on their student-followers'—or subordinates'—motivational behaviors. The study will employ a survey research method in which 15 student-leaders of on-campus organizations at Radford University will be assessed for parenting styles that were exposed to them during childhood, as well as their current goal orientation and social intelligence. Although discovering the links between a childhood environmental element and both goal orientation and social intelligence is beneficial to the field of management as understanding these links can enable parents to purposefully adjust the ways they control and care for their children so as to enhance leadership potential, the relationships that are more significant to this field of study involve those between leaders' goal orientation and social intelligence and their followers' sources of motivation. In order to assess these relationships, the Parental Authority Questionnaire (Buri, 1991), the General Causality Orientations Scale (Deci & Ryan, 1985), the Achievement Goal Questionnaire (Elliot & McGregor, 2001), the Tromso Social Intelligence Scale (Silvera, Martinussen, & Dahl, 2001), and the Motivational Sources Inventory (Barbuto & Scholl, 1998) were utilized. Moreover, while this study pertains to student-leaders, specifically, people at any level of authority can potentially benefit from its outcomes.

*Session:* Multidisciplinary Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Tuesday 4:00-5:00pm

*Location:* Heth 43

## **Social Science Symposium I**

### ***The Redcoats are Coming***

Damaris Scott Patxot

Faculty Mentor: Roby Page Sociology

The Redcoats are one of the oldest clubs on campus and is a way for those new and old to the equestrian way of life to come together with those who share the same interests. The redcoats are a sort of family in and of itself. We like to say that we are our own sorority and our letters are RUE. We spend a lot of time together not only doing club activities and equestrian shows but also in a social aspect. / I wanted to capture what it is that we do and who we are as a group. Each of at some time or other has been asked "What is a Redcoat?" and when they are told they are surprised that Radford even had an equestrian team. This project will be used to shed light on how we interact with each other and the different things that go into being in the equestrian world.

*Session:* Social Science Symposium I

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Tuesday 4:00-4:15pm

*Location:* Heth 19

### ***A Dive in the Paranormal: A Visual Ethnography***

Heather Wright

Faculty Mentor: Roby Page Sociology

This visual ethnography focuses primarily on Saint Albans Sanatorium and the Mountain Ridge Paranormal Research Society (MRPRS). St. Albans is a historical site that sits high above the New River overlooking the city of Radford. Once used for an asylum for mental patients, the building is now used for paranormal investigations, organized events, and historical restoration. The purpose of this visual ethnography is to visually capture an organization, MRPRS, to understand better its group processes and social interactions within the historical location. To these group members, Saint Albans is their life. They dedicate their weekdays and weekends each week to help restore the historical value. MRPRS has learned so much about the building just through investigations at night. These group members have created meaning with Saint Albans that outsiders just cannot see. This visual ethnography works to capture the symbolic interaction between Mountain Ridge Paranormal Research Society and the historical Saint Albans Sanatorium.

*Session:* Social Science Symposium I

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Tuesday 4:15-4:30pm

*Location:* Heth 19

### ***Responding to Persons with Mental Illness: Can Screening Checklists Aid Law Enforcement?***

Christian Mason

Faculty Mentor: Tod Burke Criminal Justice

Stephen Owen Criminal Justice

On a daily basis, law enforcement officers may interact with persons suffering from various forms of mental disorders. Accordingly, officers must be well-prepared to recognize and appropriately respond to indicators of mental illness. The purpose of this presentation is to recommend a checklist that can be used by frontline officers to quickly screen for mental disorders.

*Session:* Social Science Symposium I

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Tuesday 4:30-4:45pm

*Location:* Heth 19

### ***Communicating with the Dead***

Ryan Waide

Faculty Mentor: Susan Kwilecki Philosophy and Religious Studies

For an Independent Study, RELN 478: Communicating with the Dead, we sought to study the beliefs on After Death Communications of ancient peoples as well as those of modern day. Dr. Raymond Moody, a psychiatrist that has been practicing since 1978 in the field of grief therapy, began his research by studying Near Death Experiences which led him to the study of After Death Communications. Through the use of Dr. Raymond Moody's research

and that gathered by a self built Psychomanteum, we aim to study the effects of After Death Communications on a person's worldviews and beliefs. / A psychomanteum uses sensory deprivation and mirror gazing techniques to facilitate an After Death Communication, something scientists are hesitant to fully support can be induced in a lab-like setting due to lack of research. This experience, or lack thereof, has shown significant after-effects, some that greatly reduce the negative feelings associated with losing a loved one. After building a psychomanteum as closely to Moody's specifications as could be achieved, research data was gathered in an office on Radford University Campus. / Sixteen participants went through the chamber. The results were overwhelming. Thirteen out of Sixteen people said they actually believed they contacted a deceased loved one. The experiences themselves varied greatly in content, but every person that had an experience reported a positive almost therapeutic effect that helped to assuage their grief. Throughout my presentation, I will create "profiles" in which to delve into these experiences more in-depth.

*Session: Social Science Symposium I*  
*Presentation Type: 15 minute oral presentation*  
*Day & Time: Tuesday 4:45-5:00pm*  
*Location: Heth 19*

## Chemistry Poster Session

### ***Fire Resistance of Modified Polyvinyl Chloride***

Joshua Varga

Faculty Mentor: Cindy Burkhardt Chemistry  
 Poly(vinyl chloride), PVC, is the third most produced polymer in the world. PVC is inherently nonflammable. However, upon addition of modifiers used to make it into a wide variety of consumer products, flame resistance is compromised. Therefore, depending on its use, other additives must be incorporated to counteract and make it flame resistant again. Limited Oxygen Index was used to determine the lowest amount of oxygen the PVC would ignite in at different thicknesses. Thermogravimetric Analysis was used to determine the stability of the modified samples over a range of temperatures.

*Session: Chemistry Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 5:00-7:00pm*  
*Location: Heth 43*

### ***Molecules of interest in targeting non GAT 1 receptors***

Nima Hami

Faculty Mentor: Christopher Monceaux Chemistry  
 The role of GABA transport proteins, or GAT proteins, have sparked interest as targets for antiepileptic drugs. The FDA approved drug Tiagabine has shown selective and potent inhibition of the GAT 1 protein. With the use of several different starting compounds (2-, 3-, and 4-nitrobenzenesulfonyl chloride) we are aiming to synthesize cyclic sulfonimamides that may show effective inhibition at one or more isotype of the GAT proteins, in particular interest is the GAT-2, GAT-3, and BGT-1 proteins as there are currently no selective and potent inhibitors of these proteins at this point in time.

*Session: Chemistry Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 5:00-7:00pm*  
*Location: Heth 43*

### ***Cyclic Sulfonimidamides for the Potential Use as GABA Reuptake Inhibitors***

Brandon Johnson

Faculty Mentor: Christopher Monceaux Chemistry  
 The inhibitors of GABA transport proteins (GATs) have generated interest as improved anti-epilepsy agents. Of these transport proteins, the GAT1 isoform is the one of four that has a known potent and selective reuptake inhibitor (Tiagabine), whereas the other 3 isoforms do not. We aim to synthesize GABA mimics containing cyclic sulfonimidamides (a carboxylic acid isostere) using various starting materials: 2-,3-, and 4- nitrobenzenesulfonyl chloride. A key feature in this design is the use of the cyclic non-planar carboxylic acid isostere into the known GABA reuptake inhibitor piperidine-carboxylic acid (ACHC) in hopes of finding a novel class of selective and potent non-GAT1 inhibitors. This possible new class of CNS-active drugs may also have applications in other disorders due to an imbalance of GABA, such as depression and Alzheimer's disease.

*Session: Chemistry Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 5:00-7:00pm*  
*Location: Heth 43*

### ***New Synthesis of sulfonimidamides as GABA Reuptake inhibitors***

Jessica Mawdsley

Faculty Mentor: Christopher Monceaux Chemistry  
 The GABA transport proteins (GATs) have generated interest as target for the treatment of epilepsy. The FDA approved antiepileptic drug Tiagabine is a potent and selective reuptake inhibitor for the GAT1 protein. The other isoforms of GATs: BGT-1, GAT2, and GAT3 have relatively unknown mechanisms; due to a lack of potent and selective inhibitors. We hope to target these isoforms to potentially develop a new class of antiepileptic drugs. Various starting materials compounds (2-, 3-, and 4-nitrobenzenesulfonyl chloride) were used to synthesize sulfonimidamides. It is hoped that the sulfonimidamides shows a higher potency and selectivity for the non-GAT1s isotypes.

*Session: Chemistry Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Tuesday 5:00-7:00pm*  
*Location: Heth 43*

### ***The Affect of Cellular Crowding on the Ternary Complex Formation of Ferrioxamine B and Bipyridine***

Evan Samples

Jessica Robinson

Faculty Mentor: Joseph Wirgau Chemistry  
 The drug Desferal is used in combination with vitamin C for the treatment of transfusional iron-overload. Previous work has demonstrated that the iron bound drug (ferrioxamine B) is redox

stable when combined with biologically relevant reducing agents but is redox active with the addition of iron(II) chelating agents. The mechanism of reduction occurs through ternary complex formation followed by reduction and ligand exchange reactions. This work is designed at better modeling cellular conditions by simulating cellular crowding through the use of high concentrations of polyethylene glycol (PEG). The binding constant for the formation of a ternary complex between iron(III), desferrioxamine B, and bipyridine was determined through a spectrophotometric titration at various PEG concentrations.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

### **Subunit Interface Mutagenesis of the Wild-Type $\beta$ -glucuronidase**

**Gina Burchett**

Faculty Mentor: Kimberly Lane Chemistry

$\beta$ -glucuronidase is an enzyme that is present in many organisms, such as humans and bacteria.  $\beta$ -glucuronidase is a homotetramer that has an active site on each of its monomers. The enzyme cleaves a glucuronide group from its substrates, releasing an organic alcohol and glucuronic acid. The bacterial form of the enzyme, expressed by intestinal bacteria, is known for reactivating molecules, including toxins, within the intestinal lumen. The toxins cause severe deterioration to the cell mucosa lining that can induce diarrhea and lead to ulcers. Deficiencies in the human form of  $\beta$ -glucuronidase can lead to the onset of Sly Syndrome, a lethal disease with no current treatments. Previous studies have exhibited evidence that a stable dimer of the enzyme may exist. This current study focuses on possible point mutations in silico to decrease electrostatic interactions at subunit interfaces to form three possible dimers. The WinCoot software was used to locate salt bridges and interactions between Monomer 1 and each of the other 3 subunits. The possible dimers associate the subunits back to back, corner to corner, and face to face. The residues predicted to make relevant interactions are E6, K12, D16, D319, R43, D477, K157, Y517, D53, R10, E523, H514, K576, S579. MC-PRO will be used to predict feasible mutations for laboratory testing. A stable dimer of this enzyme could prove useful in current cancer and disease research.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

### **Beta-glucuronidase**

**Suzanne Hengeli**

Faculty Mentor: Kimberly Lane Chemistry

Beta-glucuronidase ( $\beta$ -glucuronidase) has been associated with the side effects related to the cancer treatment drug CPT-11 (irinotecan hydrochloride), which is primarily used for colon cancer treatment. CPT-11 is converted in the body to the active form of the drug, SN-38, which is further metabolized into SN-38G (by addition of a glucuronide group). This allows for SN-38G to be transported to the intestine for elimination, where it is hydrolyzed to SN-38 by the bacterial form of the enzyme beta-glucuronidase. This release of SN-38 causes damage to the intestinal lining, leading to side effects such as severe diarrhea. Recent studies have produced an inhibitor that is specific for the bacterial form of beta-glucuronidase and have demonstrated that this specificity is due to the presence of an active

site loop found in the bacterial form of the enzyme, but not the human form. In this study, mutations in the residues found in the active site loop of the enzyme, which are residues 360 through 376, were modeled using WinCoot and Argus Lab. Residues in the active site loop were mutated to see how the binding energies would be affected, the tighter the binding energies the estimated better the inhibitor would bind to that active site.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

### **Mutagenesis of the Wild-Type E. coli $\beta$ -glucuronidase**

**Skye Hickling**

Faculty Mentor: Kimberly Lane Chemistry

Camptothecin-11 (CPT-11) is a drug used for chemotherapy in cancer patients. However, CPT-11 is a pro-drug that gets converted to the topoisomerase inhibitor SN-38. SN-38 is metabolized in the liver to SN-38-glucuronide. Bacterial  $\beta$ -glucuronidase hydrolyzes the glucuronide from the SN-38-glucuronide, re-releasing SN-38 into the intestines. This reformed SN-38 is toxic to the body and  $\beta$ -glucuronidase is the key to the toxicity of the drug CPT-11, characterized by damage to the intestinal lining and severe diarrhea. Research has shown that the use of inhibitors of E. coli  $\beta$ -glucuronidase decreases the amount of damage to intestinal cells. This current study has been using the programs WinCoot and Argus lab to develop mutations in silico of the active site in  $\beta$ -glucuronidase at residues that have shown to be of some importance through the study of an enzyme closely related to  $\beta$ -glucuronidase called  $\beta$ -galactosidase of  $\beta$ -glucuronidase. These mutations were developed at the following residues: His296, Glu297, Ser360, Phe365, Asn412, Glu413, Tyr468, and Glu504. In the future, MC-PRO by Schrodinger will be used to determine feasible mutations for laboratory testing. Through these calculations, mutations will be developed and studied for the interactions between E. coli  $\beta$ -glucuronidase and ligands in hopes of learning more about the enzyme mechanism, which could help in further drug development.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

### **Using Computational Chemistry to Predict the Outcomes of Protein/Ligand Interactions**

**Dylan McKnight**

**Jacob Mace**

Faculty Mentor: Timothy Fuhrer Chemistry

$\beta$ -glucuronidase is an enzyme that belongs to the glycosidase family of enzymes. These enzymes catalyze the breakdown of complex carbohydrates known as glycosaminoglycans. Human  $\beta$ -glucuronidase is located in the lysosomes of the cell and functions as digestive enzymes. The chemotherapy drug CPT-11 targets rapidly dividing cells and has been shown to effectively reduce the growth of cancerous tumors. Unfortunately, CPT-11 is not yet a safe cancer therapy due to the harmful side effects that result from the buildup of SN-38. Side effects include damage to the epithelial lining of the colon and severe diarrhea that restricts effective delivery of the drug. Upon entering the human body, SN-38 (a byproduct of CPT-11) is

converted to a less toxin form in the liver (SN-38G). In the intestines, SN-38G is reactivated by  $\beta$ -glucuronidase, converting it back to its original toxic form (SN-38). Our current focus is on using computational modeling techniques to test possible inhibitors of  $\beta$ -glucuronidase, so that CPT-11 can be a safe and effective treatment for cancer patients.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

### ***Computational study of synergistic effects of chlorine and fluorine as catalysts for fullerene formation***

**Chris Pregot**

Faculty Mentor: Timothy Fuhrer Chemistry

We have computationally modeled several derivatives of the polycyclic aromatic hydrocarbon C<sub>18</sub>H<sub>10</sub> to determine if replacing particular hydrogen atoms with chlorine or fluorine atoms would make pentagon closure more energetically favorable. Pentagon closure is the key to fullerene formation. Since chlorine and fluorine are known to be ortho para directors, one or both of them may serve as catalysts to the pentagon ring closure if the atoms are placed at the proper positions. Computational results show that replacing any hydrogen atom on C<sub>18</sub>H<sub>10</sub> with a chlorine atom, except at the meta position to the pentagon closure site, makes pentagon closure more favorable. For fluorine, only the sites ortho and para to the pentagon closure site increase favorability. When multiple chlorine or fluorine atoms are placed on the same C<sub>18</sub> model at sites that favor ring closure, there is a synergistic effect on the favorability of pentagon closure.

*Session:* Chemistry Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-7:00pm  
*Location:* Heth 43

## **Biology Poster Session**

### ***Wildlife Interpretation with Children: Identifying What's Important***

**Melissa Whistleman**  
**Meghan Stump**

Faculty Mentor: Karen Francl Biology

The USDA Forest Service and The Boy Scouts of America recognize the importance of investing in environmental education of children and young adults. At the Eastern Divide Ranger District of the USDA Forest Service in Blacksburg, we assessed children ages 3-6 in multiple wildlife interpretive programs and settings during summer and fall 2012. Additionally, at Alta Mons in Pembroke, we led Boy Scouts ages 11-15, in attaining three merit badges: Mammal Study, Nature Study and Environmental Study. For both groups, our goal was to determine the most meaningful and enduring teaching methods to the kids, while discovering particular interests and focusing on individual processes of learning. At the end of every session, we identified useful learning techniques, the most

memorable activities, and what aspects of the program most interested them. All children were tracked to note positive and negative reactions to topics of the day and/or activities. As expected 88% of the participants (N = 44/50) preferred learning about wildlife in the outdoors instead of the classroom. Results for determining most effective learning style were slightly differentiated between the two age groups with younger children preferring physical learning (65%, N=13/20) over auditory (30%, N = 6/20) and visual learning (.05%, N = 1/20). Older students also found physical learning to be more effective (87%, N = 26/30 ), however the Boy Scouts did not identify with visual learning, possibly because they entered the educational environment with more knowledge, and experience in the topics. Using these programs as a guide for teaching children more appropriately about wildlife education in a real-life setting will ultimately lead to students further embracing outdoor knowledge.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Effects of Calcium Acetate, Gibberellic Acid and a Combination of the Two on Leaf-Peel Cultures with Crystal-Containing Idioblasts in Dieffenbachia seguine***

**Melissa Whistleman**

Faculty Mentor: Gary Coté Biology

Dieffenbachia seguine is a tropical plant that produces calcium oxalate crystals. The leaves of Dieffenbachia contain two major types of crystals, needle-like raphides and star-like druses. Biforines, oval cells that contain raphides are able to expel the crystals, and researchers have suggested that the crystals deter herbivores. Previous experiments by Ohene Amponsem in Dr. Coté's lab suggested that crystals were lost from Dieffenbachia leaf peels prepared with their lower surfaces removed, even with added calcium, but that the plant hormone gibberellic acid prevented this loss. We attempted to replicate this. Dieffenbachia leaf peels were floated on solutions of 200  $\mu$ M gibberellic acid, 20  $\mu$ M calcium acetate, or a combination and incubated in a well-lit growth chamber for 3 to 4 weeks. The leaf peels were then cleared and examined under both brightfield and polarization microscopy, and the crystals were counted. The numbers of druses appeared to be higher in peels treated with gibberellic acid, especially with calcium also added. However, we were unable to confirm that the hormone prevents crystal loss in peel culture.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Crystal-Producing Cells in Petioles of Deciduous Leaves.***

**John Huth**

Faculty Mentor: Gary Coté Biology

Microscopic intracellular crystals of calcium oxalate are produced throughout the plant kingdom. It has often been proposed that these crystals defend against herbivory, but other roles have also



been suggested, including the possibility that they sequester calcium from cell walls during controlled breakdown of plant tissues. One case of such controlled breakdown involving cell wall changes is the abscission of spent leaves and floral parts, in which a layer of cells with weakened cell walls is formed. Calcium oxalate crystals have been extensively studied in leaf blades of a large diversity of plants, but there have been only few reports of crystals in petioles. We collected abscised autumn leaves from 16 species of deciduous trees, and prepared cleared specimens of both leaf blades and petioles. Using brightfield and polarization microscopy, we examined the region adjacent to the abscission zone of the petioles for the presence of crystals. Species differed in the presence and shape of petiolar crystals. We continued this study by collecting and examining young spring leaves, mature summer leaves and autumn leaves of 5 species that demonstrated crystals. There was an increase in crystals near the time of abscission in *Ginkgo biloba*, *Acer saccharum*, and *Tilia Americana*. We plan to confirm the presence of calcium oxalate chemically.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Scanning Electron Microscopy of Calcium Oxalate Crystals of the Reproductive organs of Dieffenbachia seguine (Araceae)***

**Brian Ingram**

Faculty Mentor: Gary Cote Biology

Calcium oxalate crystals are found throughout many families of plants, notably in the family Araceae. These crystals have been hypothesized to serve for protection from herbivores, mechanical support, mineral balance, and waste sequestration. Dr. Coté (2009, American J. of Botany, 96: 1245-1254) cataloged various crystals in *Dieffenbachia seguine* with observations by light microscopy and others have studied the ultrastructure of crystals from different parts of various plants using scanning electron microscopy (SEM). However, to our knowledge, there has not been a comparative study using SEM of crystals from all parts of one single plant. We have obtained multiple images of crystals in the leaves, petioles, stem and roots of *D. seguine* during past semesters of research. Currently, our objective has been to photograph the various crystals found in the reproductive organs of *D. seguine*. Flowers sent by Dr. Marc Gibernau in French Guiana and those grown at Radford University were dried and fractured before sputter-coating and observation under the SEM. We have imaged several different types of crystals from the spathe, gynoecea, synandria, staminodia and pollen. In the spathe we have found evidence by SEM and polarization microscopy of a new form of crystal, a concretion, previously reported in species of Rubiaceae (Lersten and Horner, American J. of Botany, 98).

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Analyzing arsenic resistance gene expression using different growth conditions that model the environment from which they were isolated***

**Jasmine Jackson**

Faculty Mentor: Georgia Hammond Biology

The arsenic resistance gene, *arsC*, converts arsenate to arsenite. This reduction reaction provides the bacterial cell with the potential to oxidize organic compounds and gain energy from the process. Arsenate is toxic to bacterial cells because it shuts down energy production; arsenite, the more toxic of the two forms, destroys protein folding. Many bacteria then eliminate the arsenite out into the environment using a membrane-bound transport protein. I have taken soil samples from the arsenic mine in Floyd County and grown the bacteria from the samples in nutrient broth. My capstone uses PCR to analyze the gene expression of *arsC*, *arrA*, and *aoxAB*. The 20 bacteria that I have isolated will be identified using DNA sequencing reactions. Wave-forms will be used to analyze the data of the sequences and the sequences will be compared to other identified bacterial species that are located in different databases. By identifying the 20 bacteria, I am able to find out which bacteria contain the different genes that were analyzed.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Relationship between nest box incubation temperature, female nest attentiveness, and female corticosterone levels in Eastern Bluebirds (Sialia sialis)***

**Fionna Surette**

**Erika Palmquist**

**Brandi Norris**

Faculty Mentor: Judy Guinan Biology

Jason Davis Biology

Because egg incubation temperatures can have a significant effect on subsequent hatching success, we examined the potential interactions between female incubation behavior, internal nest box temperatures and female corticosterone (the primary avian stress hormone). Over the course of four breeding seasons, we observed female nest attentiveness of Eastern bluebirds (*Sialia sialis*) nesting in and around Radford, Virginia. During the incubation period, we observed female behavior on two separate days to ascertain the amount of time females spent on the nest and the frequency at which males delivered food to females. At the start of the incubation observations for three of those years, we placed a small digital thermometer into the nest to record temperature over a 20-hour period. We analyzed correlations between incubation temperature, daily external temperatures, female nest attendance and corticosterone to determine whether female attentiveness during incubation was related to female corticosterone level.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Characterization of Circoviruses from Wild and Domestic Animals***

**Fionna Surette**

**Kaitlin Clower**

Faculty Mentor: Justin Anderson Biology

The Circoviridae viral family, comprised of non-enveloped, icosahedral viruses with 2kb single-stranded DNA genomes, has been characterized most extensively in swine (Porcine circovirus type 1 and Porcine circovirus type 2). Recent research has identified increased host diversity of these circular ssDNA viruses, with species being isolated from spleen, Bursa of fabricious, and skin of avian species. They have also been detected in feces and serum samples in non-human primates and swine, respectively. Here, we analyze samples from house sparrows (*Passer domesticus*), domestic dogs (*Canis lupus familiaris*), Guinea Pigs (*Cavia porcellus*), and house cats (*Felis catus*). PCR will be run on DNA extracts from all samples using two different sets of primers to add specificity for genomes that contain replicase (Rep and Rep') and capsid protein sequences, shown to be conserved among circoviruses. Since little is known about the Circoviridae, we are interested in identifying new hosts that circoviruses are able to successfully infect in order to contribute to phylogenetic analysis for a more complete evolutionary understanding of the Circoviridae.

*Session: Biology Poster Session*

*Presentation Type: Poster presentation*

*Day & Time: Tuesday 5:00-6:15pm*

*Location: Heth 14*

### **PRELIMINARY SURVEY OF SUMMER BATS AT THE RADFORD ARMY AMMUNITION PLANT**

Dorothy Landgren

Faculty Mentor: Karen Francl Biology

Given the presumed impact of White Nose Syndrome (WNS) on summer bats in the Commonwealth of Virginia, we sought to examine the current bat community at the Radford Army Ammunition Plant, New River Unit, in Dublin, VA. Pre-WNS (ca. 1998) surveys had documented just two bat species on the property: Big Brown Bats (*Eptesicus fuscus*) and Red Bats (*Lasiurus borealis*). To maximize species detection, we used recordings from the Anabat echolocation detection system as well as triple-stacked mist-netting techniques. In the summer of 2012, we surveyed two sites with a combination of Anabat and mistnets, and six additional sites with Anabat only. We recorded 663 echolocation call sequences that we analyzed using the EchoClass acoustic identification program (v. 1.1). The maximum likelihood analyses indicated the presence of four species: Big Brown Bats, Red Bats, Tri-colored Bats (*Perimyotis subflavus*), and Hoary Bats (*Lasiurus cinereus*). All species were captured in our mist-nets (16 captures) except for Hoary Bats. Silver-haired Bats (*Lasionycteris noctivagans*) and myotis also were discovered with Anabat only, but the number of call sequences identified to these species was negligible. We intend to conduct a more extensive survey of bats in summer of 2013 to increase the certainty of species presence and relative abundance across all habitats on the property. We also intend to target specific habitats to maximize detection of rare species, like Indiana Bats (*Myotis sodalis*) and Small-footed Bats (*M. leibii*).

*Session: Biology Poster Session*

*Presentation Type: Poster presentation*

*Day & Time: Tuesday 5:00-6:15pm*

*Location: Heth 14*

### **SURVEY OF THE ECTOPARASITES OF THE INVASIVE WEST INDIAN MONGOOSE**

### **(HERPESTES JAVANICUS AUROPUNCTATUS) ON ST. JOHN, U.S. VIRGIN ISLANDS**

Kelsey Townsend

Karen Francl

Faculty Mentor: Karen Francl Biology

In March 2012, we completed live trapping surveys for invasive West Indian mongoose (*Herpestes javanicus auropunctatus*) on St. John, U.S. Virgin Islands. Using tomahawk live traps, we sampled three sites >400m apart from one another over a three-day period. Although the primary focus of the project was to document movement patterns and sex ratios among populations, we also surveyed captured individuals for ectoparasites. Using a flea comb, we brushed the fur of each mongoose for ca. 30 seconds and collected any ectoparasites. We combed 41 mongoose (32M, 9F), and discovered ectoparasites on 27 individuals. The most common parasite was the cat flea (*Ctenocephalides felis*; 18/27 individuals). We found no difference in the number of ectoparasites per mongoose among the three trapping locations ( $F = 1.95$ ,  $df = 2$ ,  $p = 0.157$ ), nor were there differences in the number of ectoparasites across age classifications ( $r = 0.109$ ,  $p = 0.579$ ). However, males have more parasites than females ( $t = 2.65$ ,  $df = 19$ ,  $p = 0.0158$ ). Even when mass was taken into account (males are generally heavier), this gender difference remained in place ( $t = 2.07$ ,  $df = 16$ ,  $p = 0.027$ ). We suggest the occurrence of more parasites on males may be due to behavioral differences, which could be investigated in future studies. Management suggestions from this research are limited, as it does not appear that current ectoparasite loads are negatively impacting the mongoose at this time. However, these data may contribute to our understanding of the role mongoose play within their non-native ecosystem.

*Session: Biology Poster Session*

*Presentation Type: Poster presentation*

*Day & Time: Tuesday 5:00-6:15pm*

*Location: Heth 14*

### **A Case of Indigenous Specialist Herbivores as a Potential Biological Control Agent for an Invasive Herb**

Laken Cooper

Faculty Mentor: Mark Schwarzländer Biology

Because invasive plants may inflict ecological harm to both wildlife and native plants, we investigated a new method of biological control of an invasive plant in Montana. In our summer 2012 study, we employed the green lattice caterpillar (*Gnophelae vermiculata*) as a biological control of houndstongue (*Cynoglossum officinale*), an herbaceous plant known to be harmful in early/late successional habitats of the Northwestern United States. From experiments conducted, we observed that the caterpillars feed more heavily on the invasive plant than they did the native species. Field sites in Montana where this species was observed were surveyed for several factors; level of damage inflicted by the caterpillar, size of invasive plants within the study area as well as total number of caterpillars present per plant. Our results show that the invasive plant in the wild is heavily attacked by this organism. Although not statistically significant, we noted a decrease in seed production (160 seeds produced per non-attacked plant vs. <50 seeds produced per attacked plant) and in seed weight (ca. 4.2 g for non-attacked plant vs. ca. 1.0 g for heavily attacked plant). Further studies are being conducted to determine that, if with a larger sample size, this could show a significant difference in attacked versus undisturbed plants.



The importance of this study is to show that rather than introducing non-native species to control invasive problems, focus should be shifted to look for native solutions to these problems. The green lattice caterpillar is intended to be proposed as a control method for houndstongue.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Determining Expression of HIRA in Arabidopsis***

Josh Pennington  
Hunter Simpson

Faculty Mentor: Tara Phelps-Durr Biology

Abstract / Histone repressor A. (HIRA) is a gene which is particularly important in regulating chromatin, a term used to describe DNA and its associated proteins. DNA within the nucleus is wrapped around nucleosomes which are made of histone proteins. If the DNA is tightly wound it is inaccessible and cannot be transcribed. Chromatin remodeling is the process in which the DNA is altered or unwound so that it can be transcribed. HIRA controls chromatin remodeling by regulating how tightly or loosely DNA is packaged. Our goal is to better understand how HIRA functions to regulate gene expression. In particular, we are trying to determine where exactly in the plant the HIRA gene itself is being expressed. Being able to find the location of a genes expression is a key step in determining its overall function. Arabidopsis or the mustard plant is a great model plant to use due to its rapid ability to mature and produce new seeds. Through the use of a reporter gene that we attached the HIRA promoter to we were able to produced transgenic plants. These transgenic plants when stained will allow us to see where exactly the HIRA gene was being expressed within the plant.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***DNA Barcoding: Identifying the Plants of the Radford University Greenhouse by Their DNA Sequences***

Eric Sapp

Faculty Mentor: Tara Phelps-Durr Biology

Taxonomy is used for the classification and identification of plant and animal species based on shared characteristics. Taxonomy by observation identifies characteristics of a plant, and places the plant in a certain taxa based on those characteristics. By using genetics, we can compare genetic sequences of a variable gene with a genomic database to find a plant's identity and genetically related plants. The use of a genomic sequence for the identification of a plant is referred to as DNA barcoding. / An identifiable DNA segment is preferably comprised of a short and highly variable genetic sequence. We used the Rubisco (rbclA) gene found in chloroplast DNA, since it meets these specifications. Rubisco is an enzyme in plants used for catalyzing carbon fixation in the production of glucose from carbon dioxide. It is the most abundant protein on earth. / Plant foliage samples from the Radford University greenhouse were obtained and identified through the process of DNA barcoding. In brief, DNA was isolated from the plant sample, and the rbclA gene was amplified by PCR. The resulting purified rbclA DNA fragment was then sequenced

with a sequencing reaction. The procured sequence was compared to known sequences through a BLAST search of the National Center for Biotechnology Information genomic database. These comparisons will aid us in garnering the identities of the different plant species that occupy the RU greenhouse.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

### ***Determining the Role of ASYMMETRIC LEAVES 1 and ASYMMETRIC LEAVES 2 in the Leaf Development of Ceratopteris richardii***

Katey Wickham

Faculty Mentor: Tara Phelps-Durr Biology

We have been focusing on the genes ASYMMETRIC LEAVES 1 (AS1) and ASYMMETRIC LEAVES 2 (AS2). We are using Arabidopsis thaliana, a member of the mustard family, and Ceratopteris richardii (C. fern) an aquatic fern. In Arabidopsis, AS1 and AS2 mutants cause the plant to have downward curled leaves with serrated edges. In C. fern, little is known about AS1 and AS2 largely because, unlike Arabidopsis, the C. fern genome has not been sequenced. C. fern rapidly develop; it takes about 10-12 days for C. fern to mature from a haploid to a diploid stage which allows us to examine their leaf characteristics throughout their lifecycle. During development the leaves in C. fern undergo dramatic and rapid changes in shape. When the plant is young, the leaves are short and flat with smooth margins. As the plant matures the leaves progressively become more serrated and curled under. We suspect the dramatic changes in leaf shape during C. fern development is at least partly due to the AS1 and AS2 genes being shut off during later stages of development. This is based on what has been observed in Arabidopsis where turning off AS1 and AS2 causes serrated leaves with curled under margins. In order to better understand the role of AS1 and AS2 genes in C. fern we are cloning these genes from C. fern. Ultimately we want to see if changes in the AS1 and AS2 gene expression are responsible for leaf shape changes in C. fern.

*Session:* Biology Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Tuesday 5:00-6:15pm  
*Location:* Heth 14

## **Biology Symposium I**

### ***CYP4F18 regulates the inflammatory response***

Dana Gregor  
Dylan McDaniel

Faculty Mentor: Peter Christmas Biology

Cytochrome P450 4F18 (CYP4F18) is an enzyme that metabolizes bioactive lipids, and our hypothesis is that it functions to regulate inflammatory responses. To test this possibility, CYP4F18 knockout mice were generated and studied using mouse models of

inflammation. In this investigation, real time PCR was used to measure the expression of inflammatory genes in models of renal ischemia-reperfusion injury and endotoxemia. There was a significant increase in lineage markers for neutrophils and monocytes, and for cytokines such as IL1 that act as general markers for inflammation, in ischemic kidney tissue from CYP4F18 knockout mice compared to wild type. This suggests an anti-inflammatory role for CYP4F18, and is consistent with its ability to metabolize and inactivate a pro-inflammatory lipid called leukotriene B4 (LTB4). In contrast, there was a significant decrease in inflammatory cytokine expression by peritoneal macrophages in knockout mice following lipopolysaccharide (LPS) administration in the endotoxemia model. LTB4 plays a role in augmenting the response to LPS, and the results suggest that CYP4F18 is required to enable this role rather than inactivate it. These observations in two different models of inflammation appear contradictory, but the models involve different mechanisms and follow a different time course. Our interpretation is that CYP4F18 promotes initiation of an immune response, but dampens the response over time to prevent excessive inflammation that could damage healthy tissue.

*Session: Biology Symposium I*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Tuesday 6:30-6:45pm*

*Location: Heth 14*

### ***Characterization of the Prohibitin Protein as the Putative Receptor for Dengue Virus***

**Kimberly Filcek**

Faculty Mentor: Justin Anderson Biology

Dengue virus is an arthropod-borne virus that causes dengue fever, dengue hemorrhagic fever, and dengue shock syndrome in tropical areas of the world. The putative receptor for this virus in mosquito species is the prohibitin protein, both prohibitin-1 and prohibitin-2. Through reverse transcription PCR, DNA sequencing, and 3' rapid amplification of cDNA ends (RACE), we have deduced the amino acid sequences of the prohibitin proteins from likely vector mosquito species, *Ochlerotatus japonicus* and *Aedes albopictus*, a laboratory competent mosquito, *Ochlerotatus triseriatus*, and an unknown vector, *Aedes vexans*. In a prohibitin amino acid sequence alignment with *Aedes aegypti*, we found high amino acid similarity between our vector sequences and that of the known vector. Further comparisons between vector and non-vector species has yielded six mutations in the gene sequences between the species that are consistent with vector competency. We have expressed the *Ae. aegypti* prohibitin proteins and found high binding affinity with all four dengue virus serotypes using Western blot. We also performed site-directed mutagenesis in order to test specific mutations in prohibitin for virus binding affinity. Identification of a key nucleic acid change between vector and non-vector prohibitins necessary dengue binding within a mosquito host may lead to a better understanding of dengue interactions with its receptor alternative methods to block mosquito infection and reduce transmission.

*Session: Biology Symposium I*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Tuesday 6:50-7:05pm*

*Location: Heth 14*

### ***SURVEYS FOR NORTHERN BOBWHITE AND SYMPATRIC BIRD SPECIES AT THE RADFORD ARMY AMMUNITION PLANT***

**John Huth**

Faculty Mentor: Karen Francl Biology

The Northern Bobwhite (*Colinus virginianus*) has demonstrated an alarming decline in populations over the past century. Effective efforts have been applied to encourage Northern Bobwhite recovery, particularly through active habitat management. At the Radford Army Ammunition Plant, New River Unit (1150 ha, Dublin, VA), management strategies (mowing, food plots, controlled burns) should encourage the presence of Northern Bobwhite. We therefore surveyed early successional habitats from April - October 2012 at ca. 2-week intervals (15 dates). On each survey date, we listened for calls within 500 m of four designated points within early successional habitats. We documented one or more distinct Northern Bobwhite calls on 9 of our 15 survey dates, and determined that at least two distinct coveys exist on-property. In order to determine avian species sympatric to the Northern Bobwhite, we concurrently conducted songbird surveys, documenting birds seen and heard within a 30-m radius of our four designated points. In these 60 observations (15 dates x 4 sites), we documented 884 individual birds of 53 species (46 species if fly-overs not included). The most commonly detected species were Field Sparrows (58/60 observations, relative abundance = 0.12), Eastern Bluebirds (47 observations, relative abundance = 0.10), Barn Swallows (39 observations, relative abundance = 0.08) and Song Sparrows (25 observations, relative abundance = 0.05). Data interpretations are on-going, and Northern Bobwhite population and avian community trends will be discussed in light of recent analyses.

*Session: Biology Symposium I*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Tuesday 7:10-7:25pm*

*Location: Heth 14*

### ***Success of rhizome transplants for the medicinal herb black cohosh: Is forest farming a viable option?***

**Christopher Nuckols**

Faculty Mentor: Christine Small Biology

Black cohosh (*Actaea racemosa*) is a native Appalachian wildflower extensively harvested from Appalachian forests and sold throughout American and European markets for various medicinal treatments including menopausal symptoms. Approximately one million kilograms of black cohosh were wild harvested from Appalachian forests from 1997 to 2005, with sales in 2001 estimated at \$6.2 million. Black cohosh is now considered "at risk" due to over-harvesting. We are investigating whether black cohosh can be successfully transplanted and cultivated in forest settings, to reduce rhizome harvest from native forests. In 2010, 200 rhizomes were collected from natural black cohosh populations and transplanted to eight 5 x 5 meter planting grids in mixed-oak forests in Floyd, VA. More than 70% of plants showed aboveground growth after one year, but this declined to just 39% of plants in year two. By 2012, rhizome biomass declined to less than half of initial transplant weight (59.0 ± 10.1 g vs. 22.1 ± 3.3 g; p = 0.031). We identified three factors that may contribute to significantly lower rhizome survival: lack of roots (41.4% vs. 15.8% survival; p = 0.029), rot or fungal infection (39.5% vs. 30.0% survival; p = 0.549), and low pre-transplant rhizome biomass (59.0 g vs. 37.1 g; p = 0.031). This research helps us understand conditions necessary for successful forest farming of

medicinal plants, such as black cohosh, and could not only increase market supply of black cohosh, but also contribute to the conservation and sustainable use of this and other Appalachian plants.

*Session: Biology Symposium I*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Tuesday 7:30-7:45pm*

*Location: Heth 14*

### **Camera Trap Surveys at the Radford Army Ammunition Plant**

**Devon Silva**

**Nikohl Miller**

Faculty Mentor: Karen Francl Biology

We utilized camera traps to maximize detection for mammals and birds typically not documented through other survey techniques employed at the Radford Army Ammunition Plant, New River Unit (Dublin, VA). From August 2012 - February 2013, we deployed eight wildlife cameras at the 1150-ha New River Unit. We checked cameras at ca. 2-week intervals and moved them periodically to maximize species detection across the entirety of the project. Habitat types included but were not limited to: early- and late-successional habitats with visible wildlife trails, roadways, VDGIF-maintained food plots, concrete structures, and ponds. Analysis of 22,594 digital images (of >67,000 images collected to date) documented 14 mammalian and 11 avian species. The most commonly documented animals were White-tailed Deer (*Odocoileus virginianus*; 1599 incidents), which averaged 1.3 individuals/incident (range 1 – 24 indiv./incident). Also well-represented were Wild Turkey (*Meleagris gallopavo*; 26 incidents, 4.0 indiv./incident, range 1 – 6) and Coyote (*Canis latrans*; 20 incidents, 1.6 indiv./incident, range 1-3). Feral Cats (*Felis catus*; 28 incidents) also were more prevalent than expected or desired. Rare or unexpected finds included a Double-crested Cormorant (*Phalacrocorax auritus*), which had not been detected on property before this project, American Mink (*Neovison vison*), and American Black Bear (*Ursus americanus*). The plethora of White-tailed Deer observed allowed for behavioral patterns within the range of the camera, and we'll describe trends in gender aggregation, male-male aggressive interactions, and temporal browsing behaviors. This research is ongoing and will continue in order to detect additional elusive species at the New River Unit.

*Session: Biology Symposium I*

*Presentation Type: 25 minute oral presentation*

*Day & Time: Tuesday 7:50-8:15pm*

*Location: Heth 14*

### **Identifying Bacteria that Live in High Concentrations of Arsenic**

**Hilary Miller**

**Jessica O'Grady**

**Lindi Hutchinson**

Faculty Mentor: Georgia Hammond Biology

Microorganisms are exceedingly abundant and diverse in the soil, making it difficult for scientists to characterize them. Some bacteria can thrive in extreme environmental conditions due to their genetic makeup. Our focus is on bacteria capable of metabolizing arsenic, a heavy metal. We obtained soil samples from a headwater stream at an abandoned arsenic mine in Floyd County, Virginia. Erosion at this site has caused arsenic to leach out of the soil and into a head water stream nearby, potentially contaminating major river systems in

Virginia. According to our previous studies, bacteria isolated at this site are able to live in arsenic rich environments because they contain arsenic resistance genes. Our goal is to characterize these bacteria down to the genus and, if possible, species level using the 16s rRNA gene. This gene sequence is highly conserved among bacteria; however, it contains variable regions with point mutations that can be used for identification purposes. To accomplish this, we isolated DNA from pure cultures of the bacteria, amplified the 16s rRNA gene with a PCR reaction, purified the PCR product, and sequenced the DNA. We then input the obtained sequences into the Ribosomal Database Project (a website that houses gene sequences) to compare our data with known ribosomal subunit sequences of identified bacteria. Our results contribute to knowledge regarding bacteria capable of surviving in environments containing the heavy metal, arsenic.

*Session: Biology Symposium I*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Tuesday 8:20-8:35pm*

*Location: Heth 14*

## CORE 102

### Poster Session I

#### ***Gun Control: Would taking away the Second Amendment benefit the U.S.?***

Rebecca Carr

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

This presentation gives an overview of the Constitution, but goes more in depth about the Second Amendment and what it declares to the citizens of the United States. Gun control has become a big discussion in the world today causing many riots as well as disagreements within Congress. So far, there have been many opinions to both sides of the argument. I will discuss the benefits the Second Amendment gives citizens as well as the most recent tragedies surrounding gun control. Sadly, the most recent catastrophe, the Sandy Hook Elementary School massacre, has not only given firearms a bad name, but the people that carry them as well. This presentation will further view the life of an ordinary citizen who believes in the Founding Fathers' decision on including gun rights in the Constitution as well as secondary sources that discuss the viewpoints of family members of the Sandy Hook incident as well as the Virginia Tech shooting. I hope to provide my audience with a well-rounded overview of both sides of the issue so that they can form their own opinion towards the topic. It's important for people to understand what is happening in the world and how it affects them and their future. I will conclude by discussing how our future will look if gun rights were taken away versus if Congress chooses to keep them.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 09:00-10:00am

*Location:* Heth 43

#### ***Is the Mind Separate from the Body***

Kristina Daniel

Faculty Mentor: Frank Napolitano English

This research presentation will talk about the different facts and views on whether or not the mind still exists when the body no longer does. It will highlight the views from psychological, religious, philosophical, and neurological standpoints. The project will explore the views on Dualism of the mind and body. I will study different scenarios, like out of body experiences, and figure out why these would concern our society. More specifically a question to think about in my project would be if the mind were still present after the death of the body. Also, from a scientific standpoint, it will figure out if there is still any activity in the brain after death and if that has any significance. My project will also go into detail about the mind in relation to the brain and whether or not they are one and the same. I plan on discovering whether or not the mind and consciousness are completely separate entities.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 09:00-10:00am

*Location:* Heth 43

#### ***The Changes in Society due to Electronics***

Lucas Diniz

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

For my research project, I will be conducting a research involving the negative impact electronics are having on society. The purpose of this paper is to inform the audience if electronics are distancing us from each other. In these last years, the world has been experiencing lots of changes in technology and sometimes people find themselves more isolated and preferring to stay in the comfort of their houses instead of going out and socializing. My research will inform the changes in behavior and explain the effects of having a significant change in the amount of technology, and the main question asked throughout my research will be "What has the new electronic era done to society?" Furthermore, I believe this topic is widely considered a social issue, because in today's world we end up seeing a lot of behavior changes and some strange situations, where people rely on the use of text message on their cell phones to communicate in a place where the other person is sitting right next to them. The use of electronics have certainly done some damage and modification to our society and my research will cover some of the alteration and use reliable sources to explain why is it a threat to our social skills.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 09:00-10:00am

*Location:* Heth 43

#### ***Why are we letting untrained people handle guns?***

Jasmine Marshall

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

Is the world changing so much that we are letting anyone handle firearms? First it started out that anyone who was in the military or fought for our country in some way were allowed to handle weapons at home, but now there are stores all over the place that advertise weapons of all sorts. We have seen on the news regarding the Sandy Hook Elementary School shooting that not everyone is capable of handling the power that lies behind a gun. Because of that incident, there should be talk in the White House about a more strict law regarding the handling of gun control so another catastrophe like Newtown, Connecticut can be quickly avoided. This presentation will discuss how more strict laws on gun control can be both good and bad for our country.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 09:00-10:00am

*Location:* Heth 43

#### ***The Fourth Amendment: What College Students Should Know***

Nicholas McElroy

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

College students should be more aware of their Fourth Amendment rights. Understanding the rights granted to you as a citizen is



essential to being an American and avoiding trouble. This presentation explains situations in which proper knowledge of court cases can assist in police encounters. Useful terms to know will be explained, and scenarios will be described in which those terms could be helpful. Considering that, what if you were in a bad situation with the police? Would you incriminate yourself or know your rights and stay within them? Some police can manage to make citizens give up their rights in exchange for minor deals in the courtroom, but if taught about the Fourth Amendment, citizens could live free—the better deal. I will discuss how the Constitution allows citizens to live free, without fear of the American government. Citizens are bestowed rights; therefore, the rights should be memorized and used to their advantage.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 09:00-10:00am  
*Location:* Heth 43

### ***Racism and Discrimination in Mass Media***

**Emily White**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

This presentation will examine racial bias in present-day mainstream media. It will bring to light the discrimination and bias that is occurring in everything from sports coverage to criminal news. The main focus of this presentation will center around African Americans, but several other minorities will receive some attention as well. It will address the differences between what may be looked at as intentional bias and what is considered unconscious biasing. This project will also discuss how people's opinions of specific races (mainly minorities) may become skewed because of journalists' biased reports.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 09:00-10:00am  
*Location:* Heth 43

### ***Modernization and the Traditions of India***

**Leela Young**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

"Tradition" is defined as "the handing down of statements, beliefs, legends, customs, information, etc., from generation to generation, especially by word of mouth" (Dictionary.com). What is the idea of tradition when it's been a part of a society for so long? Can it be changed, altered, or even improved on? Have you ever thought of what it would be like to take what's considered tradition and modernize it? This presentation will be an overview on the social and religious developments of one of the most ancient societies, India. In other words, I will discuss the modernization of India and its affects on people's lives who are used to what would be considered the "norm" due to years of tradition, and try to understand if modernizing such an ancient tradition will be good for the country and its people. I will also look into the idea of whether or not this modernization could cause people to lose their touch with rituals, beliefs, and devotion that come along with the modifications of a culture.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 09:00-10:00am  
*Location:* Heth 43

### ***The Problems of Global Overpopulation and Possible Solutions***

**Campbell Carter**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

My poster gives detailed information on the growth rate and increasing population throughout the entire world through charts and graphs. I will also bring forward possible solutions of the ongoing problem through charts, graphs and examples of solutions and the probable effects after the solutions have been set. I also plan to give information on how our natural resources, both renewable and nonrenewable, are decreasing more and more. It is because of these depleting necessities that the growing population is such a problem. I want to inform my audience in my paper and give them the facts in my poster. Without food and shelter, life will prove to be a feat for all that are alive during this time because with nearly all of the land space taken up by people, we can't provide enough produce for everyone. I wish to post possible solutions to the ongoing growth rate and give people a heads up to this epidemic and what they should expect. For example, like China's control on the amount of offspring a family is allowed to produce would be on possible solution in controlling the growth rate. The life expectancy of people now has also grown tremendously, causing the population to steadily grow more and more due to our knowledge of nutrition and increases in technology. With my facts, I hope to make everyone a little wiser and more aware with not only the conditions of their country, but the entire world as well.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 1:00-2:00pm  
*Location:* Heth 43

### ***The Effect of the Media on Eating Disorders***

**Catheryn Cope**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

While rich, industrialized countries certainly have enough food to feed the majority of their population, there is a strange, self-imposed starvation taking place. Eating disorders have become a growing problem. When looking at eating disorders throughout the world, we see a much higher rate of them in developed countries than in undeveloped. One factor people have attributed this to is that we see that developed countries have much higher rates of media influence. Not only do they have more direct influence from the media in their life, but they also have extremely easy access to it. The question I am posing is this: does the media have an influence on the development of eating disorders? I will be conducting a study to try and answer this question and creating a poster of my research and findings.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 1:00-2:00pm  
*Location:* Heth 43

## ***Illegal Immigration in America***

**Nick Dougherty**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

For the final project presentation, I will be conducting research on the topic of illegal immigration. The purpose of this paper is to talk about the facts of illegal immigration that many Americans do not know about. Over the past couple of decades, illegal immigration has had a negative impact on the United States economy, and other things such as the job market and housing market. Throughout the research paper, and the project presentation, I will give statistics and graphs showing these negative side effects in America, and show how poorly the government has been handling this whole situation. My position in this paper is to inform the American public about illegal immigration and show how it is a major problem in the United States, and go into greater depth about every aspect of illegal immigration. This topic has become a big part of my life because up in Northern Virginia, many illegal immigrants have been trying to start their new lives, but it seems that almost every month you hear of someone getting deported for being an illegal immigrant. In the end, my project presentation will display the many facts about illegal immigration, how it has a negative impact on the economy, how the government has handled the situation, and give statistics and graphs about illegal immigration.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 43

## ***Two paths to wellness***

**Laura Fowler**

Faculty Mentor: Frank Napolitano English

In this presentation it will inform people two ways to stay healthy, Juicing fruits and vegetables and eating whole food. There are many different dietary ways to stay healthy, but which way is the most guarantee. Juicing is a good way to consume the correct serving size for your daily intake. Juicing can also be bad for you because it takes away sources that are essential for the body's daily intake. Eating whole foods, however, will promote you with the essential nutrients, but with juicing you can receive more. Is there really a difference in these two, or do they just become a personal preference over the other. Many state that juicing can help sustain chronic illnesses. Having to eat whole foods or juicing to stay healthy, could it potential affect families who do not have the money for those necessities. Throughout my research I will be looking up many different studies on juicing vs. eating whole grain foods. I will provide the benefits of both, as well as the negatives. After you read this, you will have all the information you need to make the choice for yourself on which lifestyle you find most beneficial for you.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 43

## ***Is Animal Testing Humane?***

**Emily Gerding**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

For my research project I look into the pros and cons of animal testing along with whether there are more humane ways to go about

it. Most people, including myself, know that animal testing is cruel, but I believe there are some pros to it. However, I feel that the way they go about it is inhumane, and I want to see if there is a humane way and why other companies don't do it whether it's because of money or simplicity. I also want to inform my readers about what the chemicals can do and cause pain to the animals and how horrible it can be, but at the same time I will tell some positives to what animal testing can do and how it can help save human lives. I want to prove however that animal testing should be illegal because the animals will go through intense amounts of pain, torture, and ultimately die due to the tests conducted on them. People need to realize that they have the sense of pain just as much as humans. I hope to learn a lot from this as well as teaching more people about it.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 43

## ***Should dropping individuals from foster care at such a young age be permitted?***

**Jordan Hite**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

My presentation is going to look at the after effects of being in a foster home. Though a child has a home for a while, when they age out what happens to them? Many foster children are only eighteen when they are let go or age-out of the program. At the age of eighteen you're not done learning or experiencing life and you definitely shouldn't be living completely on your own. In my research I've come to realize that the government gives little to no attention to former foster participants. With this being said many of these young-adults become homeless or put in jail. I believe that a simple solution to preventing these people from living on the streets would be to stop allowing them to leave at such a young age. Unless the teen has a definite plan of what they're going to do when they're on their own, they should be able to stay.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 43

## ***Do Americans Work Too Hard?***

**Brandon Kemp**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

This presentation will discuss whether or not Americans work too hard in order to earn a living. Americans are said to be some of the laziest and most obese people in the world, but do we still work harder at our jobs than people in other countries? While the average workweek may be 40 hours per week, some work even more hours than that. Some jobs require a higher mental ability while others require a higher physical ability, and in some cases, both are required. Whether using primarily your brain or your body, both begin to become exhausted. Other countries have laws in which longer vacations from work are required, while in America; the majority of workers are lucky to receive two weeks vacation. We work extremely hard to earn a living that can compete in today's expanding world, all while rarely taking the time to smell the roses. It has become a custom in America to work harder than the competition in order to live the American dream. Do Americans retire at too old an age or do we retire too soon? The United States has one of the

highest average retirement ages in the world, sometimes being ten years higher than some countries. This presentation will take an in depth look at the effects of this hard work along with the benefits and disadvantages.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 1:00-2:00pm  
*Location:* Heth 43

### ***The Morning After Pill.***

**Gina Pistininzi**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

In my project I will be discussing the morning after pill and the effects on teenagers. In modern times sex is not cherished like it used to be. Many teens can take sex for granted in the fact that partners will not use protection that being condoms or birth control. Should teens have access to the "Morning after Pill"? What age is appropriate? Should the Morning after pill be able for purchase over the counter? In my project I want people to be aware of teens and the use of the morning after pill. I will explain if there is a certain age that should be enforced, and does the morning after pill make teenagers feel like it is okay to have sex at younger and younger ages due to its availability. In my project I will explain how it is in relation to abortion and the younger generation if it makes sex not cherish or protected knowing there is a pill out there to fix your mistakes.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 1:00-2:00pm  
*Location:* Heth 43

### ***The affect of media on the body image of women.***

**Brittany Sullivan**

Faculty Mentor: Napolitano English

This presentation is to inform women of the negative affect that the media has on our body image. Just because actresses and models look a certain way doesn't mean that is what all women need to look like. Every woman has their own body shape. Women on T.V. or in magazines are beautiful yet unrealistic, studies show that those women are under the average "healthy body weight". This gives off the impression that women have to be unhealthy to maintain the weight they want to be attractive. In this presentation I want to emphasize healthy eating habits for women. Too many women today insecure about their weight because of what they see around them or on T.V. Although they feel they can only do certain things to lose weight you have to keep your own health in mind. I want to show women that their health is the most important thing and if you do diet then do it the right way by eating healthy and exercising!

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 1:00-2:00pm  
*Location:* Heth 43

### ***Understanding the underlying causes of violent crimes against women***

**Carrie Cicerchia**

Faculty Mentor: Frank Napolitano English

This presentation will be covering the main causes and motivations for victimizing women through violence. The reasoning behind covering this topic is due to the seemingly insignificant amount of information known to societies and cultures about the foundations and bases of why such forceful and dehumanizing acts transpire. Why criminals, convicted or not, act the way they do against others can sometimes be misunderstood, pushed aside, and purposely ignored. This presentation will provide analyses and reviews of different reported crimes aimed at women. These analyses will provide insight into a criminal's state of mind and way of thinking. There are many different factors that contribute to such brutal and harmful crimes against women. There are biological causes going on in the criminal's brain and functioning of it. Also, many aspects of society, including a person's family, peers, and the media, play a part in these acts.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

### ***Cyberbullying lives on past high school***

**Christa Herndon**

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

This presentation will address the ongoing issue of bullying, more specifically cyberbullying. I will discuss how cyberbullying was introduced when technology became the main source of communication. Bullying is no longer a face-to-face encounter but is instead found on the Internet and through other technologies used for communication. My presentation will also touch on the effects that cyberbullying have on college students and how it differs from when you are in middle or high school. In addition, I will cover how the repeated negativity through hostile and harmful engagement can lead to bad outcomes and how it has in the past.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

### ***Body Mutilation Practices Among Cultures***

**Charlotte Jones**

Faculty Mentor: Frank Napolitano English

This presentation will discuss the methods of body mutilation practiced around the world, and the cultural, religious, or regional values that these practices represent. It will also attempt to explain why Western cultures in particular tend to close their minds to the practices of cultures other than their own and view them as being strange, ugly, or even inhumane. Using examples of different body mutilation practices that may seem very strange to Westerners, I will attempt to expand their way of thinking about unfamiliar groups of people. My ultimate goal in presenting this point of view is to give my audience a broader perspective on different cultures and attempt to open their minds to different ways of living.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

## ***Are Cell Phones Negatively Impacting our Communication Skills?***

**Erin Leonard**

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

This presentation will discuss how cell phones are changing the way we, as a society, are communicating with one another. My research will show different examples of why people are becoming lazier and not as professional when it comes to having a cell phone. It will discuss how we are becoming dependent on our cell phones and how it is taking us away from the real world. People need to realize that cell phones should not take over their lives. This presentation will also talk about the emotional and mental effects cell phones have on people. It will look at the way society used to be and how cell phones brought about an easier way of communicating, trumping the previous modes of face-to-face conversations, telephones, and writing. In addition, I will cover communicating over Facebook and Twitter on smart phones and how there can be negative effects in doing that as well.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

## ***Skin art collides with the professional workplace***

**Darius Logan**

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

From a young age, most people are taught to express their feelings and ideas on whatever they are faced with. These feelings can be expressed in various ways, such as in writing, verbally, or in an artistic manner. For instance, tattoos are a way of expressing feelings artistically; however, they are looked down upon in professional settings, even in some professional environments that encourage people to express their emotions. So, why are tattoos frowned upon in the workplace? This presentation will discuss reasons why tattoos are looked down upon in a professional setting, and debate whether or not they will ever become somewhat acceptable in the professional world.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

## ***Judicial Bias***

**Dominique Melendez**

Faculty Mentor: Frank Napolitano English  
Gracie Rossie English

The topic of my research paper is going to be focused on judicial bias in courtrooms by the judges themselves, as well as the jurors. Although I will speak of more than one recent court case, I will mainly focus on the Jodi Arias trial that is currently still in process. Jodi Arias is accused of murdering her boyfriend and premeditating it, but she claims that she did it in self-defense because her boyfriend was abusive. In short, the judge is very lenient with Arias and I am proposing that it is not really the judge's fault in that most people do tend to feel sorrier for a woman murder than a man who is a murder.

The purpose of my paper will be to explain the case, try to identify how the judge's rulings tend to favor Arias, why it may not be the judges fault that she is favoring her, what this type of behavior does to the case, and how this attitude from the judge towards Jodi Arias affects the jurors involved. My intended audience will be general, but also could be viewed as being specialized because I will be referring to, mostly, the Jodi Arias trial. My intention will be to inform others about the specific case and about the detriments of having an easily persuaded judge and to evaluate the specific Jodi Arias murder trial to provide a very specific example.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

## ***Privacy and social media***

**Jake Smith**

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

The principle objective of this presentation is to demonstrate how social media has encroached upon the privacy of people, some suspecting and some unsuspecting. Social media is used by a large percentage of the United States population. Unfortunately, not every user is fully informed on the potential encroachment of their privacy when they sign on to their accounts. Many people feel safe in their homes and don't realize that everyone in the world can see what they say or do on these networks. Technology has certain limitations on keeping information confidential, and in today's world, people are smart enough to hack and gain access to all of your personal information. We as humans in this day and age look for convenience in everything we do. Having direct connection to any social media networks through cellphones, tablets, computers, etc. may cause sacrifices to one's privacy. Additionally, I will be exploring the consequences of these actions and how employers, colleges, and law enforcement agencies are just a few reasons why we should pay extra attention to the detail of the information we post on social networking websites. Privacy is just as important today as it was 50 years ago; the only difference is it seems as though we have lowered our standards as to what we share with the world.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

## ***The Great Homework Debate: Is the Added Stress Actually Necessary?***

**Jenna Stallard**

Faculty Mentor: Frank Napolitano English  
Rachel Turner English

This presentation will discuss how all over America, parents, students, and educators alike all have their arguments and opinions on homework and its effect on learning in schools. Many students as well as some parents argue that the stress level placed on young kids is too high. Many teachers feel as though homework is a stepping stone to teach students to think on their own and develop crucial study skills. Others question if homework is even needed at all. Across the board, people have differing views on the subject. This presentation will display the many different opinions of parents, students, professors, high school teachers, etc. My presentation will also show results and statistics of various other research experiments conducted on the psychological effect that different



amounts of homework have on students at different levels. How much homework is too much? Is it even necessary at all? Does homework jump start a student's ability to study on their own? These are all questions that I am attempting to answer in my presentation. I am hoping to be able to help others form their own arguments and opinions for this topic based on the many news articles, academic journals, and websites about the debate of homework that I cite in my research.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 43

### ***Culture's Effect on Marriage and Love***

**Annie Akers**

Faculty Mentor: Frank Napolitano English

This presentation will illustrate how a person's specific culture and background affects his or her personal views on what love and marriage mean. By researching different societies and religious views, the presentation will consider diverse marital rituals and their importance. It will also explore the significance of love and how beliefs shape a person's definition of love. This should help people understand, personally, how important love is to them. Showing how love is related to the custom of marriage in different cultures will help outsiders understand traditions that are unlike their own. It will describe in detail the different types of marriages that are acceptable for a culture, such as marrying more than one man or woman or the standard age for someone to get married. It will discuss, in detail, the tradition of arranged marriages and the effect that has on the relationship and the love shared between the two people. Also, it will explain if getting married is the ultimate goal of a person's life, or if it falls second to other customs. Overall, the presentation will help explain the role that love and marriage have in specific cultures.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***Same-sex Marriage: Constitutional or Not?***

**Brianna Allen**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

Same-sex marriage is a very controversial issue in the United States, and many people are debating whether or not it's constitutional. There are many valuable arguments for why same-sex marriage should be made legal, such as happiness, equality, human rights, and many more. There are also many valuable arguments for why same-sex marriage should not be legalized, such as marriage is between a man and a woman. I have researched many scholarly and news articles as well as other websites to understand the wide range of opinions that people have on this issue. Researching this topic has really showed that people go through great lengths to voice their opinions and push their views on other people. The larger implication of this issue that I will discuss is giving new rights to the gay community.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon

*Location:* Heth 43

### ***Global Warming: We know the problem, but can there be a solution?***

**Darla Denham**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

This poster presentation will explain the issue of global warming and several different types of solutions that can be easily done with today's technology. It will bring to light the different factors in today's society that have increased the amounts of CO<sub>2</sub> in the atmosphere as well as what has inhibited immediate action to slow CO<sub>2</sub> emissions and reduce the daunting amount of CO<sub>2</sub> already in the atmosphere. The main point of my presentation will be to discuss the efforts of previous groups to make society more eco-friendly, their setbacks, and what can be learned and possibly come from those hindrances. In addition, this project will cover what human habits can be changed to benefit atmospheric revival efforts and more complex human factors that must change to finally begin a new age of planetary conservation.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***The Impact of the Growing World Population***

**Abby Dodson**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

The purpose of this presentation is to inform my audience about the growing world population. I would like to share what I have learned through my research with those interested in this topic. I plan on answering questions such as 1. Will we be able to supply enough food to keep everyone healthy? 2. Are there ways to address this topic to prevent overpopulation? 3. How bad are we polluting our environment with waste products, and how can we elongate the life span of our Earth for future generations to come? 4. What are the negative and positive effects of having more and more human beings among us on Earth? 5. Why should we even care that the population is steadily increasing? My plan is to educate my audience on the growing world population because some people are simply unaware of this important fact.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***What influence does birth order have on children?***

**Alyssa Dorfman**

Faculty Mentor: Frank Napolitano English  
 Rachel Turner English

This presentation will explore how the order of birth can affect children's behaviors, personalities, interactions with others, etc. It will observe many different sources such as studies that have been done on this topic as well as magazine articles. It will also discuss how parents play a role in all of this and how their relationship with

their child influences them too. I will cite different studies that have been done on this topic and will compare and contrast their results. This presentation will look at all of the factors that go into this idea, such as the birth order of children, their gender, how they are treated by their parents (expectations, etc.), and how it affects their overall personality and their behavior towards other people. It is intended for a wide range of audiences, seeing as how behavioral and social studies affect people of all ages. This topic can interest people who are simply curious on the issue, but it can also interest parents who want to learn more about understanding their children. Overall, this presentation will look at all of the variables that go into understanding the influence of birth order on children as well as looking at the patterns that have been noted in multiple studies.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***Fast Food Frenzy: America's Ongoing Addiction***

**Catherine English**

Faculty Mentor: Frank Napolitano English

Fast food franchises have been taking America by storm for multiple decades. From burgers to tacos, portion sizes have grown exponentially. You cannot turn on a radio, TV, or computer without hearing or seeing an ad relating to fast food. In this presentation I will highlight the major factors leading to the popularity of fast food and articulate how it is contributing to America's obesity epidemic. I also will explore how fast food has become a competitor in the food industry. Many people do not know the ingredients in fast food or how it is manufactured, so this presentation will shed light on what is really in the food Americans are consuming. I will explain the different effects that fast food can have on the health of Americans who are frequent consumers and compare how children in today's age are growing up in a much different world than those who are not exposed to such foods at a young age. Finally, the presentation will give a better understanding of fast food's effects on the economy.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***Child abuse, child labor, and the affect it has on a West African society***

**Bianca Mark-Okai**

Faculty Mentor: Frank Napolitano English

Rachel Turner English

Child abuse and child labor are still issues in our world today. Child abuse is getting out of hand and getting worse daily because nothing is being done about it. This is an issue affecting a lot of children in various societies. This presentation is going to elaborate more on the effects of child abuse and child labor in Ghana, a country in West Africa. Due to increases in urbanization and poverty in Ghana, children become more vulnerable to all forms of child labor and abuse. This presentation is going to give an in-depth meaning to child abuse and child labor, and also highlight the causes and resolutions the country is attempting. I will also discuss some of the political and social issues concerning child abuse and how they go about resolving this as well. Various online sources are used to pinpoint some of the

problems Ghana is facing with these dilemmas, and what they are doing as a country, if anything, to put an end to it.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 11:00-12:00noon  
*Location:* Heth 43

### ***The Power of Music***

**Billy Wells**

Faculty Mentor: Frank Napolitano English

This presentation will discuss the general topic of music, and open up many opinions as to why/how music is so entertaining and helpful for most people. From articles that experts have written online they express how most people find music as a source to help them with certain tasks that are involved in their everyday life. For instance, working out to loud and energetic songs to get more of a boost, or listening to jazz or blues songs to help ease the mind as you concentrate on your studies. What I want to know is how everyone reacts to certain types of music and how music influences people in multiple ways. Researchers say that music is extremely healthy for the human body. It can do anything along the lines of lowering blood pressure, healing headaches, boosting immunity, and improving coordination. Music is one of the few activities that can involve all parts of the brain at once. It has the power to enhance reading, mathematical, and emotional intelligence by simply learning how to play an instrument. Generally, music has the power to influence and manipulate people to do almost whatever they want. With that being said my job is to observe and question how people feel music affects them and in what ways do they go to music as a way to entertain or help them with personal issues or goals.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

### ***Sports Violence and It's Effects on Society***

**Troy Allaire**

Faculty Mentor: Frank Napolitano English

Gracie Rossie English

My project looks at the contribution pro athletes play on the growing violence in society and the effects their violent actions have on the younger generation that look up to them? There are many pro athletes that people admire and look up to have been involved with some form of violence in the community. The tremendous difference between violence committed by a pro athlete and regular person in society is that violence from an athlete is televised for everyone to see so the younger generation that sees this violence thinks it is acceptable and can contribute to the ever growing violence in the world. I intend to talk about some of the many athletes that have committed acts of violence and what happens to then after the fact. I want to bring awareness about the growing violence and how some of the people that are supposed to be role models are helping fuel the growing violence. The younger generation is beginning to think it is acceptable to so some of the things they see the people they look up to doing. When they see that the athletes don't get the severe punishment that they deserve it makes it seem like it is okay to do some of the acts they do.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **Human Trafficking**

**Sergio Arzubaga**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

My project will be looking at the issue of human trafficking. Human trafficking is a crime in which a female or in some cases even males are trafficked and forced to commit sexual acts unwantedly. The crime of human trafficking many times involves kidnapping, abduction, intimidation, fraud, and deception. This horrendous crime is little known in the world and needs to be made more public. People need to know that this illegal activity is happening around us everywhere. Although we may not be aware of any cases or real life accounts, it's happening. This illegal activity is the second most profitable illegal activity next to drug trafficking. As you can see this is a lucrative business run by sick people and anyone can fall victim.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **What is more important?**

**Zach Baker**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

The topic that I have chosen for this poster is to look at and the problem of hunger in the United States and Africa. I will use visual aid and text to describe how we as a society spend more money to destroy each other than to feed the starving. When you see a homeless man on the street what is the first thing you think of? How much a slob this person is? Or how could I help him? You think about how much of a slob this man is without even knowing who he is. Now today it is normal to always to be in a rush and not to worry about our follow neighbor. We spend our hard working money on weapons so we can "protect" ourselves. I want to convince the reader that is not what a society should be doing. This poster will be used as a tool to show and to explain how hunger is still an issue in the 21st century and should be address in local and federal governments. Even by just going to a shelter and feeding the hunger is making a difference, but something much larger needs to be done. We must change our way of thinking before we can do anything.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **The Criminal Mind**

**Mariah Farran**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

My project looks at the question, "Do serial killers and criminals have a relation with psychological problems?" I researched examples of serial killers and other criminals, and read about their past. I look at their childhood to see if they had any dramatic events happen during their lifetime that changed their mindset on life. I feel as if people are always questioning humans who commit crimes such as

murdering someone else. Why did they do it, or how did they go through with murdering someone? My research project looks at if a serial killer commits crime because of some urge they have that they can not control, because I am sure anyone who commits crimes such as serial killers are not normal people. This research paper is mostly a search on information, knowledge, and wisdom. Information on the way a criminal's brain works verses a normal human brain is evidence I'm showing in my project that will prove how criminals have a different mindset. Comparing the childhood of the two different brains and what they have been through as children growing up are also presented in this project. I do not believe that serial killers and people of that sort have the same thoughts and brain activity of someone who would not kill another.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **Misrepresentation of Women's Image in the Media**

**Schniece Foust**

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

My poster proposal is going to be looking at the social issue of the misrepresentation of women's image in the media. My focus is going to be in the cosmetics and beauty industry. Photoshop, commercials, and other forms of advertisements portray that only wearing makeup or looking like a high fashion model is beautiful. This type of media strongly influences young girls around the world, and they feel that they must meet those standards in order to be accepted socially. This causes young girls to become insecure with who they are at very young ages. Events such as beauty pageants have the same affects. When girls at the age of five see other girls entered into pageants they wish to be just like them. They desire to wear tons of makeup and look like Barbie dolls. Images on beauty and cosmetics magazines affect women of all ages as well. Women sometimes may feel insecure or cast out if they don't fit into the beauty image of a size two or wear make-up and have long hair with perfect skin. This resorts to excessive tanning which can lead to skin cancer, eating disorders because of being unhappy with body image, or thousands of dollars in plastic surgery to alter their bodies. Beauty is not just what is advertised on TV, there are several other forms and images that are still beautiful. Media and society base everything off of image, not the essence, quality, or value of something.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **The Inherent Nature of Evil**

**Devon Gaiteri**

Faculty Mentor: Frank Napolitano English

The Inherent Nature of Evil / This presentation will delve into the social and cultural aspects of evil by examining research studies and experiments. What makes people commit mass murders or kill whole families to make child soldiers in South Africa? These are the questions that keep me up at night and make me question human nature. I will attempt to understand why certain cultures can do what they do and still be revered as freedom fighters and holy men. Most importantly I want to see if evil is in all of us and if under the right circumstances, we can become just like the people we despise. /

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

### ***The Causes and Effects of School Violence***

Sydney Liske

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie English

The purpose of my project is to evaluate the causes and effects of school violence and why it is happening. School violence occurs on all levels of education and effects the lives of children, families, teachers, and the community. Children are the world's future generation, but what will happen if school violence continues to corrupt their life and education? Bullying and changes of violence in media are key factors in why school violence is occurring more and more. Children are becoming more exposed to violence and it is influencing them because bullying and the media are creating the example that violence is acceptable. Children are easily influenced because they are still developing. This concerns me because I am an elementary education major and more people should be informed on how much school violence actually occurs even when schools have policies and consequences. My presentation will include statistics of events where school violence has taken place and statistics of bullying and how many videogames and movies kids watch on an average basis. If more people are aware of this issue then it can be easier to prevent from happening.

*Session:* CORE 102 Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

### ***Energy Crisis***

Nicholas McGuinness

Faculty Mentor: Frank Napolitano English  
 Gracie Rossie

For my poster presentation, I will be discussing the energy crisis. The energy crisis is all about the limited resources that our world possesses and how we are exhausting them. The world's climate is changing right as we speak and the effects are irreversible. This ongoing event is called global warming; and it has a negative impact on our environment. Global warming is caused by all the greenhouse gases that are created by inventions that human beings have created. Such an example is people driving cars. On a related topic, a car that runs on oil, which is a nonrenewable resource, helps speed up the process of climate change. Unfortunately human beings are so reliant on today's technology that it makes it impossible to stop and continue their lives without it. So what would be the next best course of action? First, people every day are coming up with brand new technologies that make cars much more fuel efficient and ecofriendly to the environment. The next step would be trying to get the most of out of devices that run on electricity and not let any power go to waste. Even when a person is at home and sees something that's plugged into the wall and not being used, he or she should unplug the wire so it lowers the cost on the monthly bill. Those are just a few examples of what people can do to "go green" as people call it, and make our home planet better off.

*Session:* CORE 102 Poster Session I

*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 12:00-1:00pm  
*Location:* Heth 43

## **Special Session – Place Based Education**

### ***High School Students, University Mentors, and Community Partners: Place-Based Education at Floyd County High School***

Mary Dickerson Shylah Jones Mike Barbour  
 Brandon Beck Victoria Curtis Patty McMurray  
 Ryan Woodson Analise Roccaforte Kenna Crane  
 Gabby DeMarco

Faculty Mentor: Melinda Wagner Sociology

The Floyd County Place-Based Education Project focus is oral history interviewing that connects high school students with elderly residents of their home place, using college students as mentors. Since 2007, emphasis has been on World War II veterans, with a goal of understanding how the war affected young soldiers and their families at home. College mentors, high school staff, and community partners from the Floyd Story Center/Old Church Gallery teach students how to: conduct ethical, methodologically sound interviews; record using state-of-the-art audio and video equipment; transcribe; create searchable tables of content; research historical background; archive; discover stories and themes in interviews; extract a theme from an hour-long interview; and create a seven-minute movie. The Project forges connections, builds skills and confidence, conserves local history and culture, and fosters pride. Within the University, the Project meets learning outcomes for connecting classroom instruction to experiential opportunities. It is serving as a pilot project in the University's new Scholar-Citizen initiative. The presenters include both students who have a long history with the Project and students new to the Project. The presentation will discuss the advantages of and obstacles to place-based education, and describe the mentors' preparation-learning the ethnographic research methods that they subsequently impart to the high school students. The presenters will give examples of positive mentoring, and explore the ways in which the Project meets the Scholar-Citizen initiative learning outcomes.

*Session:* Special Session - Place Based Education  
*Presentation Type:* 45 oral presentation  
*Day & Time:* Wednesday 10:00-11:00am  
*Location:* Heth 18

## **Communication Research Methods Poster Session**

### ***Music and Millennials***

Caroline Burge  
 Justin Carter



Danielle Curtis-Williams

Joanne de Vera

Max Loomer

Faculty Mentor: Erin Berman School of Communication

Music piracy has become a bigger issue in the recording industry as well as on college campuses as a result of constant technology improvements. With an abundance of down time and access to high speed Internet connections college students are at the forefront of digital music piracy. This study aims to discover how students at Radford University access, buy, download, and trade music among peers. Data was collected across the campus population in order to observe piracy rates in the students.

*Session:* Communications Research Methods Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

### ***Mobile Phones & Interpersonal Communication: The influence of mobile cellular devices on interpersonal communication within the millennial generation***

Stephanie Carter

Evan Scheible

Haley Metcalfe

Robbie Campbell

Ben Pasquel

Faculty Mentor: Erin Berman School of Communication

This study will show how mobile phone usage of the millennial generation has an impact on interpersonal communication. Radford University students between the ages of 18 and 25 will make up the sample for this study. The primary method for data collection employed in the study will be an online survey offered to students within the Radford University School of Communication, those not within the millennial age range will be excluded from the results. Results will also be broken down to determine gender's role in the study. The survey is likely to be completed by the end of March. It is hoped that the results will show that mobile phone usage greatly affects interpersonal communication of those users.

*Session:* Communications Research Methods Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

### ***Facebook Effects on the Satisfaction in a Romantic Heterosexual Relationship***

Nina Chambers

Emily Lalande

Tyler Looney

Britt Taylor

Kate Wright

Faculty Mentor: Erin Berman School of Communication

In a world of ever-changing communication technologies, relationships are being altered by the rapid advancements that are being made. This study explores the impact that one of these technologies in particular, Facebook, has on intimate heterosexual relationships in the millennial generation. The study examines the negative and positive impacts that Facebook may have on these relationships through the deployment of a survey issued to willing participants.

*Session:* Communications Research Methods Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

### ***RU Flood***

Emily Davis

Stephanie Johnson

Morgan-Taylor Miller

Kristen Casey

Camila Herrera

Faculty Mentor: Erin Berman School of Communication

Our survey is designed to gain feedback from Radford University students who were affected by the January flood crisis, and how Radford responded through virtual communication. The researchers, (Emily Davis, Morgan-Taylor Miller, Stephanie Johnson, Camila Herrera, and Kristen Casey) define a "crisis" as a phenomenal event that negatively affects the majority of people involved. For the purpose of this survey, "virtual communication" is defined as sites like Facebook and Twitter, and also includes emails and text messaging. The main purpose of the study is to evaluate the efficiency of the RU alert system in reaching students during a crisis, and to determine whether or not students use the alert system or receive the information from elsewhere. To achieve this we sent a survey out around the campus to various students attending Radford who were involved with the recent flood. /

*Session:* Communications Research Methods Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

### ***Facebook Communication and Friendships***

Chloe Molthen

Ray Murry

Cameron Sonnerberg

Victoria Zavolas

Joseph Demasi

Faculty Mentor: Erin Berman School of Communication

Understanding friendship levels and communication skills has always been a particularly interesting subject in the field of communication research. This topic has always been a complex aspect of communication; however the topic has become increasingly more complicated due to social media and its effects on friendships. Researchers are seeing new types of friendships develop in new ways that were not always there prior to the internet and social media. This study asks the question: When college undergraduates

check Facebook who are they most likely to communicate with? For this particular study the main focus is on Generation Y (people born between 1982-2000) participants and the main reasons why or how Facebook is being used. More specifically focusing on whether or not Facebook is the main form of communication for Generation Y, and how many actual friends are offline friends. The study looks at three specific types of friendship that being: close (high level of interactions; people who interact offline as well as online), casual (people in the early stage of relationship development), and acquaintance (people who vaguely know each other, if at all). The use of a survey was involved in order to collect the information needed to see who Generation Y is more likely to communicate with on Facebook, and what types of communication is being used for the three levels of Facebook friendship relationships.

**Session: Communications Research Methods Poster Session**

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

### **social Media and Breaking News**

Michael Serone  
Ashley Hill  
Tiffany McCrory  
Nada Abu-Ulbah  
Michael Moraco

Faculty Mentor: Erin Berman School of Communication

In recent years, social networking sites such as Facebook, Twitter, and Instagram have become more and more popular among young adults. Publics are not only using these social technologies for social networking and interactions among people but they are looking to social media for information distribution and breaking news as well. The purpose of our research is to identify and understand how 18 to 25 year-olds receive their breaking news. Through further research we were able to find that this age group receives both hard news and soft news through the means of social networking sites more than traditional broadcast networks or newspapers. Young adults within this age group find it easier to rely on news facts found on Twitter rather than reading a traditional newspaper.

**Session: Communications Research Methods Poster Session**

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 1:00-2:00pm

*Location:* Heth 16-17

## **Sociological Research Methods Symposium**

### **College Students' Attitudes Toward Refugees and Immigrants**

MaryKathryn Aldrich

Faculty Mentor: Allison Wisecup Sociology

This research project identifies students' attitudes toward refugees and immigrants and whether or not they are accepting of either. Using previous research as a point of reference, questions include finding out whether the younger populations attitudes are progressing or regressing on racial fronts, and another is to determine the effect word usage will have on the sample population and decipher whether or not word usage has to do with a respondents feelings toward a refugee or an immigrant. This research project will provide a good reference point for attitudes today, bridge the gaps of age and continent, and observe how refugees and immigrants are considered differently in modern times. It will also aim to discover whether or not the language we use to talk about different populations influences our sentiments and attitudes about these different groups. The sampling method is convenience sampling of Radford University students enrolled in Sociology classes and sample size will range from 100-150. Data from an electronic survey will be used to answer these research questions.

**Session: Sociology Research Methods Symposium**

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 1:00-1:15pm

*Location:* Heth 22

### **Parenting Models and Their Connection to Social Class**

Benjamin Brightman

Faculty Mentor: Allison Wisecup Sociology

The objective of this research project is to establish quantitative data on parenting styles and their connection with class. Further, the intention is to build a spectrum analysis that demonstrates how severe parents mediate and filter media in and out of the household. What this study seeks to prove is that based upon certain social advantages (age, income, and number of children measured to accumulate this score) within American culture, certain demographics will express levels of media control specific to their economic class. The data is analyzed using a traditional bell curve layout that places all respondents in either a lower, middle, or upper tier in the factors of media control intensity and societal advantages, and to compare these results along demographic lines. The sample population consists of 100 parent participants that live within the same county in Southwestern Virginia. Data is collected through a survey and results are measured and compared utilizing the SPSS calculation program. Due to the fact that the survey method is used to gather data, respondents are anonymous and thus it is highly likely that there will be little issue with participants being truthful and accurate, as there is no time limit. The area is skewed strongly towards middle class and thus the results will be weighted as possible to observe fluctuations in the perceived social spectrum under investigation. It is likely that the conclusions will confirm the assumptions of the researchers.

**Session: Sociology Research Methods Symposium**

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 1:15-1:30pm

*Location:* Heth 22

### **The Naming Game: Identity and the LGBT Subculture**

Kasey Campbell

Faculty Mentor: Allison Wisecup Sociology

What is the importance of shared meanings in social interaction, particularly between the dominant culture and a subculture? We propose that definitions of LGBT identities are different between members and non-members of the LGBT community, leading to differing perceptions of these identifying descriptors. Survey data from 150 Radford University students taking courses within the College of Humanities and Behavioral Sciences during Spring 2013 is analyzed.

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 1:30-1:45pm  
*Location:* Heth 22

### ***Private vs. Public Education and Critical-Thinking Output***

**Ryan Coker**

*Faculty Mentor:* Allison Wisecup Sociology  
 OBJECTIVE / Public high schools implement standardized curriculums that follow their state's educational guideline. On the other hand, private high schools have more freedom in their ability to construct and implement personalized curriculums within their institution. I propose that private high schools focus more on important educational qualities, such as critical-thinking development, when compared to public high schools that "teach to the test". As a result, individuals who attend private institutions will perform better on critical-thinking exercises when compared to their public high school counterparts. In order to collect the data necessary for an evaluation on private vs. public education, survey methods will be used. Specifically, an online survey will be conducted. The population will be the entire student population currently enrolled at Radford University, and the ideal sample size will be around 100 students. The sampling method will reflect convenience sampling, and the date of the data collection has yet to be determined. /

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 1:45-2:00pm  
*Location:* Heth 22

### ***The views of the family and the views of the individual***

**Jesse Hall**

*Faculty Mentor:* Allison Wisecup Sociology  
 Research on the topic of family and its role as a socialization agent is quite prevalent; however, research on how family units (of all structures) influence individual ideologies-such as political affiliation, and religious beliefs- are not only few and far between, but also show reluctance and avoid directly scrutinizing the highly sensitive religious and political beliefs of individuals and their families. From studies that are available on the subject of how families socialize individuals ideology (apart from religious and political), research shows that the family has a very strong influence on individual perspectives, beliefs, values, ideologies and so on. An online survey will be distributed to the Radford University student population as a non-probability convenience sample for data collection. The objective is to establish correlation between family ideology and individual ideology and determine if there is any causation between variables as well. Also, data collected for this study will show commonality-if any-among certain family structures and beliefs that they maintain.

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 2:00-2:15pm  
*Location:* Heth 22

### ***Perception of Crime and Media Consumption***

**Kristen Hottle**

*Faculty Mentor:* Allison Wisecup Sociology

The purpose of this research is to look at the connection between local news sources, like television, newspapers, and online news forums, and see how they affect people's attitudes towards race and crime within their neighborhoods or surrounding areas. This research will also take into effect the socioeconomic status of the different neighborhoods. Those living in neighborhoods with different socioeconomic statuses may have different perceptions of race and crime within their community. The sample will include 100 non-institutionalized adults over 18. Non-probability sampling will be used as the sampling method for this research. For this sample, it will primarily be snowball sampling. Survey methods will be used for this research and the surveys will be conducted online through anonymous surveys.

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 2:15-2:30pm  
*Location:* Heth 22

### ***Financial Independence: Current Trends of Young Adults at Economic Risk and Preventative Measures***

**Shannon McGrath**

*Faculty Mentor:* Allison Wisecup Sociology

This study is designed to evaluate current trends in financial independence seen among young adults. The recent debt crisis in the United States coupled with the high cost of education results in an increasingly difficult transition for adolescents from their childhood to adulthood. More specifically, many young adults remain financially dependent upon their parents. The byproducts of this dependency are commonly seen as the elements of living at home with ones parents, having parental financial aid, loans that are undertaken and an overall debt that is accrued. Young adults and newly graduated students are commonly seen in this financially dependent situation and this necessitates a way to combat the issue at hand as it develops into a widespread social problem. In order to reduce future debt and discover financial independence as early as possible, students and their families must consider planning ahead: savings placed in college funds, giving guidance, and possibly aiding them financially with set terms and limits. These changes can lower debt among young adults and prepare them to be financially independent and contributing adults in society. In this study, 100 students at Radford University, across various departments, were surveyed in order to examine the degree that they and their parents planned ahead for college endeavors and how this affects debt accrued upon graduation from college.

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 2:30-2:45pm  
*Location:* Heth 22

## ***Are Attitudes Towards Women Effectuated by Hunting? : A Look at Traditional Hegemonic Masculine Behaviors and the Effects on Women in Society***

**Caroline Musumarra**

Faculty Mentor: Allison Wisecup Sociology

This paper explores the hypothesis that hunting is a bastion for hegemonic masculinity and all who that participate in hunting are likely to express similar attitudes towards women because of the power of hegemonic masculinity and the accompanying ideology. If people who hunt are coming from a very traditional standpoint than their views may vary with people who do not engage in typically hegemonic masculine behaviors. The goal of this research is to see if people who hunt have more positive or negative attitudes towards women. This research will be conducted through an anonymous online survey sent out to Radford University students. Convenience sampling techniques will be employed in order to get the best possible range of data.

*Session:* Sociology Research Methods Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 2:45-3:00pm

*Location:* Heth 22

## ***Video Games and Their Effects on Aggressive Behavior***

**Brianne Poe**

Faculty Mentor: Allison Wisecup Sociology

**OBJECTIVE** / This research will try to determine if aggressive video games have a positive association with aggressive behavior moderated by the number of hours spent playing and the types of games that are being played. Many key factors have a direct effect on aggressive behavior including gender, age of onset of delinquency, and frequency and duration of aggressive media consumption, have been shown to have a positive association on aggressive behavior. For this research, surveys will be used. Surveys will be given to Radford University Students electronically through the Radford University Email System. The sampling method is convenience sampling. The data collected from an online survey of college students will provide the means for establishing the relationship between video game play and aggressive behavior.

*Session:* Sociology Research Methods Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 3:00-3:15pm

*Location:* Heth 22

## ***Corporate Crime and University Student Attitudes***

**Mary Raymond**

Faculty Mentor: Allison Wisecup Sociology

Between 2000 and 2006, the economy seemed to be flourishing. Americans previously unable to buy homes were being given loans to buy into the American Dream. Capitalism seemed to be successful and businesses were thriving. What began in 2007 with the subprime mortgage bubble, the global financial collapse should have affected the way American companies were doing business. However, the government chose to bail out many failing institutions without changing necessary regulations upon the corporate environment. Many CEO's did not have to account for their misdeeds. This research

seeks to determine if future CEO's are affected by the apparent lack of punishment for management in the institutions that were bailed out. Do future CEO's find corporate crime even more profitable now than they did before the economic fallout? The higher the levels of perceived strain upon individuals will positively affect their perception of the acceptability of committing corporate crime. The data for this study will be taken from a random sample of 100 Business and Sociology Radford University students. The use of an online vignette survey will be administered to students. / Author: Mary Raymond /

*Session:* Sociology Research Methods Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 3:15-3:30pm

*Location:* Heth 22

## ***Helicopter Parenting and Technology: The Effects on the Autonomous College Student***

**Heather Wright**

Faculty Mentor: Allison Wisecup Sociology

The current project focuses on the effects of helicopter parenting on autonomy levels of college students. Helicopter parents are often called overprotective, intrusive, and inquisitive over their child's academic and social life. Although academic research recognizes the phenomena of helicopter parenting, there is a gap in the literature involving autonomy levels and the parental technology usage. The objective of this research is to examine helicopter parenting and the relation of new technology, and how it influences the overall autonomy of adolescents. Research questions include: 1) to what extent do children of helicopter parents have a strong sense of autonomy and 2) to what extent has new technology increased the prevalence of helicopter parenting. This research uses nonprobability convenience survey research methods to collect data. Electronic surveys were administered through Qualtrics to introductory level students in the College of Humanities and Behavioral Sciences. The presence of helicopter parenting is anticipated to have a negative association with autonomy levels, and the presence of technology is anticipated to have a positive association with helicopter parenting.

*Session:* Sociology Research Methods Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Wednesday 3:30-3:45pm

*Location:* Heth 22

## ***Marital Satisfaction***

**Whitney Gunn**

Faculty Mentor: Allison Wisecup Sociology

Over the years many questions have been proposed about why divorce is so prevalent even though statistically divorce seems to be on a decline. This study looks at different samples of individuals who are married with children and without children. The sample will consist of married or divorced individuals with or without children (voluntarily or involuntarily). The individuals that will participate in this study will need to be between the ages of 21-50 years old. At least 200 people will need to take the survey so we can say with confidence that we have enough data before making comparisons. Two different types of non-probability sampling will be used in this study. In this convenience sampling, snowball sampling method will be used in this study. The independent variable is the presence or absence of children while the dependent variable is marital



satisfaction. Presences of children in this study are likely to have a negative correlation on marital satisfaction. /

*Session:* Sociology Research Methods Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 3:45-4:00pm  
*Location:* Heth 22

## Information Technology Special Session

### *Internet Privacy Database: A solution to the disorganization of today's internet laws*

Joan Sureshkumar

Andrew Powell

Faculty Mentor: Chen-Chi Shing Information Technology

Maung Htay Information Technology

Internet privacy has become an overlooked yet essential part our everyday lives. At any given moment, while browsing a webpage, your identity could be stolen leaving you in thousands of dollars in debt. The purpose of this paper is to aid the general public to become more aware of these issues and the laws pertaining to them. We propose the creation of a database using machine learning and data mining techniques with the specific purpose of educating and informing the general public on these laws. In effect, we hope this will raise awareness on the subject as well as aiding any legal counsel needing quick but informative answers regarding internet invasion of privacy.

*Session:* Information Technology Special Session  
*Presentation Type:* 30 minute oral presentation  
*Day & Time:* Wednesday 2:30-3:00pm  
*Location:* Heth 19

## CORE 201 Poster Session

### *Advancements in Computer Aided Diagnostics*

Seth Frantz

Chad Cassar

Faculty Mentor: Carolyn Quinn English

The field of diagnostic technology has rapidly become more popular in the use of diagnosing patients with diseases, disorders, and injuries. The use of diagnosing patients has greatly improved since its beginning in the 1980's. One field that has been greatly improved from the use of computer aided diagnostics (CAD) is epileptic surgery. Major improvements have been made in the past two years. Over the past decade the quality of knowledge in dealing with epileptic surgery has increased drastically. All aspects of epileptic

surgery have seen major improvement. Our machinery is more superior now and is continuing to grow. Computer aided prognostics (CAP) has also grown to help with the finding of breast cancer and prostate cancer by using an image-based Risk Score algorithm.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### *Changes in the Textile Community because of Technology*

Denise Jenkins

Faculty Mentor: Carolyn Quinn English

Textile arts is the use of fibers from plants or animals (and more recently synthetic fibers) to produce decorative and/or practical goods. Technology has changed the textile arts community dramatically. Spinning, the process of making yarn and thread, was done by twisting the fibers by hand, then the drop spindle was invented, next the spinning wheel, and then industrial spinners. Weaving has progressed from frame looms to hand looms to the mechanized looms of today. Sewing, combining pieces of material with fiber, has gone from bone needles to industrial machines that can sew through sheets of lead. Each of these advancements has affected the textile community, some in positive ways and some in negative. Advancements such as the drop spindle, the spinning wheel, the hand loom, and the sewing machine were welcome advancements to spinners, weavers, and tailors and seamstresses, who could now be more productive with the same amount of time. When, however, the machines became automatic so that they didn't need these trained individuals, they were a curse to the professions. Industrialization caused many textile arts to become factory jobs. The mechanized spinners, looms, and sewing machines took little skill and mostly just needed to be guided along. This caused the textile professions of the pre-industrial world to almost disappear. Industrialization did allow for cheaper goods, though. Some societies today still use the old methods: developing countries, artists, living history and historical reenactment, and even researchers and museums. Technology has brought blessings and curses to the world of textile arts, and has thus changed them forever.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### *Integrating Technology into Music Education*

Erica Johnson

Faculty Mentor: Carolyn Quinn English

Technology is becoming more advanced and even more common in our daily lives. We have access to the world at our fingertips. We are constantly connected to each other with today's technology and we are becoming completely dependent on it. With the new generation of children who have never known life without these technologies, classes in schools need to offer more than they used to. Teachers need to find a way to put technology into their classes and lesson plans to fit the needs of these "experts" of technology. Music educators are just one example of educators that need to find new and exciting ways to integrate technology into their classrooms. This research project looks at new technologies that are being offered

and how educators can use them. It also discovers the troubles that are keeping teachers from integrating these technologies and using them effectively. Not only are music teachers today not prepared to use technology in their classrooms, they are also not comfortable using it, much less trying to teach others how to use it. Schools' budgets also present concerns that stand in the way of obtaining new programs that are being offered. Teachers often don't have the resources necessary to be able to bring new and exciting opportunities to their classes so that students can use them to learn more efficiently. Technology can allow music teachers to enhance the level of education that we are continually striving for. If we can uncover what is standing in the way of this integration, music education could really go to another level.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Impacts of Meteorites on today's world***

**Alan Berkeley**  
**Nathan Pirino**

Faculty Mentor: Carolyn Quinn English

In the news recently there have been reports of meteorites hitting the Earth. So Congress and the Senate have had a meeting about how to stop a meteorite that would cause massive destruction. In hopes preventing such a disaster, some scientists have decided to take action by conducting new research. What are the benefits to the studying of the nature of Earth-bound meteors and asteroids? Is the risk high enough to warrant such an expenditure of the taxpayers' dollars? Now understand that meteorites hit the Earth about every day but these recent events have started to make the public panic. The chances of a catastrophic collision are very low, however the stakes are high. Having a plan for action in the event of a collision could very well determine the fate of civilization, and yet it all hinges on one thing: money. With NASA's budget being cut there is less study in meteorites because there is no money to study the meteorites. Instead the money is being used on the next space mission. Scientists theorize that an asteroid hit the Earth about 65.5 so research into meteorite collision is important because "history tends to repeat itself". Now while research into stopping them is very important there needs to be research into the meteorites themselves. The researchers plan to record, catalog, and track asteroids and map out their tendencies. Knowing tendencies gives a better prediction of the future and could very well warn and prepare people for impacts that lie ahead.

*Session:* CORE 201 Poster Session (coordinated by Carolyn Quinn)  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Cochlear Implants: Benefits and Downfalls***

**Elizabeth Bowen**

Faculty Mentor: Carolyn Quinn English

This poster will give an overview of Cochlear Implants. It will begin by discussing what Cochlear implants are, and the basic components of the system. It will then discuss the possible beneficiaries of cochlear implants and what the benefits of the implant may be. In addition, it

will examine the negative consequences that have resulted in the deaf community due to this medical advancement. /

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Advancements and Techniques in Digital Art Production***

**Layla Dobos**

Faculty Mentor: Carolyn Quinn English

Digital art has become more popular and recognized in recent years. This method of artwork is currently being debated over whether or not computer generated material may be more representative of the artist than traditional media. It is important to understand, however, that both digital artwork and human artwork are evolving with one another. This is made possible by removing boundaries and inputting levels of creativity into digital work that is characteristic of human expression. I will explain the four levels, or steps, which are used to represent the style of the abstract artist Wassily Kandinsky in a computer generated painting. /

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Technology in Psychology and Counseling***

**Michaela Horvath**

Faculty Mentor: Carolyn Quinn English

With the recent addition of online counseling to the field of psychology, the idea of counseling is changing. Students in school who are training to be counselors must develop new and specific skills to counsel online. Nonverbal communication, such as body language, changes the approach for the counselor. Online counseling can be extremely beneficial in certain instances when the counselor and client are unable to meet for a scheduled session. Professionals also need to recognize the importance of technology in their client's live. Humans as a whole have changed, socially, due to technology.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Changes in Dance Education and the Obstacles it Has Overcome***

**Kayleigh Long**

Faculty Mentor: Carolyn Quinn English

Dance education has experienced many changes throughout its history. It has come a long way since its early beginnings, but still is facing many problems. In order for dance education to continue to pursue forward, these problems need to be resolved with the help of current educators and others with influence in the field. The purpose of this project is to look at dance education over the past few decades and compare where it is now, in relation to size and strength, to where it was when it started in women's physical

education in the 1930s. It will look at the changes/accomplishments it has faced, as well as some of the challenges, including lack of qualified educators in the system. This topic will look at the majority of dance education in secondary and post-secondary schools. This project will start with a brief background of where dance education mainly originated and will then expand into the depths of where it is now. Dance education has made many strides since its start even though facing many challenges. Hopefully dance education can look towards the future in order to adjust itself.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Carpal Tunnel Syndrome***

**Hannah Stowers**

Faculty Mentor: Carolyn Quinn English

The poster talks about carpal tunnel, it later goes on to talk about the causes and the treatment. Carpal tunnel syndrome has increased rapidly with the rise of dependability on technology. There are different types of tests that can be used to diagnosis a patient with carpal tunnel. It can become a serious issue if it goes untreated. The worst cases will have to undergo carpal tunnel release surgery. A majority of the time carpal tunnel is never fully cured. There are other alternatives for less serious cases.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***The Debate of Analog Recordings vs. Digital Recordings: Convenience or Quality?***

**Brittani Tuttle**

Faculty Mentor: Carolyn Quinn English

In the music industry, the debate of vinyl against digital recordings has been a widely discussed topic. In this project, I will attempt to prove that despite the convenience of digital music for our technological era, analog and vinyl sound recordings provide the highest quality sound experience for a listener, as well as providing a tangible quality to music. I will cite information from various articles to help exemplify and prove my standpoint. I will also explore both the pros and cons of the two types of sound recordings, in order to properly debate both sides.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Angelman Syndrome: The Effect of Enhanced Natural Gestures (ENGs)***

**Katelyn Vaughn**

Faculty Mentor: Carolyn Quinn English

Angelman Syndrome is a neurological and genetic disorder with many different symptoms. These symptoms include, but are not limited to, development delay, behavioral problems, speech limitations, motor difficulties, hyperactivity, and distinct facial

features. Angelman syndrome is caused by a couple of different attributes and is well known in infancy and adulthood. Although those who have this disorder generally have an average life expectancy, they require care throughout their entire lives. Along with the family, support from the community helps these children develop and learn to communicate. Families may use techniques like enhanced natural gestures (ENGs) to help develop their child's delayed communication skills. A study was conducted to show the effectiveness of ENGs. The five different phases of the study lead the parents to the conclusion that teaching their children ENGs is beneficial and shows very few negative outcomes.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

### ***Using Technology & Physiology to Measure Mental Workload***

**Cynthia Wenger**

**Kelly Soloe**

Faculty Mentor: Carolyn Quinn English

These two experiments focus on different ways to measure mental workload through physical and physiological means. In each investigation, tasks that presented different levels of difficulty were used to determine how much strain was put on the participants' minds. Mental stress in Real-Time Assessment of Mental Workload by Russell and Wilson was measured by recording eye blink rate, heart rate, and an electroencephalogram (EEG). The mean correct classification (of mental workload) accuracy for the three task conditions ranged from 82-86%. In Batmaz and Ozturk's Using Pupil Diameter Changes for Measuring Mental Workload, a camera recorded pupil dilations for different tasks meant to trigger certain parts of the mind. Diameter changes occurred between 5.01-11.5% according to reference value. Both experiments support the idea that observed changes in the body can accurately determine the level and type of mental workload.

*Session:* CORE 201 Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 3:00-4:00pm  
*Location:* Heth 43

## **Social Science Symposium II**

### ***Reflections in the Glass Ceiling: A Literature Review of Gender Inequality in Art***

**Rori Holford**

Faculty Mentor: Carla Corrotto Sociology

In the United States, only five percent of all art in museums are created by female artists. To combat inequality, organizations dedicated to the advocacy of women artists have developed over the

last 40 years. Museums and art institutions perpetuate inequality by portraying art as bifurcated into two genres: art or feminine / women's art. With this paper I examine the unequal representation of women in art applying the theoretical perspective of Feminist Standpoint Theory (FST). FST, developed by Dorothy E. Smith and others, identifies the interpretation of knowledge as relative to one's social location. As a result, gender inequality is perpetuated through the elite, patriarchal standpoint of art critics, who influence the collector, who loan to museums, who educate the public, thus creating a feedback loop of class reproduction. I conclude that this cycle can only be broken if institutions approach women artists as equal, rather than separate.

*Session: Social Science Symposium II*  
*Presentation Type: 15 minute oral presentation*  
*Day & Time: Wednesday 2:30-2:45pm*  
*Location: Heth 18*

### ***American companies taking away Human Rights in other Countries***

**Amalia Cruz**

Faculty Mentor: Scott Dunn School of Communication  
 This presentation will shine the light on how American companies contribute to other countries' human rights being taken away. American companies such as Wal-Mart, Nike, and Apple rely on their workers to produce their products while paying them next to nothing in unsafe and poor conditions. This presentation will discuss what products these companies are making the workers make, child labor, conditions in which they work, long hours, pay, and how these workers are trapped in this vicious cycle. Anywhere where laws are negligent and there is plenty of cheap labor, there will be sweatshops. Because these workers barely earn enough to eat, they will never be able to save enough money to improve their lives. Upon researching China and Indonesia, this presentation will expose the harsh realities in which these workers live day to day in their countries as well as the negative long term effects that will result from negligence of these American companies. The presentation will end with the negative media associated along with how these companies have responded in efforts to improve their workers' lives. With big corporations with large consumer demand such as Wal-Mart, Nike, and Apple, there comes a price to pay to produce their products, however, should it be at the expense of other human lives?  
 / /

*Session: Social Science Symposium II*  
*Presentation Type: 15 minute oral presentation*  
*Day & Time: Wednesday 2:45-3:00pm*  
*Location: Heth 18*

### ***Operation OASIS***

**Jeremy Mobley**  
**Jordan Addison**  
**Olivia Thompson**

Faculty Mentor: Allison Wisecup Sociology  
 The present study, Operation OASIS (On-campus Aid Service Implementation System), is an applied social research project developed to address the increasing visibility of the LGBTQIA community at Radford University (RU). The research incorporates an institutional needs assessment in an effort to better understand the visibility of LGBTQIA services and the levels of homophobia and trans/genderphobia on campus. Needs assessment and visibility are determined from an online survey distributed to Radford University

students, 18 and older, using convenience and snowball sampling. Overall, a total of 268 participants completed the survey, with more than 20% of respondents identifying as a member of the LGBTQIA community. In addition to collecting data quantitatively, two small focus groups were conducted with LGBTQIA students from RU in order to better understand the experiences of these individuals on campus. Analyses examine the relationship between sociodemographic characteristics and levels of homophobia towards lesbians, towards gay men, and levels of trans/genderphobia. Sensitivity analyses using within-population comparisons explore these relationships further. Finally, a series of logistic regression analyses explore the visibility of the LGBTQIA community and events at RU. In keeping with an applied focus, the results of the current research will be presented to university officials to encourage the establishment of an LGBTQIA office that will meet the needs of LGBTQIA students, specific to Radford University.

*Session: Social Science Symposium II*  
*Presentation Type: 15 min. presentation and 15 min. Q/A*  
*Day & Time: Wednesday 3:00-3:30pm*  
*Location: Heth 18*

## **Humanities Symposium**

### ***Ulysses and the Law: An Investigation of Legal Significance***

**Emily Redd**

Faculty Mentor: Jolanta Wawrzycka English  
 Renee Dickinson English

The subject of my paper and presentation for the Undergraduate Research Forum is the examination of the censorship and obscenity cases which occurred in the 1930's in the United States and explain their legal and literary significance. In order to complete my objective, the paper provides a brief history of Anglo-Saxon censorship law, an explanation of the decisions found both in the original decision reached in United States v. One Book Called 'Ulysses' and the decision reached in the subsequent appeal of the case, and, lastly, a researched analysis of the implication of these decisions in both the literary and legal circles. / This paper is of significance to my field because it combines the research of both legal and literary scholars in a new way, while also including significant amounts of primary source research of appropriate laws, codes, court decisions, and James Joyce's Ulysses in order to create a comprehensive document which reflects both serious scholastic merit and the creation of a new type of research document on this topic. /

*Session: Humanities Symposium*  
*Presentation Type: 30 minute oral presentation*  
*Day & Time: Wednesday 3:30-4:00pm*  
*Location: Heth 19*

### ***Moby-Dick and Pop Culture***

**Justine Jackson**

Faculty Mentor: Jeff Saperstein English  
 Herman Melville's Moby-Dick is one of the greatest American novels, but many people shy away from reading this whale of a tale. However, Moby-Dick is a significant pop culture icon that continues to appear in TV shows, commercials, movies, and more. By



explaining the significance of Moby-Dick in relation to pop culture, I can offer a new and creative way for teachers to approach Moby-Dick in the classroom.

*Session: Humanities Symposium*

*Presentation Type: 30 minute oral presentation*

*Day & Time: Wednesday 4:00-4:30pm*

*Location: Heth 19*

### ***Art for Public Spaces: Engaging in the Local Community Through the Creation, Collaboration, and Contribution of Public Art***

Kelli Billips

Julie Hawkins

Hallie Hawkins

Whitley Rogers

Hannah Milam

Faculty Mentor: Halide Salam Art

Members of the Art for Public Spaces QEP course, as part of the Scholar-Citizen Initiative, have left their brush marks on Radford this semester, painting murals in various locations around the City of Radford. / Public art has the capacity of becoming a powerful tool for communication, in fostering a dialogue and engagement with the community. From enhancing the aesthetics of a town or city, to bringing up societal, political, or ethical issues, or a combination of these matters, one of the primary roles of the muralist is to reach out and engage with the community. / We will discuss the works we have created and the impact they have had on the community based on the feedback we have received. /

*Session: Humanities Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:30-4:45pm*

*Location: Heth 19*

### ***Mara Salvatrucha-13: Más allá que los tatuajes***

Caroline Martinez-Carranza

Faculty Mentor: Blas Hernandez Foreign Languages and Literatures

Mara Salvatrucha-13 is one the world's highly organized, violent and massive gangs out there today. It originated during the Salvadorian Civil War in Central America in the 1970s. Because of the atrocities tormenting El Salvador, it became a popular trend to for Salvadorians immigrate to the north, making its gradual stops in Honduras, Mexico and finally the United States. Salvadorians that were raised and even fought in the civil war brought with them a sense of entitlement and paranoia. Once in unknown territories, certain groups of these Salvadorian created a unity and trust among each other with the mentality of "us verse the world". The gang soon started to use violence and crime as a defensive mechanism and soon transformed into an attack tactic. The crime committed by this group has been classified as in inhuman, immoral and beastly. The crime and expansion has reached every corner of the United States; the Federal Bureau of Investigation (FBI) has created a special unit focused on reducing and eliminating gangs such as this one. This literature will encapsulate the origin, language, organization, crime and violence committed by, who are now known as, MS-13. MS-13's crimes stretch from extortion to rape to mass murder in cold blood. This gang has become a global phenomenon that is now expanding from the

Americas to Europe, specifically Spain. This literature will be written in Spanish and presented in English. This will be evidence of the author's mastery of the Spanish language as well as in translation and presentation of the literature.

*Session: Humanities Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:45-5:00pm*

*Location: Heth 19*

## **Education Symposium**

### ***Using iPads to Assist Learning in Young Children with Special Needs***

Jessy Bryant

Amanda Sowder

Faculty Mentor: Sharon Gilbert School of Teacher Education and Leadership

This capstone project that is being proposed will be to identify if there are any academic benefits to using iPads with young children that have special needs. If benefits are found, it will be used as research for how iPads can be used to increase academic achievement in young children with special needs. These objectives will be achieved through selecting preschool age children with various special needs and allowing them to use academic applications on iPads. There will be over 30 hours of video taping on the children using the iPads. The videos will be reviewed by the team working on the project and the team will look for themes, problems, and interesting findings. The team will summarize the findings and research other studies to write an article that will be submitted to request publication in an academic journal selected by Faculty Mentor.

*Session: Education Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:00-4:15pm*

*Location: Heth 18*

### ***Using iPads to Assist Learning in Young Children with Special Needs***

Amanda Sowder

Jessy Bryant

Faculty Mentor: Sharon Gilbert School of Teacher Education and Leadership

This presentation will discuss a Capstone Project that met the following objectives. First of all we evaluated how iPads could be used to assist children who have disabilities and whether or not they could be effective teaching tools. Our team of participating faculty advisor (Dr. Sharron Gilbert), along with two undergraduate students (Amanda Sowder and Jessy Bryant) gathered videos of preschool aged children who have disabilities interacting with iPads. The team collected the videos and reviewed them in order to discuss qualitative data about how the children interacted with the technology, how their interactions were similar to a conventional use of the iPad, and whether or not they seemed engaged by the iPads. The presentation will also review scores from the children's assessments that their teacher administered at the beginning of the year and weighed them against their scores at the end of the year to

see if the scores improved. Additionally, the presentation will review literature found about iPads and children to see what has been discussed about the effects of the iPads on children's learning. / This project combined the presentation participants' field of study, Early Childhood Development/Early Childhood Special Education, with a look at today's ever changing and evolving technology. In a world where technology continues to advance in complexity it is important to look at how it affects children. It has the potential to be used as a great tool, and the presentation team wanted to analyze the children's interactions with iPads to see how children with disabilities would respond to the technology as a teaching tool. The results and a reflection of the process of the study will be discussed in the presentation.

*Session: Education Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:15-4:30pm*

*Location: Heth 18*

### **Academics and Athletics: An Examination of Conflicting Interests**

**Anita Puerto**

Faculty Mentor: Kevin Ayers Exercise, Sport and Health Education

Collegiate sports have been a part of our social fabric since at least the mid-19th century. The National Collegiate Athletic Association (NCAA) governs all aspects of collegiate sport, including the rules and regulations regarding the education of student-athletes. A conflict of interest arises from one governing body controlling both academic and athletic policy, without a separate system of checks and balances. Athletic departments house its own academic advisors, who are pressured with keeping the student-athlete eligible in the classroom. This causes major academic violations to occur for the sake of keeping the student eligible as an athlete. One solution would be to remove academic advising from under the roof of the athletic department, into the hands of faculty, thereby reducing the conflict of interest. This proposal could help student-athletes feel more connected to their education, would give faculty more control, and may truly put academics first. However, the athletic department staff may feel they have less control and could begin pressuring faculty to becoming knowledgeable of both academic and athletic requirements. Examples of past NCAA academic violations will be given to support the conflict of interest theory. Personal interviews were conducted with members of important reform groups as well as representatives from the NCAA. Secondary research has also been conducted and all of the information offered will be used to draw a final, reinforced conclusion. There has been a forced connection between academic integrity and athletics, the result of which is the detriment of higher education.

*Session: Education Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:30-4:45pm*

*Location: Heth 18*

### **Challenge Course Outcomes and Effective Evaluation Methods**

**Ashley Fenner**

Faculty Mentor: Mark Wagstaff Recreation, Parks and Tourism

For the purpose of understanding participant outcomes and effective evaluation methods related to challenge course programming, this

project serves as a literature review of current and past research. This project consists of a number of studies reporting participant outcomes after a challenge course experience; including RU ABLE's (Radford University Adventure Based Learning Experience) evaluations from the past eight years. Today, challenge courses are used to develop teambuilding skills within groups and to promote a safe and positive atmosphere (Borland & O'Connell, 2008). Due to lack of statistical research, the question of challenge course effectiveness on participants has become a "hot topic" in adventure education (Gillis & Speelman, 2008). This project will delve into the body of research related to challenge course experiences and outlines effectiveness of challenge course programs. RU ABLE sent evaluations to each group after the participation in a challenge course experience. The evaluations were not conducted for the purpose of this research project, but for the goal of improving RU ABLE. The researcher received all completed evaluations after the start of this study. Evaluations were not collected after the start of this research due to IRB restrictions. Numerical data was entered into a Microsoft Excel spreadsheet to further analyze the information. Written responses for open ended questions were recorded in a Microsoft Word document. This project will expand on the information presented in the Excel spreadsheet and Word document and provide suggestions based from the literature review on effective evaluations for RU ABLE to improve their evaluation methods.

*Session: Education Symposium*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 4:45-5:00pm*

*Location: Heth 18*

## **Geology, Geospatial Science, and Physics Poster Session**

### **The Cascades Landslide**

**Chelsea Carbo**

**Jennifer All**

**Jeremy Robbins**

Faculty Mentor: Chester Watts Geology

Cascade Falls is a spectacular 69 foot waterfall along Little Stony Creek located in Pembroke, VA. According to the Giles County officials, Cascade Falls is visited by around 150,000 tourists per year. Sometime during the 18 months prior to December 2012, a hazardous rockfall occurred just downstream from the waterfall. The failure occurred in rock layers exposed along Little Stony Creek across from the hiking trail and is easily accessible by curious visitors. Obvious undercutting by the waters of Little Stony Creek, as well as the structural properties of the rock layers were of great concern to the researchers. This study investigated the dangers posed to visitors by the unstable rock mass and provides suggestions for increasing visitor safety. Structure data, including orientations of the rock layers, and the rockfall detachment area, were measured in detail and shear tests were performed on the rock samples to provide insight into what caused this unstable slope to fail.

*Session: Geology, Geospatial Science, and Physics Poster Session*

*Presentation Type: Poster presentation*

*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 16-17

### ***Investigation of the Landslide Dam through seismic Refraction, Mountain Lake, Virginia.***

Miles Costello  
 James Freeman

Faculty Mentor: Chester Watts Geology  
 Mountain Lake, located in Giles County, SW Virginia, is one of only two natural lakes in Virginia and has experienced extreme water-level fluctuations over the past 4200 years. The lake is situated within a broad breach of the northwest limb of a northeast plunging anticline in the Valley and Ridge Province. The lake itself is underlain by four distinct rock units of Ordovician and Silurian age. They are the limestone and calcareous shale of the Martinsburg Fm. along with sandstones of the Juniata Fm., the Tuscarora Sandstone, and the Rose Hill Fm. The lake is hypothesized by previous workers in the area to have formed when colluvium dammed the stream known today as Pond Drain and into which water flows over landslide deposits during full pond stage. Seismic refraction was used in an attempt to estimate depth to bedrock along an ancient head scarp, to quantify source material; and at various locations across the present day stream valley, where hummocky terrain is prevalent, in order to determine the extent of the valley in filling. This preliminary research was done in order to elucidate the topography of the bedrock beneath the dam. The resulting data can be used to better understand the path along which ground water travels. Findings of this survey will be discussed within.

*Session:* Geology, Geospatial Science, and Physics  
 Poster Session

*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 16-17

### ***Seismic Refraction Survey of Landslide Colluvium and Lacustrine Sediments at Mountain Lake, Virginia***

James Freeman  
 Elizabeth Crook

Faculty Mentor: Chester Watts Geology  
 Mountain Lake, located in Giles County, SW Virginia, is one of only two natural lakes in Virginia and has experienced extreme water-level fluctuations over the past 4200 years. The lake is situated within a broad breach of the northwest limb of a northeast plunging anticline in the Valley and Ridge Province. The lake itself is underlain by four distinct rock units of Ordovician and Silurian age. They are the limestone and calcareous shale of the Martinsburg Fm. along with sandstones of the Juniata Fm., the Tuscarora Sandstone, and the Rose Hill Fm. The lake is hypothesized by some to have formed when colluvium dammed the stream known today as Pond Drain and into which water flows over landslide deposits during full pond stage. Others hypothesize the lake to be primarily a karst feature. Seismic refraction was used in an attempt to estimate depth to bedrock at several locations in order to ascertain whether natural piping holes, through which water leaks from the lake bottom, drain through colluvial material or whether the underlying bedrock of the Martinsburg Fm. has dissolved to form "blind karst" features that provide the pathways for water loss. Findings to date will be presented and the implications will be discussed.

*Session:* Geology, Geospatial Science, and Physics  
 Poster Session

*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 16-17

### ***Provenance of Feldspars in the Lower Mount Rogers Formation***

Ryan Bond  
 Jenny All  
 Matt Sublett

Faculty Mentor: Elizabeth McClellan Geology  
 The Neoproterozoic Mount Rogers Formation (MRF) located in the Blue Ridge of southwestern Virginia and northwestern North Carolina formed by an ancient rift complex involving Laurentia, the eastern margin of the supercontinent Rodinia, approximately 760 million years ago. Failed initial rifting produced volcanic and sedimentary rocks of the MRF. Successful rifting and opening of the Iapetus Ocean occurred ~200 million years later. The MRF nonconformably overlies older Mesoproterozoic basement granitoids formed by an earlier mountain building event, the Grenville Orogeny. The MRF is separated into two distinct units; the upper MRF consists of predominantly rhyolites and ash flow sheets, while the lower MRF consists of interbedded bimodal volcanic rocks and clastic sedimentary rocks (sandstones and conglomerates) that exhibit low grade metamorphism. This study examines the use of feldspars to assess the provenance (sediment source) of the clastic sedimentary rocks of the lower MRF. We analyzed feldspars from arkosic sandstones in the lower MRF, and compared them with feldspars from potential source rocks, including lower MRF rhyolite and basalt, and granitoids of the underlying basement. These arkosic sandstones are poorly sorted and contain quartz, feldspars, and abundant lithic clasts, most derived from intraformational volcanic rocks or the underlying basement granitoids. A petrographic analysis and point count was performed on each sample with the results plotted on the QFL and QmFLt diagrams. The microcline variety of K-feldspar appears to be the most dominant type, found primarily within the basement granitoid clasts.

*Session:* Geology, Geospatial Science, and Physics  
 Poster Session

*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 16-17

### ***CHARACTERIZATION OF RHYOLITES IN THE LOWER MOUNT ROGERS FORMATION***

David Sublett  
 Jennifer All  
 Ryan Bond

Faculty Mentor: Elizabeth McClellan Geology  
 The Neoproterozoic Mount Rogers Formation (MRF), located in the Blue Ridge Province of SW Virginia and NW North Carolina contains volcanic and sedimentary rocks that formed during an aborted rifting event along the eastern Laurentian margin of Rodinia ~760 million years ago (Ma). The lower portion of the MRF is in contact with ca. 1330 to 1060 Ma granitoid basement rocks, and consists of a bimodal basalt-rhyolite volcanics overlain by coarse clastic rocks, all of which have undergone chlorite-grade metamorphism. Our mapping is mainly focused on distinguishing varieties of the Fees Rhyolite (FR)

found in the lower MRF. The typical FR is a distinct maroon porphyritic rhyolite with abundant pink feldspar phenocrysts. However, we identified several other varieties within the FR map area, including: aphanitic light gray rhyolite with sparse, mm-sized red feldspar phenocrysts; a darker gray variety with abundant, mm-sized pink feldspars and elongated black minerals; a megacrystic maroon rhyolite with cm-scale pink feldspar; and a maroon variety containing elongate fiamme. Porphyritic gray rhyolite with abundant cm-sized feldspar phenocrysts and well-rounded grains of clear quartz was also found. This variety showed a high degree of strain and may be part of the upper portion of the MRF. We are using field relationships, along with petrographic and geochemical analyses, to gain an understanding of the formation and significance of variations within the FR.

*Session:* Geology, Geospatial Science, and Physics  
Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 4:00-5:00pm

*Location:* Heth 16-17

### ***How Dulles Airport Altered Land Use Through Eminent Domain***

**Patrick Donlay**

Faculty Mentor: Richard Roth Geospatial Science

This poster will explain how land use and cover patterns evolved over time in two different locations during the planning and development stages of Dulles International Airport when the federal government implemented the eminent domain clause. My research methods include an interview with Merlin McLaughlin a Fairfax County land surveyor since 1951. I consulted two history books on Fairfax County which went into extensive detail on both Dulles Airport and the former proposed Burke location and gathered pictures, figures, and maps from said books and the Metropolitan Washington Airports Authority. Aerial photographs courtesy of an online institution called Historic Aerials. Dulles International Airport straddles the border of Fairfax and Loudoun counties in the northern region of the commonwealth of Virginia. From original plans to build the airport in nearby Burke, Virginia to eventually razing a town (Willard, Virginia) and constructing it in its current location, the area has seen a half century of different land use and cover changes. Understanding impacts of land use and cover changes associated with the area surrounding Dulles Airport is very important in making future plans for such large developments. The revolution of Burke from what was once the proposed site of this major project into what is now a multi-use park and the transformation of Chantilly from a once small unincorporated farming community to the technological behemoth it has become today are all part of these landscape changes. How these events unfolded and what it meant for each community going forward is extremely important in understanding the effect modern land use and cover has on an area as immense as northern Virginia and metropolitan Washington D.C.

*Session:* Geology, Geospatial Science, and Physics  
Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 4:00-5:00pm

*Location:* Heth 16-17

### ***New River land use and pollution***

**Jacob Ogle**

Faculty Mentor: Richard Roth Geospatial Science

The purpose of this research is to analyze and understand different land use methods that can harm or have negative effects on the New River's water quality. Non-point pollution from agricultural and industrial land uses affects the biological and recreational uses of the New River. This paper describes how storm water run off and point source pollution can cause negative effects in the natural biome of the river and its surroundings. The Radford Army Ammunition plant for example puts pollution into the river every year, and has done so for a long time. Other industries have polluted the water system as well and the causes and affects of these pollutants will be discussed. This research will summarize the negative affects of these pollutants from certain land uses and describe steps we can take to prevent further pollution of the New River.

*Session:* Geology, Geospatial Science, and Physics  
Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 4:00-5:00pm

*Location:* Heth 16-17

### ***Urban Storm Water Management Techniques of Fredericksburg, VA and Arlington, VA***

**Nathaniel Shafferman**

Faculty Mentor: Richard Roth Geospatial Science

Urban stormwater runoff is a pressing issue in the United States today. It is especially important to areas in the Chesapeake Bay watershed. Two main cities are analyzed in this paper, Fredericksburg and Arlington. These cities are well established and have existed since civil war era. While stormwater controls are relatively simple to design into new developments, retrofitting older urban environments is challenging. This paper aims to uncover the techniques of LID (low impact development) being used in older cities were retrofitting historic areas is the only way to reduce stormwater runoff and discover the pro's and cons of such techniques using literary analysis, spatial analysis, and interviews. You have to balance the amount of history to preserve and amount of technology to incorporate. Arlington has a very proactive plan to implement solutions to storm water runoff. Fredericksburg is trying harder to limit the many issues that come with runoff on the more individual setting. Fredericksburg is making headway with help of organizations such as Friends of the Rappahannock and Virginia Outdoors Foundation. Some projects are having large impacts from studies done on the local level such as rain gardens, soil aeration, rain barrels/cisterns, and downspout disconnection. In Arlington the same rain gardens and rain barrels are being utilized but there is more emphasis on larger scale infrastructure to update and retrofit the storm sewer system. Arlington is converting collection ponds to gardens and implementing green roofs as well. All of these Low Impact Development retrofits have a cost to either the owner or to the city so the retrofits must be ranked from most effective to least effective and by cost. Overall the Chesapeake Bay, streams, rivers, and inhabitants of the cities and surrounding area would benefit in a reduction in stormwater runoff, and the techniques utilized by those in Arlington and Fredericksburg are going to help.

*Session:* Geology, Geospatial Science, and Physics  
Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 4:00-5:00pm

*Location:* Heth 16-17



## Psychology Poster Session I

### ***An Investigation of Emotional Labor and Performance Evaluations***

Lydia Bradshaw

Faculty Mentor: Allen Gorman Psychology

Emotional labor is a form of regulation which describes how employees display specific emotions and behaviors as part of their job. The purpose of this study is to investigate the relationship between an employee's emotional labor and their supervisor's performance evaluations. A total of 53 undergraduates, who were working a minimum of ten hours per week, participated in this study. Emotional labor was rated on a Likert five point rating scale with the anchors never (1), rarely (2), sometimes (3), often (4), and always (5). Emotional labor consists of two subscales, deep acting and surface acting. One of the sample items for deep acting was, "on an average day at work, how frequently do you try to actually feel the emotions that you need to display to others?" One of the sample items for surface acting was "on an average day at work how frequently do you pretend to have feelings that you do not really have?" Frequencies on demographics for gender, age, and race were run in order to see if the sample was representative of the population. Frequencies on demographics were also collected to see if there were differences between the subgroups. The sample consisted of 66% females and 34% males, which is representative of the gender population on campus. The hypotheses tested were: 1) emotional labor (deep acting) would be negatively correlated to turnover intentions, 2) emotional labor (surface acting) would be positively correlated to turnover intentions, and 3) emotional labor (deep acting) would be positively correlated to supervisor ratings.

*Session: Psychology Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 4:00-5:00pm*

*Location: Heth 43*

### ***Trait Predictors of Typical and Maximum Task Performance***

Christina Thibodeaux

Faculty Mentor: Allen Gorman Psychology

This study examined the relationship between self-reported attitudes and individual differences with performance on a computer task under typical and maximum conditions. Maximum performance describes the best quality of work an individual is capable of performing. Whereas typical performance describes the quality of work an individual will display on a regular basis. Self-reported attitudes measured in this study included intrinsic/extrinsic motivation, goal orientation, and generalized self-efficacy. Cognitive ability was measured using a verbal and mathematical ability timed test. Typical performance was measured by allowing participants to complete a computer digit task outside of the lab. Maximum performance was measured by requiring participants to complete the task while being observed by a researcher. Performance on the computer digit task was scored using total time for completion and the number of errors. A total of 59 undergraduate students at Radford University provided complete data for both parts of this study. Expected relationships were that conscientiousness, cognitive ability, and motivation would predict performance in both the typical and maximum conditions. Further, the researcher hypothesized that

intrinsic and extrinsic motivation would exhibit differential relationships with performance under typical and maximum settings.

*Session: Psychology Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 4:00-5:00pm*

*Location: Heth 43*

### ***Effects of Self-Monitoring as a Moderator on Severity of Group Initiation and Group Liking***

Charles Ashley

Amanda Westergaard

Sarah Shevlin

Faculty Mentor: Jeff Aspelmeier Psychology

The present study investigates the effects of severity of initiations on group liking. The present study also tests whether initiation effects are moderated by individual differences in self-monitoring. Approximately 100 undergraduate students from Radford University completed measures of self-monitoring (Snyder, 1974) and were randomly assigned to three group initiation conditions (high severity, low severity, and control group). The high severity group was asked to voluntarily write down slang terms related to human sexuality. The low severity group was asked to write down clinical terms related to human sexuality. Lastly, the control group was asked to write down general biology terms. Next participants read a transcript of a simulated group discussion about the secondary sex characteristics of animals. The script was intentionally written to be boring, mundane, and uncontroversial. Finally participants completed a survey describing their liking of the group. A significant main effect for self-monitoring, a main effect for suffering, and an interaction between the two variables were all expected. Participants who experienced the more severe initiation were expected show stronger group liking, which is predicted by cognitive dissonance theory. These effects were expected to be strongest among participants reporting high levels of self-monitoring.

*Session: Psychology Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 4:00-5:00pm*

*Location: Heth 43*

### ***Does Time Make A Difference? Effects of Time Pressure on Attractiveness Stereotypes***

Devin Brown

Kanishia Williams

Cody Birdsall

Faculty Mentor: Jeff Aspelmeier Psychology

The present study investigates the effects of time pressure on attractiveness stereotypes. Previous studies have shown that people attribute a broad range of socially desirable personality characteristics to attractive individuals (Dion, K., Berscheid, E., & Walster, E, 1972). The present study tested whether putting participants under time pressure would exacerbate these effects. In a 2 (between subjects; time pressure vs. no time pressure) x 2 (within subjects; attractive target vs. unattractive target) factorial design, 100 undergraduate students from Radford University viewed a series of photos of attractive and unattractive people and rated each person on attractiveness and 13 personality characteristics. Participants were also randomly assigned to one of two groups; One

group was told they had limited time to complete their ratings and the other group was given unlimited time. Results show that time pressure moderated the relationship between attractiveness and personality ratings, where the difference between rating of attractive and unattractive targets was largest among participants who placed under time pressure.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Does Rape Myth Acceptance Mediate the Effects of Traditional Gender Roles on Victim Blaming?***

Amanda Lessard  
 Hali Gibson  
 Christina Adkins

Faculty Mentor: Jeff Aspelmeier Psychology

The proposed study tests whether rape myth acceptance mediates the relationship between traditional gender roles and victim blaming in approximately 100 Radford University students. The BSRI (The Bem Sex Role Inventory; Bem, 1974) will be used to measure the masculinity and femininity of each participant and will be used to identify whether participants hold traditional gender roles. The IRMA (Illinois Rape Myth Acceptance Scale; Payne, Lonsway, & Fitzgerald, 1999; McMahan & Farmer, 2011) will be used to measure rape myth acceptance. Finally, participants will complete a victim blaming assessment that requires them to read a scenario describing an acquaintance rape and then answer questions about the degree to which each character is to blame for what happened. It is expected that holding traditional gender roles will be positively associated with greater victim blaming. Holding traditional gender roles is also expected to be positively associated with greater acceptance of rape myths. The participants that have higher scores on the IRMA are expected to show stronger victim blame attitudes than people with lower IRMA scores. If mediation is found then there will be a significantly weaker association between the traditional gender roles and victim blame attitudes, when rape myth attitudes are statistically controlled for. Therefore, the relationship between traditional gender roles and victim blaming will be explained by rape myth acceptance.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Drink Up!: The Effects of Normative Information on Pluralistic Ignorance in Attitudes about Binge Drinking***

Jessica Morris  
 Cassidy Lawson  
 Kevin Starinieri

Faculty Mentor: Jeff Aspelmeier Psychology

This class project evaluates pluralistic ignorance effects in attitudes about binge drinking, this could be an error on our part on the abstract submission. Previous studies show that college students over-estimate the degree to which their peers are comfortable with or engage in binge drinking behaviors, demonstrating pluralistic ignorance. In this study pluralistic ignorance is reflected by a

difference between one's own comfort levels and one's perceptions of peers' comfort levels with the drinking habits of students at Radford University. The present study also tests whether pluralistic ignorance can be reduced by exposing participants to persuasive ads that present information about actual rates of binge drinking. Approximately 100 undergraduate participants were randomly assigned to one of two groups; they evaluated a set of ads relating to drinking behaviors. One group evaluated ads that contained information about rates of binge drinking. The second group evaluated the same ads but without the additional information. It was expected that participants who received the ads without the rates of binge drinking will be more likely to overestimate perceived comfort levels of peers', therefore showing higher levels of pluralistic ignorance. In contrast the participants who received the ads with rates of binge drinking will be more likely to rate perceived peers' comfort levels closer to the actual rate of binge drinking, showing lower levels of pluralistic ignorance.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Adult Attachment Styles and Self-Regulatory Resources: A Dynamic Interplay***

Jonathan Renz  
 Amanda Lessard  
 Bryce Lewis  
 Jenna McChesney

Faculty Mentor: Jeffery Aspelmeier Psychology  
 Niels Christensen Psychology  
 Janessa Steele Psychology

This purpose of this study was to test whether self-regulatory resources are involved in the deactivating strategies utilized by individuals with dismissing avoidant attachment styles. After assessing participant's attachment styles, using the ECR-R (Fraley, Waller, & Brennan, 2000) and the RQ (Bartholomew & Horowitz, 1991), participants were randomly assigned to one of three essay writing conditions: the first activated the attachment system, the second depleted self-regulation resources, and the third acted as a control and did not activate the attachment system or deplete self-regulation resources. Self-regulation depletion was assessed by measuring persistence on an unsolvable anagram task. Independent from their attachment classification, there were no observed differences between participants who completed the attachment essay, the depletion essay, or the control essay concerning time spent on the anagram task. When averaged across the essay conditions, there were no significant differences between participants of differing attachment styles in regard to time spent on the anagram task. A significant interaction between essay condition and attachment style was observed, with simple effects revealing that fearful individuals that completed the attachment essay gave up sooner on the anagram task compared to other participants. There were marginally significant differences between participants that completed the depletion essay, with dismissing participants "hyper-persisting" on the anagram task compared to the other participants. The use of the deactivating strategies appears to deplete self-regulation resources, but only for individuals who don't consistently use these strategies.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Different Views of Body Image based on Gender and the Relationship between Implicit and Explicit Anti-fat Attitudes***

Austin Shornak  
 Joi Robinson  
 Rita Saiban

Faculty Mentor: Jeff Aspelmeier Psychology

This study evaluates the relationship between the attitudes that people hold about their own body and the attitudes they hold about people who are overweight, which will be explored by measuring their implicit and explicit anti-fat attitudes. Participants consisted of approximately 100 undergraduate students at Radford University. The implicit attitude test asks participants to categorize images of people as either overweight or thin and to classify negative and positive words. The speed with which participants classify picture/word combinations indicates the degree to which overweight participants are viewed negatively. To measure explicit attitudes, participants answered the anti-fat attitudes questionnaire (Crandall, 1994). Also, a body image questionnaire (Body Image Questionnaire, 2010). It is expected that gender will moderate the effects of body image on implicit anti-fat attitudes, where body image is expected to be negatively associated with weight prejudice among women, but not among men. Explicit anti-fat attitudes are not expected to be predicted by body image and no differential effects are expected for men and women.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Living in a Sexist Society: A Study on Gender Roles, Ambivalent Sexism, and Heterosexism***

Hannah Vass  
 Kayten Stroop  
 Stephen McFarland

Faculty Mentor: Jeff Aspelmeier Psychology

This study investigates whether gender moderates the relationship between gender roles and ambivalent sexism and heterosexism. Using an online survey administered through Qualtrics, approximately 100 undergraduate students completed measures of masculine and feminine gender roles (Bem Sex Role Inventory; Bem, 1971), ambivalent sexism (Ambivalent Sexism Inventory ;Glick & Fiske,1996) and heterosexism (Attitudes Towards Lesbians and Gay Men; Herek, 1988). It was expected that gender would moderate the relationship between masculinity and ambivalent sexism, where men reporting high levels of masculinity would report lower levels of ambivalent sexism, compared to men reporting high. We expected that women reporting low levels of masculinity would report higher levels of ambivalent sexism, compared to women reporting high levels of masculinity. It was also expected that gender would moderate the relationship between femininity and ambivalent sexism. It is expected that men reporting low levels of femininity would report higher levels of ambivalent sexism, compared to men reporting high levels of femininity. Women reporting high levels of femininity were expected to report higher levels ambivalent sexism,

compared to women reporting low levels of femininity. With respect to heterosexism, a similar pattern of results was expected.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***The Development and Validation of the "Attitudes Toward Small Mammal Research" Scale.***

Amanda Adams  
 Hilary Hicks  
 Michael Curry

Faculty Mentor: Jay Caughron Psychology

The "Attitudes Toward Small Mammal Research" (ATSMR) measure presents an unbiased evaluation of attitudes toward animals; specifically, it focuses on the use of small order mammals for research purposes. Participants were asked to consider only small order mammals such as rats, mice, and rabbits. After conducting a factor analysis, the final ATSMR includes 23 items that are split into 3 factors: Feelings, Benefits, and Knowledge. The ATSMR treats the understanding of safety rules and regulations as knowledge rather than opinion; therefore, the Knowledge component is measured independently from attitudes. Internal consistency measures were calculated for each subscale and the overall measure, all were reliable. The ATSMR, when administered in conjunction with the NEO-FFI (Costa & McCrae, 1989), is able to replicate the relationship between agreeableness and attitudes toward animal research which has been demonstrated with previous animal attitudes measures. Scores received on the ATSMR significantly correlate with scores received on the Animal Research Attitudes Scale (ARAS; Saucier & Cain, 2006),  $r(300) = -.798, p < .001$ . (Note: High scores on the ATSMR indicate negative attitudes; in contrast; low scores on the ARAS indicate negative attitudes). The addition of the Knowledge component allows test administrators to evaluate the relationship between knowledge of animal research compared to attitudes. Findings suggest individuals with less knowledge of animal research feel more strongly that animals experience pain related to research, and more negatively about the benefits of animal research. These results provide evidence of the convergent validity of the ATSMR.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***Differential Behavioral Effects of Cerium Oxide Nanoparticles Following Traumatic Brain Injury***

Hilary Hicks  
 Amanda Adams  
 Kimberly Crawford

Faculty Mentor: Jeffrey Willner Psychology  
 Mark Whiting Psychology

Following traumatic brain injury (TBI), there is an excessive release of free radicals that contribute to cognitive and behavioral dysfunction. Cerium oxide nanoparticles (CeONP) can scavenge free radicals. Thus, we examined the usefulness of CeONP as a post-injury therapeutic intervention. However, there is debate regarding the adverse side effects that can result from interfering with free radical



activity, so we administered CeONP to sham animals in order to monitor its behavioral effects. / / Long-Evans rats were administered a moderate TBI or were sham injured. Thirty minutes following injury, rats received an intravenous injection of CeONP or vehicle at a dose of .05 µg/g, .50 µg/g, or 5.0 µg/g. Motor function was investigated on post-injury days 1-5 using the beam balance task, and cognitive function was measured using the Morris Water Maze on days 11-15. / / Results from the beam balance assessment suggest that no dose of CeONP significantly alters motor function for sham or injured animals. Results from water maze testing suggest a pattern of differential effects of CeONP on cognitive functioning for both injured and sham animals. Specifically, injured and sham rats treated with .05 µg/g CeONP displayed trends towards impaired performance relative to their respective comparison groups. In contrast, injured and sham rats treated with 5.0 µg/g CeONP displayed superior performance compared to vehicle. / / These results suggest that CeONP may be useful for the treatment of TBI-induced dysfunction. However, some doses may impair behavioral outcome. Future research should seek to identify the mechanisms by which CeONP cause these differential effects.

*Session:* Psychology Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 4:00-5:00pm  
*Location:* Heth 43

### ***A Comparison of Two Instructional Approaches for Parents Learning to Program a Communication App on an iPad2***

**Paige Waddell**

Faculty Mentor: Diane Millar School of Communication  
 This study investigated the effects of two types of instruction when customizing an augmentative and alternative communication (AAC) software program on an Apple iPad 2 ®. Thirty participants who have children with a communication disorder were asked to customize the software application Proloquo2Go™ (AssistiveWare®) on an iPad2. The participants were randomly assigned into one of two groups and participated in two instructional approaches. Group 1 participated in a self-guided condition followed by an instructor-led condition, while Group 2 participated in the instructor-led condition followed by the self-guided approach. Participants were asked to complete ten skills in each instruction condition, and were given a time constraint of thirty minutes. The number of steps participants completed during each condition and the number of skills completed correctly were measured. Additionally, satisfaction questionnaires were given at the completion of each condition.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

## **Psychology Poster Session II**

### ***The Role of Age and Empathy in Preschoolers' Likelihood to Help an Adult on Prosocial Tasks***

**Amory Cox**  
**Courtney Powell**  
**Kayla Smith**

Faculty Mentor: Jenessa Steele Psychology

The older population (65 and older) consists of 39.6 million people and will nearly double to 72.1 million people by 2030 (Department of Health and Human Services, 2010). The United States is a society that divides generations socially and recreationally (Gilbert & Ricketts, 2008). In addition, children generally hold negative stereotypes of older adults (Weinberger, 1979). Bryant (1982) argued that the more empathetic a child was, the more likely the child would be able to share feelings with a wide range of individuals. However, few studies have investigated the potential differential role of age and level of empathy in a preschooler's likelihood to help an adult stranger. The current study aimed to assess preschoolers' likelihood to help an older or younger adult stranger on an action-based and emotion-based prosocial task based on levels of empathy. Our study recruited 44 preschool students ( $M_{age}=46.43$  months,  $SD_{age}=9.98$  months). The main effect for task was significant,  $F(1, 40) = 10.212, p = .001$ ; however each task was significantly different from each other. No significant differences were found in levels of empathy or age when engaging in helping behaviors. The results are in the overall expected direction, but not statistically significant. Eisenberg, Guthrie, Murphy, Shepard, Cumberland and Carlo (1999) found that preschoolers who spontaneously engaged in prosocial behaviors and sharing behaviors were related to the self-reported tendency to perspective take in adolescence and early adulthood, as well as social responsibility and suppression of aging, thus there are beneficial longitudinal effects.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

### ***Five-Factor Model Facets as Predictors of Engagement in Workplace Romances***

**Kelsey Geary**  
**Savannah Deroma**  
**Brandi Carper**

Faculty Mentor: Jessica Doll Psychology

Abstract / / Workplace romances have not been extensively studied. Research is beginning to suggest that dimensions of the Five Factor Model of Personality may predict the likelihood of engaging in workplace romances. Our research examined facets of the Five Factor Model as predictors of workplace romances. We hypothesized that individuals (a) low in self-consciousness, (b) low in cautiousness, (c) high in anxiety, (d) high in immoderation, (e) high in adventurousness, and (f) high in excitement-seeking would engage in more workplace romances than individuals who scored low on each facet. Participants (N=164) completed an online survey assessing scores on facet measures of workplace romances and the number of workplace romances in which they had engaged. Linear regression analyses partially supported our hypotheses such that self-consciousness ( $t(163) = -2.06, p < .05, \beta = -.14, 95\% CI [-.28, -.01]$ ), immoderation ( $t(163) = 2.37, p < .05, \beta = .17, 95\% CI [.3, .32]$ ), adventurousness ( $t(163) = 4.01, p < .05, \beta = .3, 95\% CI [.15, .44]$ ), and excitement-seeking ( $t(163) = .17, p < .05, \beta = .17, 95\% CI [.03, .31]$ ) were significant predictors of the number of workplace romances. /

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43



## ***Neophobic Behavior in Adult Rats Exposed to Cannabinoids During Lactation***

Stephen Casazza  
Heather Boyle  
Kim Crawford

Faculty Mentor: Pamela Jackson Psychology  
Cannabis remains a preferred and problematic drug among pregnant women (Fried & Smith, 2001). Studies suggest that perinatal marijuana exposure alters emotional regulation and leads to lasting and potentially irreversible cognitive deficits (O'Shea et al., 2006). This study investigated differences in anxiety between adult rats who received exposure to the synthetic cannabinoid agonist CP 55,940 during lactation on postnatal days (PD) 2-19. Additionally, this study investigated the effects of weight loss by including a second control group. Two groups of mothers received a subcutaneous injection of vehicle or drug, and were allowed to eat as much as they wanted, and the third group of mothers was food-yoked with rats receiving drug. To assess for anxiety, a sucrose preference test was administered beginning on PD 77. The task involved measuring preference for sucrose over plain water for 60 minutes. Less sucrose consumption suggests fear of a new, but attractive stimulus, indicating increased anxiety. The drug rats consumed a significantly lower percentage of sucrose than food-yoked rats at one hour, and somewhat less sucrose than control rats during the first 30 minutes of this task. There was a significant decrease in the weight gain of the drug animals and the food-yoked animals compared to control animals throughout the entire injection period, and continued through PD 55. Although both the drug and the food-yoked rats experienced malnutrition, only the drug animals showed an increase in anxiety on the neophobia task.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

## ***Long-term Effects of Developmental Exposure to Cannabinoids During Lactation on Emotional Regulation***

Michael Curry  
Lauren Schick  
Kody Draper

Faculty Mentor: Pamela Jackson Psychology  
Chronic developmental exposure to exogenous cannabinoids has been shown to alter emotional regulation (O'Shea et al., 2004; Newsom & Kelly, 2007). Further research by O'Shea, McGregor, and Mallet (2006) found that repeated perinatal cannabinoid exposure from postnatal day (PD) 4 – 25 reduced social interaction in adulthood. However, few studies have looked at lactational exposure to cannabinoids and its effects on emotional regulation in offspring. Twenty-five dams were divided into a cannabinoid-exposed group, a food-yoked control group, or a free-fed control group. The cannabinoid exposed group received daily injections (s.c., 0.35 mg/kg) of CP 55, 940 from PD 2 -19 for the pups, while the control groups received comparable vehicle injections. A food-yoked control group was included because Rubino et al. (2008) found that during cannabinoid injection periods food intake and body weight decrease. Behavioral testing of the offspring began on PD 77. Fifty males were used, two from each litter, to assess emotional regulatory behaviors

in adulthood. One rat ran the elevated plus-maze (EPM) while the other rat ran the open-field emergence task. No significant results were found on the EPM, however there was a suggestion that the control animals had increased anxiety. Open-field activity measures indicated the yoked group was more active but less anxious than the control group. The results suggested that early nutrition deficits may be a serious confound in the attribution of cognitive deficits or emotional changes to marijuana-type drug exposure during early development.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

## ***Marijuana Effects on Neonatal Development: Persistent Cognitive Alterations Following Lactational Exposure***

Christopher Hartless  
Lauren English

Faculty Mentor: Pamela Jackson Psychology  
Marijuana is the most commonly abused illicit substance among pregnant women in the United States (SAMHSA, 2012), asserting concern for the effects on the offspring's neurological development. Research addressing this issue is limited, however evidence suggests that perinatal exposure to cannabinoids may result in long-term learning and memory impairment. The current study examines similar parameters with an emphasis on the postnatal period of development, where infant subjects were exposed to a cannabinoid agonist via lactation. Maternal dams, after giving birth, were randomly assigned to three conditions. The experimental condition received daily injections of the synthetic cannabinoid CP 55,940, while control conditions received injections of a vehicle solution. A food-yoked condition received a comparable vehicle solution and mild deprivation of food to account for the decreased food intake observed in experimental subjects. Learning and spatial memory was assessed in offspring on a T-Maze discrimination task during young adulthood. Drug exposure did not affect the rate of learning, however, subjects exposed to cannabinoids were less likely to utilize a spatial memory strategy when compared to control subjects. In addition, this pattern was observed among the food-yoked control condition as well, suggesting that nutritional deficits, in a rodent model, may be a contributing factor in the severity of exogenous cannabinoid effects on development at the neonatal stage of life.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

## ***The Effect of Synthetic Marijuana and Cat Odor Exposure on Activity and Anxiety***

Charnele Johnson  
Callie Newcomer  
Brittany Vernon  
Kelly Williams  
Mike Curry

Faculty Mentor: Pamela Jackson Psychology

The current study investigated whether or not cannabinoid exposure affects anxiety and activity levels within our subjects. Previous research indicates that perinatal exposure to cannabinoids has an aversive effect on anxiety and activity measures. The subjects used in our experiment were 34 Long-Evans female rats that were bred in the lab at Radford University. Half of our subjects were exposed to the cannabinoid CP 55, 940 from postnatal day 2-19 where the other half were exposed to a comparable vehicle injection. A food-yoked control group was included to control for possible malnutrition effects associated with drug exposure. To test the effects of stress we exposed half the subjects to a predator's odor, using a cloth which was previously worn by a cat. The rats were tested in an open-field to measure activity and anxiety. The activity level was measured by distance traveled in meters. The anxiety level was determined by time spent in center cells and avoiding the cat collar. Another factor to determine the anxiety level of the subjects was the amount of boli left within the open-field. Results of this experiment are expected to show that rats exposed to the cannabinoid will be more likely to suffer higher anxiety and increased activity levels than those that were not exposed to the cannabinoid, and that this effect should be stronger in the rats exposed to the cat-odor stressor.

*Session: Psychology Poster Session II*  
*Presentation Type: Poster presentation*  
*Day & Time: Wednesday 5:00-6:00pm*  
*Location: Heth 43*

### ***Effects of Cannabinoid and Cat Odor Exposure on Object Recognition in Rats***

Natalie Popsuy  
 Lindsey Lumley  
 Kayla Mullins  
 Mike Curry

Faculty Mentor: Pamela Jackson Psychology  
 Previous research indicates that perinatal exposure to cannabinoids has negative effects on object recognition in rats. In an experiment done by O'Shea, Mallet, and McGregor (2006), exposure to cannabinoids were shown to affect both memory and anxiety in male rats. The subjects used in our experiment were 34 female Long-Evans rats, aged 60 to 90 days old. They were bred in the lab and were naïve to behavioral testing. Maternal cannabinoid exposure to the drug CP 55,940 was at a moderate dose (.35 mg/kg) each day and took place during postnatal days 2 through 19. The control group also received a comparable vehicle injection. Also included in the experiment was a food-yoked group that was only allowed the same amount of food that the drug group ate. This was done in order to control for any effect that a lack of food might have in behavior. The independent variables in this experiment were whether or not the rats were exposed to cannabinoids and/or cat odor (to produce stress) from a previously worn cat cloth. Based on the results of previous research, it is expected that neonatal exposure to CP 55,940 will have a negative effect on the rats' ability to recognize the spatial location of objects in an open-field test and this will be potentiated by exposure to the cat-odor stressor.

*Session: Psychology Poster Session II*  
*Presentation Type: Poster presentation*  
*Day & Time: Wednesday 5:00-6:00pm*  
*Location: Heth 43*

### ***Holden and Gatsby: Personality Explained***

**Caitlyn Foley**

Faculty Mentor: Ruth Riding-Malon Psychology

Two iconic books with strong characters in American culture: The Great Gatsby and The Catcher in the Rye were analyzed in the terms of the personalities of the main character in each book, Jay Gatsby and Holden Caulfield, respectively. Gatsby is a character that appears strong and independent when in reality he is conflicted by others perception of him and who he sees himself as. In contrast Holden, is a character that is conflicted by his inner turmoil and finding a way to come to terms with what has happened in his life. The author examined Gatsby and Holden's personalities with respect to the big five personality traits: openness, conscientiousness, extraversion, agreeableness, and neuroticism. The author also interpreted Gatsby's personality through the eyes of other people (observer-reports) and through the observations of the narrator Nick Carraway (self-report). Those observations are considered self-report because he is the only person who sees the "true" Gatsby. Holden's personality was explored through observer-report because we as the readers are determining his personality through his actions and thoughts. Some of the areas considered included Gatsby and Holden's need for intimacy, Gatsby's need for achievement, and Holden's defense mechanisms. The last aspect scrutinized was Holden's adult relationship style. The author examined themes common of all his relationships; why he may have his type of attachment style; how it has affected his past relationships and possibly his future relationships.

*Session: Psychology Poster Session II*  
*Presentation Type: Poster presentation*  
*Day & Time: Wednesday 5:00-6:00pm*  
*Location: Heth 43*

### ***In Their Own Words: Youth Perception of a Psychosocial Support Model***

**Jessica Strangand**  
**Stirling Barfield**

Faculty Mentor: Ruth Riding-Malon Psychology  
 Resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity (Luther 1991). The majority of South African children can be considered to fall within this context; at risk for exposure to physical and sexual abuse, poverty, violence, and ongoing socio-economic hardship (Dawes, 1994). Recently, there has been an increase in programs aimed to build resilience in children facing adverse conditions. These existing programs for youth, mainly youth who are HIV +, are designed to meet the needs of children at an individual level. There is, however, a call for sustainable intervention that will work towards the strengthening of protective influences within communities and families (Petersen et al., 2010). It has been suggested that spirituality may facilitate resilience in four major ways: by helping to build attachment relationships, by opening access to sources of social support, by guiding conduct and moral values, and by offering opportunities for personal growth and development (Crawford et al., 2006). Because there have been very few empirical studies on this topic, an exploratory qualitative study was conducted using grounded theory methods of data collection and analysis. Grounded theory is A series of individual and group interviews were conducted by the Principle Investigator (PI) to discover the impact of the Resilient Kids (RK) training program in communities which have benefitted from this psychosocial support training model. The study sought to uncover initial evaluative categories to create a tool for the NGO to continue evaluating the effectiveness of the training model. The study's ultimate goal is for the NGO to secure funding for ongoing workshops to train community members to meet the

psychosocial needs of the orphans and vulnerable children within their communities. A pilot focus group was conducted by the Principle Investigator (PI) in a township in Cape Town. The initial focus group consisted of 5 teenage participants. Preliminary analysis has yielded the following themes: grief and loss, sense of identity, belonging, sense of stability/structure, empowerment, spirituality and faith, and community support. Themes were illustrated with participant quotes. All interviews were audio recordings were later transcribed and analyzed using Nvivo 8 software for coding and thematic analysis. The study received approval from institutional ethics review boards in both the US and South Africa.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

### ***Men Who Have Sex with Men and the Influence of the church***

**Dante Lavender**

Faculty Mentor: Tracy Cohn, PhD Psychology

Our society seems to hold a stigma when it comes to words such as gay, homosexual, and/or bisexual. Of course it's understood that when we think of negative attitudes towards homosexual relationships and sexual activities, the foundation for these arguments always based on religious beliefs. The research that I'm doing not only examines the LGBTQ community, but it takes a look at the interactions and motivations of self-identifying heterosexual men who engage in sexual activity with other men. From what the research shows, there seems to be a division in sexual acts which these men are willing to perform and their roles with other men seem to be influenced by race and perceptions of dominance. There seem to be common themes such as hyper-masculinity and avoiding gay men even though the activities that are pursued would be considered homosexual in nature. We can see that the term "Down-Low" was once the phenomena seen only in the Black community however it seems to be spreading towards the White community as well; this seems to be the case when White males are seeking the company of Black males and/or dominant White males are pursuing alpha males of various races. Even though these men may not be religious, the church plays a strong role in breeding internalized homophobia and encouraging it with society. Even when these men are in accepting environments, there is still a fear of judgment and social persecution.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

### ***Use of Mobile Technology in Student-Veteran Reintegration***

**Heather Price**

Faculty Mentor: Valerie Leake Psychology

Being a student is basically a balancing act, it involves several different aspects of life coming together to meet the goal of gaining knowledge (Branker, 2009). Most students have some form of technology readily available to them, either owned by them or maybe provided by the university. Therefore, with technology readily available, students should all be able to use it to make their educational experience easier and more successful. Student veterans may need special assistance with this balancing act because most of

them have families, specific financial needs, and may need additional academic support. Some schools have already implemented student affairs programs (DiRamio, Ackerman, & Mitchell, 2008), but currently, there seems to be little to no research directly relating software and college reintegration for veterans. The current study will be used to define these needs and hopefully provide universities and software developers with a reason for developing a new way for these people to receive assistance as the world becomes more technologically advanced.

*Session:* Psychology Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 43

## **Psychology Symposium**

### ***Poly-victimization and traumatic symptomatology in incarcerated females***

**Krista Borling  
Samantha Lynn  
Robert Stallings  
Bryce Lewis**

Faculty Mentor: Ann Elliott Psychology

This study examined the relative contribution of six different categories of childhood victimization and poly-victimization in predicting the four factor scores from the Trauma Symptom Inventory-2. Hierarchical regression analyses using data from 56 female inmates from a regional jail showed that poly-victimization added large and statistically significant percentages of variability accounted-for to multiple regression equations predicting TSI-2 factor scores after the six categories of victimization had already been entered as a first block of predictors.

*Session:* Psychology Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 5:00-5:15pm  
*Location:* Heth 46

### ***Childhood Poly-Victimization and Perceived Family Environment***

**Stephanie Gusler**

Faculty Mentor: Ann Elliott Psychology

There is a growing body of evidence expressing the necessity of examining multiple victimizations when studying childhood victimization histories. Several studies have found poly-victimization (i.e. high cumulative levels of victimization), common in non-clinical samples and is associated with greater trauma symptomatology than experiencing a single type of victimization (Finkelhor, Ormrod, & Turner, 2007; Richmond, Elliott, Pierce, Aspelmeier, & Alexander, 2009; Saunders, 2003). This study examined the relative contribution of six different categories of childhood victimization and poly-victimization in predicting the Conflict and Cohesion subscale scores of the Family Environment Scale (FES). In a sample of 330 female college undergraduates, the results showed that victimization was common in a non-clinical sample, and that most participants who endorsed one type of victimization also endorsed multiple types. Poly-victimization also contributed significant variance in participants' perceptions of their family Conflict and Cohesion, but these contributions were small to moderate. Child maltreatment

(e.g., physical abuse, psychological or emotional abuse, neglect, and custodial interference or family abduction) was also found to be a particularly important victimization to examine in relation to perceptions of family environment. Further research should examine the relationship and determine causality between family environment and poly-victimization.

*Session:* Psychology Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 5:15-5:30pm  
*Location:* Heth 46

### ***College Students, Dating, and Personality: Will They Ideally Prefer Similar Personalities or Opposite Personalities?***

Alex Weikel  
Kristen Bowen  
Hilary Hicks

Faculty Mentor: Pamela Jackson Psychology

This study looked at personality similarity between the participants and their ideal partners; in other words, the researchers were interested in whether college students desire romantic partners who have personality traits similar to or different from their own. This study used the Big Five Personality Inventory to assess personality traits (John & Srivastava, 1999). The participants completed the Big Five Inventory twice within the study; once to determine their own personality, and another time to determine the personality of their ideal partner. The results suggest that participants desire romantic partners who are significantly more extraverted, agreeable, conscientious, and open than themselves. In addition, the participants desired partners who were much less neurotic than themselves. These findings suggest that college students desire partners who have personalities that may be similar but slightly better than their own. Specifically, they desire partners who have high levels of positive personality traits such as extraversion and agreeableness and low levels of the negative personality traits such as neuroticism.

*Session:* Psychology Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 5:30-5:45pm  
*Location:* Heth 46

### ***An investigation between self-esteem and memory***

Stephanie Smith

Faculty Mentor: Ruth Riding-Malon Psychology

Self-esteem is a highly important concept to the western world, particularly in the United States. Self-esteem is the way we feel about ourselves and our abilities to do tasks, whether familiar or not. Previous literature has discussed the relationship between school success or achievement and self-esteem. However, no study has investigated the relationship of self-esteem and memory. This study proposes to examine whether there is a connection between one's self-esteem and the types of words (positive or negative) one remembers and interprets. Based on studies already performed on self-esteem, it is predicted that college students with high self-esteem as measured by the Rosenberg Self-Esteem Scale will recall more words classified as 'positive'. Conversely, those students with low self-esteem as measured on this scale will recall more words

classified as 'negative'. We expect to see that self-esteem will indeed have an effect on the types of words recalled.

*Session:* Psychology Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Wednesday 5:45-6:00pm  
*Location:* Heth 46

## **English Panel Discussion**

### ***Contesting Masculine Discourses in Contemporary American Literature***

Tom Gaffney  
Saif Raza  
Spencer Bennington  
Greg Jensen

Faculty Mentor: Moira Baker English

Fresh from presenting at the 2013 American Men's Studies Conference at the University of Michigan, this panel will cover the multiple masculinities presented by four unique novelists. Works by Chuck Palahniuk, Bret Easton Ellis, Christopher Isherwood, and Jhumpa Lahiri will be closely analyzed in hopes of shedding light upon the discourses that surround contemporary American masculinity.

*Session:* English Panel Discussion  
*Presentation Type:* Panel Discussion  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 22

## **Biology Symposium II**

### ***Faculty Panel***

*Coordinated by:* Jason Davis  
*Session:* Biology Symposium II  
*Presentation Type:* Faculty Panel  
*Day & Time:* Wednesday 5:00-6:00pm  
*Location:* Heth 14

### ***Neophobia and corticosterone response profiles in house sparrows (Passer domesticus)***

Laken Cooper

Faculty Mentor: Jason Davis Biology

When confronted with novel stimuli, animals must evaluate both the stimulus as well as their surrounding environment. Particular stimulus traits play an important role in determining both rapidity and depth of investigatory behavior. Color is a feature which may prove to be relevant to many passerine birds, given its natural association with food, sexual display and potential danger. In previous studies we have found that house sparrows (*Passer domesticus*) exhibit caution in approaching red colored items, in addition to a sex difference, with males approaching the food item with less hesitance than females. Here we will discuss this work as well as recent studies on the development of red avoidance and its relationship to fledging. I will



also discuss the findings from recent studies of the effect of color exposure on circulating corticosterone levels, and the relationship between individual corticosterone response profile and an individual's exploratory behavior.

*Session: Biology Symposium II*

*Presentation Type: 30 minute oral presentation*

*Day & Time: Wednesday 6:00-6:30pm*

*Location: Heth 14*

### ***Effects of royal jelly and juvenile hormone on development of tobacco hornworms (*Manduca sexta*)***

**Kristan Cale**

Faculty Mentor: Jason Davis Biology

As in vertebrates, growth and maturation are closely related systems in the physiology of insects. Together these systems provide an interesting basis for investigation of the hormones responsible for development, particularly in metamorphosing holometabolous insects. Though it has been known for some time that royal jelly modulates morphogenesis of larval honeybees into queen honeybees, recent studies show *Drosophila* given royal jelly developed in a fashion similar to that observed in honeybees. These findings suggest that the hormones discovered in royal jelly may also affect other, more distantly related, insects as well, which motivated us to investigate the impact of royal jelly supplementation using *Manduca sexta* as a model. In parallel to examining the effects of royal jelly, we also explored the effects of agonistic Juvenile Hormone (JH) on development. JH has been found to be primarily responsible for adult maturation in many species of insects; high levels of JH pre-maturation generally prevent a nymph from maturing into an adult state. Therefore growth and maturation are regulated in part by JH, though the complete mechanistic relationship between the hormone and development remains unclear. We hypothesized that individuals receiving the JH agonist would display reduced rates of maturation, but extended development and an increase in overall size, while those given royal jelly should show higher growth rates and equivalent or slightly larger size.

*Session: Biology Symposium II*

*Presentation Type: 30 minute oral presentation*

*Day & Time: Wednesday 6:30-7:00pm*

*Location: Heth 14*

### ***A novel technique for identifying environmental bacteria from the genus *Bacillus****

**Dylan McKnight**

**Vincent Gentilcore**

Faculty Mentor: Georgia Hammond Biology

The *Bacillus* genus makes up one of the largest known groups of bacteria found in nature. These bacteria have the ability to survive for long periods of time in extreme environmental conditions by forming an endospore; a process known as sporulation. An endospore can be thought of as the bacteria's dormancy period. Encoded in the genome of all *Bacillus*, Small Acid-Soluble proteins (SASP's) are synthesized upon sporulation. These unique proteins characteristic of all *Bacillus*, are considered to be the leading mechanism of their survival. Their purpose is to bind to and protect the DNA from any mutations that could occur due to the presence of high heat, extreme drought, degradative enzymes, UV radiation, or toxic

chemicals. Because we know that all *Bacillus* contain genes for SASP's, the purpose of the present study is to use these genes as a biomarker so that any unknown species of *Bacillus* can be identified as a member of this genus. Using DNA sequences for two major SASP proteins from *Bacillus subtilis*, we have developed PCR primers to use in PCR reactions that examine the DNA of bacteria that we collect from the environment. The objective is to use these primers along with a PCR reaction that uses a gradient of annealing temperatures to detect major SASP genes in an unknown species. Obtaining a PCR product with SASP genes would be very good evidence that the unknown bacteria was a member of the genus *Bacillus*.

*Session: Biology Symposium II*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 7:15-7:30pm*

*Location: Heth 14*

### ***Fecal Microbiota Transplantation***

**Elizabeth Castaneda**

Faculty Mentor: John Kell Biology

*Clostridium difficile* infections are the cause of thousands of deaths each year in the United States alone. Due to the overuse of antibiotics, antibiotic therapy alone can no longer stop this recurring infection from being fatal. Fecal Microbiota Transplantation (FMT) is a new controversial treatment being implemented by some alternative medicines health systems. This therapy replenishes the normal flora of the patient's body allowing for total recovery. This method of treatment is relatively new and has raised the need of further investigation. Although there is still research being conducted about the effects of this therapy, the high success of this treatment could potentially place it as a better cure for recurring *Clostridium difficile* infections than antibiotic treatment.

*Session: Biology Symposium II*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 7:35-7:50pm*

*Location: Heth 14*

### ***Habitat Conditions and Land Use Disturbances that Promote Invasive Plant Species in Appalachian Forests, Grasslands, and Wetlands***

**Abbey Humphreys**

Faculty Mentor: Christine Small Biology

Invasive species threaten natural ecosystems by outcompeting native species, disrupting food chains, and decreasing species diversity. We investigated vegetation, site, and land use disturbance conditions in 140 sample plots (100-400 m<sup>2</sup>) across Selu Conservancy, a 153 hectare natural area in Montgomery County, VA, to determine which conditions make communities more susceptible to invasive species. In 1954, large portions of Selu Conservancy were cleared for agriculture and grazing. By 2005, most had returned to forest. Using GIS, we performed a spatial analysis combining invasive abundance and historical land use, distance from roads, and soil and vegetation conditions. Invasive plant species occurred in all grassland plots, where multiflora rose (68.4%), clover (57.9%), and spotted knapweed (57.9%) were particularly abundant. Invasive plants also were widespread in wetlands (91.0% of plots), especially moneywort (81.8%), Japanese stiltgrass (63.6%), and Japanese honeysuckle (27.3%). Forests had slightly lower frequency of invasives (86% of plots), but multiflora rose (68.2%) and Japanese honeysuckle (58.2%) remained common. Total cover of invasive species was much greater in fields

(43.9%) than forests (15.5%,  $p < 0.001$ ). Plots adjacent to gravel roads and those historically cleared for agriculture (1954) also showed higher invasive cover ( $p < 0.001$ , all comparisons). Interestingly, historical disturbances were much better predictors of invasive abundance than many modern disturbances. This research contributes to the conservation and management of natural ecosystems by improving our understanding of conditions that promote or inhibit expansion of non-native invasive species.

*Session: Biology Symposium II*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 7:55-8:10pm*

*Location: Heth 14*

### ***The Effects of Pokeweed Antiviral Protein on Arbovirus Infections***

**Nikki Holland**

**Jessica Irvin**

Faculty Mentor: Justin Anderson Biology

Mosquito-borne diseases are a major global problem, causing over a million deaths each year. Finding new ways to fight these diseases and control the mosquito population is crucial. In this experiment, we have tested the effects of pokeweed antiviral protein (PAP) on two mosquito-borne viruses: La Crosse and dengue. We extracted RNA from pokeweed leaves and used reverse transcription to obtain a fragment of PAP DNA. This DNA fragment has been purified and cloned into *E. coli* cells, and we are in the process of transfecting an *Aedes albopictus* mosquito cell line. We will test these cells to see if they are susceptible to La Crosse and dengue viruses or if they exhibit antiviral properties against them. We will also attempt to express PAP in *Aedes albopictus* mosquitoes in order to block virus infection in living mosquitoes. Our ultimate goal is to determine whether PAP can be used to prevent the viruses from infecting the mosquitoes directly or by acting as a mosquitoicidal compound.

*Session: Biology Symposium II*

*Presentation Type: 15 minute oral presentation*

*Day & Time: Wednesday 8:15-8:30pm*

*Location: Heth 14*

## **MSW Poster Session**

### ***Music Therapy and Group Therapy: Effective Practice with Cancer Patients***

**Shannon Agee**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Dr. Kerry Vandergrift School of Social Work

Dr. Deneen Evans School of Social Work

With the increasing number of cancer diagnoses in the United States and around the world, effective treatments are essential. Not only treatments for the medical changes associated with cancer, but the psychological changes as well. Social workers need to be prepared to offer effective treatments for patients who are experiencing increased amounts of anxiety due to their diagnosis. The purpose of this poster is to increase awareness in the social work profession regarding the utility of group therapy and music therapy in reducing anxiety in cancer patients. A systematic literature review looked at 16 articles regarding the treatment of anxiety with cancer patients; including Music Therapy ( $n=7$ ) and Group Therapy ( $n=9$ ). The study

found that both forms of therapy are effective at reducing increased anxiety in cancer patients. / / Keywords: Cancer, Oncology, Anxiety, Music Therapy, Group Therapy

*Session: MSW Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 6:00-7:30pm*

*Location: Heth 43*

### ***Examining the Challenges of Effective Client-Social Worker Relationships: Implications for Community Based Practice***

**Tracie Battle**

Faculty Mentor: Dr. Rana Duncan-Daston School of Social Work

Etty Vansburger School of Social Work

Kerry Vandergrift School of Social Work

Child protective services is a complicated area of social work as these workers have to make tough decisions about the safety of children while also trying to build a rapport and working relationship with the parents or caregivers of the child. The literature reviewed examines several issues that complicate this relationship. Findings indicated that power struggles and power imbalances, parental perceptions of the social worker, as well as social workers' perception of the parents all impact the relationship and how they work together to achieve goals. The findings also indicated that often parents feel alienated from the decision making process for their families. The implications for practice are that there is a clear need for more policies to guide social workers on family engagement and inclusion in decisions as well as more training in direct practice skills so that the working relationship is not a strained one, but one of collaboration and trust.

*Session: MSW Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 6:00-7:30pm*

*Location: Heth 43*

### ***Prejudices Faced by Individuals with Learning Disabilities: Implications for the Field of Social Work***

**Carly Dearing**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Susan Schoppelrey School of Social Work

Alice King-Ingham School of Social Work

The purpose of this project is to sensitize social workers to the experiences of prejudice that people coping with learning disabilities experience and to discuss the implications for practice. Literature and research showed that there continue to be negative views of college students with learning disabilities. A quantitative study of forty-five social work majors completed by the researcher showed perceptions of social work students towards peers with learning disabilities. A high percentage of respondents, 93%, reported knowing someone with a disability, while 100% of respondents reported that someone with a learning disability can be "smart." The results were not statistically significant and did not support the hypothesis that students who know someone with a learning disability have a more positive view of peers with learning disabilities. This project will demonstrate the policies, ethics, practice, and justice that social workers can address to advocate for this population.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### ***An Exploratory Study of the Efficacy of STEPPS in Treating Borderline Personality Disorder in Rural Communities***

**Amanda Hardwick**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Diane Hodge School of Social Work

Debora Schneller School of Social Work

This study evaluates the effectiveness of STEPPS as a treatment for BPD. BPD is increasingly diagnosed and recent studies have found that it effects 5.9% of the general population as compared to previous reports of 1-2%. These studies have also addressed the underdiagnosing of men and provide statistics that both men and women are equally affected. STEPPS is a DBT-based program, treatment occurs in a group setting for 20 weeks. Emphasis is placed on developing a "reinforcement team" of friends, family and additional providers to support skills learned in group. Studies suggest that STEPPS improves symptoms in areas of hospitalizations, emergency room visits, crisis utilization, symptom reduction and self-harming behaviors. High provider and participant satisfaction are also reported. Consideration should be given that the majority of research utilizing this protocol was completed by the developers. Discussion of ethical considerations, policy considerations and practice implications are included.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### ***Factors That Prevent Burnout in the Palliative Care Field***

**David Hope**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Etty Vandsburger School of Social Work

Susan Schoppelrey School of Social Work

This study investigates the strategies used by palliative care workers to prevent burnout by reviewing the existing literature and comparing it to interviews conducted with professionals in the field. The interviewees had between 2 ½ and 17 years of experience in the palliative care field. Some of the factors examined included sources of stress, support at work and factors to prevent burnout. The participants (n=6) responded to a specific interview designed for this study which contained 13 in-depth, open ended questions. The professionals interviewed in this study have found that taking care of yourself, having appropriate boundaries and limitations and having positive support both at work and home have been helpful in avoiding burnout. This study has implications for practice and policy regarding the prevention of burnout in the palliative care field.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### ***Animal Assisted Social Work***

**Selina Kelly**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Alice King-Ingham School of Social Work

Mashooq Salehin School of Social Work

The purpose of this paper is to examine the evidence base for Animal Assisted Therapy and to incorporate for its use in Social Work intervention. The value of the animal human bond has been studied since the early 1960's. The findings of research into this area have proven that the presence of pet attachment promotes lower blood pressure, lowers cholesterol, and lowers stress (Baun, Bergstrom, Langston, & Thomas, 1984). When done correctly, therapy with animals can have many therapeutic benefits including improving quality of life and assisting in healing. A survey was completed by the researcher regarding the perceptions of mental health practitioners surrounding Animal Assisted Therapy and its incorporation into treatment in the New River Valley area of Virginia. While the study was limited, a positive perception of Animal Assisted Therapeutic Intervention was found among those surveyed. This paper will discuss the policies, ethics, practice, and social justice to support incorporation of Animal Assisted Therapy into Social Work interventions.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### ***Reducing Burnout among Mental Health Professionals***

**Emil Sandstrom**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Reducing burnout among mental health workers is paramount for the professional's health and well-being as well as their ability to provide competent treatment/services for their clients. Mental health organizations could improve the mental health professional's ability to provide services and remain in their positions by being aware of the negative aspects associated with burnout and implementing effective policies to lower burnout. This research was completed to gain better awareness of the factors leading to burnout by looking at how demographics are correlated with burnout. The researcher completed a quantitative study using the Maslach Burnout Inventory, measures burnout, with added questions about demographics. 145 respondents who met the state of Virginia's qualified mental health professional's status completed these surveys. The hypothesis was that the more experience the QMHP has in the mental health field the less likely they were to be burnout, but findings were not statistically significance. The body of research is lacking for treatment of burnout; more empirical research is needed to look at factors leading to burnout and at policy changes to reduce burnout in the mental health field.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### ***Cognitive Behavioral Therapies: Efficacy in treating combat-related PTSD Implications for Community Based Family Practice***

**Sherri Scott**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Alice King-Ingham School of Social Work

Debora Schneller School of Social Work

A systematic literature review was conducted to investigate the efficacy of cognitive behavioral therapies on treating Post Traumatic Stress Disorder (PTSD) in combat war veterans. The study investigated 12 empirical articles that used various forms of CBT in the studies including exposure therapy, cognitive processing therapy and group based treatments. The study results showed that exposure therapy proved the most effective treatment for reducing PTSD symptoms in combat war veterans. Exposure therapy may be an underutilized treatment and further research should be conducted to investigate exposure therapy's efficacy.

*Session: MSW Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 6:00-7:30pm*

*Location: Heth 43*

### ***Food Insecurity and the Responsibility of the Social Worker***

**Holly Veith**

Faculty Mentor: Dr. Rana Duncan-Daston School of Social Work

Dr. Diane Hodge School of Social Work

Dr. Susan Schoppelrey School of Social Work

Food insecurity is an issue facing 49 million people (American Dietetic Association, 2010). This lack of food, or lack of certainty about acquiring food, can cause a myriad of problems (Anderson, 1990). Food insecurity carries with it the risk of both short- and long-term effects on individuals, families, and communities. This qualitative systematic literature review sought to identify the effects of food insecurity. Eighteen articles were identified and grouped into themes. The results showed physical health issues, behavioral and psychological issues, sacrifice of other basic needs, and compensation for the effects of food insecurity. In light of this information, social workers should be vigilant to identify food insecurity in their clients. Adding a food insecurity screen, developed by Bickel, Nord, Price, Hamilton, & Cook (2000), to agency intake forms can aid the social worker in identifying food insecure clients so that they can be connected to resources in the hopes of relieving these symptoms.

*Session: MSW Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 6:00-7:30pm*

*Location: Heth 43*

### ***The Aging of HIV/AIDS: The Impact of HIV/AIDS on Older Adults***

**Julie Williams**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Kerry Vandergrift School of Social Work

Elise Fullmer School of Social Work

Older adults, fifty and over who, twenty five years ago, were not represented in HIV/AIDS statistics are now steadily increasing with newly diagnosed HIV cases. This integrative study examines the impact of HIV/AIDS on older populations, fifty and over and the availability of published materials from agencies/organizations that provide HIV/AIDS services. A qualitative content analysis of brochures and publications, from seven (7) local departments of health, the Virginia Department of Health and four (4) AIDS Service Organizations (ASO) in Virginia, were sampled to determine if HIV/AIDS information and content targeted older adults, with or without HIV/AIDS. Forty one (N=41) brochures and publications were reviewed and coded. The findings concluded that the information content, including pictures, targeted children, teens and young to middle aged adults, rather than older adults. Social workers can play a significant role in advocating for inclusion of older adults in HIV/AIDS research, educational materials and resources, as well as challenging ageist stereotypes, especially within the professional community.

*Session: MSW Poster Session I*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 6:00-7:30pm*

*Location: Heth 43*

### ***Promoting Father Consciousness in the Social Work Profession***

**Staci Yontz**

Faculty Mentor: Rana Duncan-Daston School of Social Work

Debora Schneller School of Social Work

Elise Fullmer School of Social Work

The purpose of this paper is to promote father consciousness among professional social workers. It is imperative that social workers recognize the importance of including and engaging fathers in their training and practice. The research has a tendency to show the mother and father as unequal in their parenting, typically giving the mother the primary role. However, studies show that father engagement and involvement are linked to more positive child development. Attachment research shows that a secure attachment to the primary caregiver can also be linked to stronger cognitive, social, and emotional abilities in the child. Therefore, attachment to a primary caregiver would be a protective factor for children with no father involvement. Nevertheless, to ensure the stability of the family system and strengthen father involvement, social workers must learn to recognize the needs of the fathers and include them in social services. / In response to previous research showing a strong link between the father's relationship with his child and the relationship with his significant other or child's mother, a content analysis of blogs by dads was conducted to determine if this connection would be addressed by the fathers in the blogs. There were 140 blogs posts used in the analysis, and 70 of those were dedicated or solely focused on the child. However, only two of the posts were dedicated to a significant other or child's mother. The analysis further revealed three predominant categories of father involvement with his children, which were accessibility, engagement, and responsibility. Forty two of the 140 posts were placed into the engagement category, sixty posts were placed into the accessibility category, and only 18 posts were placed in the responsibility category. The results showed little evidence of a link between the father-significant other or father-child's mother relationship and the father-child relationship. Multiple explanations could account for the very few references to the relationship with significant other or child's mother. Further



research using social media and other methods, such as interviews and surveys, is necessary to adequately assess the connections between the father's relationships.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

### **Minorities in Mental Health**

**Martina Ngunjiri**

Faculty Mentor: Dr. Rana Duncan-Daston School of Social Work

Dr. ETTY VANDSBURGER School of Social Work  
 Dr. DEBORAH SCHNELLER School of Social Work

The purpose of this project is to identify strategies and resources for aiding minorities with increasing access to Mental Health Services. Through a qualitative systematic literature review that yielded 18 empirical articles, several solutions were identified as ways to increase access to care. First, the importance of taking into account the aging population as this population has the tendency to isolate from care as well from others. Second, the need for family and community support within the minority population itself. Third, the importance of cultural competency for professionals like social workers as they work with minority population. Practice implications include involving more minorities in research and two frameworks were identified as models to utilize in improving the mental health services provided to minorities.

*Session:* MSW Poster Session I  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 6:00-7:30pm  
*Location:* Heth 43

## **MSW Poster Session II**

### **Sex Offenders: Perceptions, Policies, & Practice**

**Mary Lee Beamer**

Faculty Mentor: Diane Hodge School of Social Work  
 ETTY VANDSBURGER School of Social Work  
 DENEEN EVANS School of Social Work

Sex offender registry policies, its impact on the offenders, and treatment providers' biases towards sexual offenders in the New River Valley were analyzed. Findings suggest that the public's perception of sexual offenders is related to the severity of the crime. Yet, regardless of the crime, all sex offenders must be put on the sex offender registry which is available to the public. In Virginia, this includes identifying information such as the residence of the perpetrator, the crime committed, and their date of birth (Virginia State Police, 2008). A replication survey regarding the perceptions of sex offenders, based on the severity of the crime, was distributed to undergraduate and graduate students at Radford University. Results, further literature, and implications for future practice will be discussed.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation

*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### **Corporal Punishment: Where Should the Line be Drawn?**

**Elizabeth Bradbury**

Faculty Mentor: Dr. Diane Hodge School of Social Work

Dr. Alice King-Ingham School of Social Work  
 Dr. ETTY VANDSBURGER School of Social Work

The Virginia Department of Social Services (VDSS) or the Code of Virginia law does not consider the effects of corporal punishment in its rules and regulations. Research on the use of corporal punishment and the effects it has on children's behavioral and mental development was reviewed. Based on this research, policies for mandated reporters and Child Protective Service workers will be reviewed, along with the gray areas concerning child abuse. Theoretical frameworks and different practice techniques provide educational options for clients who practice corporal punishment. Likewise, theoretical frameworks and practice techniques for children who are affected by corporal punishment will be provided. Solutions to this disparity will also be presented.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### **School Bullying and the Effectiveness of Restorative Justice as an Intervention**

**Ronita Bundy**

Faculty Mentor: Diane Hodge School of Social Work  
 DENEEN EVANS School of Social Work  
 MASHOOQ SALEHIN School of Social Work

The reasons as to why students bully can be unique and vast. A critical literature review was conducted to assess the reasons why children bully in the school setting. Many of those reasons can be addressed through the intervention of restorative justice. The effectiveness of this intervention will be reviewed in contrast to other interventions. This paper will also present readers with concepts of practice, research, and theories to take into consideration when working with this vulnerable population. / Keywords: children, school setting, bullying, restorative justice

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### **Homelessness in the United States and Social Work Students interest in working with the population**

**Felecia Coles**

Faculty Mentor: Diane Hodge School of Social Work  
 DENEEN EVANS School of Social Work  
 ELISE FULLMER School of Social Work

Given the growing number of homeless individuals in the United States, a mixed method study was conducted to examine the interest of social work students in working with the homeless

population. In accordance with the NASW Code of Ethics, social workers are professionally trained to work with diverse populations. This poster will present the results of the study on social work student's interest in working with the homeless population, including the students' experiences, perceptions and feelings about the homeless population. Theories, research, policy and considerations for social work practice will also be presented. /

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Should Personal Therapy be Included in Masters of Social Work Programs?***

**Kristin Collins**

Faculty Mentor: Diane Hodge School of Social Work  
 Alice King-Ingham School of Social Work  
 Mashooq Salehin School of Social Work

A critical review of the literature was completed to assess whether MSW programs should take a second look at implementing a policy that would make personal therapy a part of MSW students' educational and professional training. Rationales for the inclusion of personal therapy are related to how personal therapy positively influences the personal and professional development of graduate-training mental health professionals and its potential effect on future clinical work, especially in relation to the therapeutic relationship and process. Rationales against the inclusion of personal therapy includes the lack of freedom of choice, financial burden, risk of indoctrination, possible dual relationships, stigma, confidentiality issues, and learning tenets of personal therapy via other methods. Ultimately, the research suggests that there is a high prevalence rate of personal therapy among a variety of graduate-training mental health professionals. Its importance to personal and professional development, as well as for future clinical practice will be provided in this poster along with suggestions on how and why a personal therapy policy could be implemented within social work programs. Tenets of psychodynamic and social learning theories will be discussed in relation to how they apply to the topic at hand. Even with supportive evidence, the debate will likely continue due to its controversial nature.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Debriefing after a Traumatic Event and the Impact of Post-Traumatic Stress Disorder***

**Kristi Edwards**

Faculty Mentor: Diane Hodge School of Social Work  
 Kerry Vandergrift School of Social Work  
 Elise Fullmer School of Social Work

A systematic literature review was conducted to explore the relationship between debriefing following a traumatic event and the likelihood of PTSD. The findings do not support or reject the efficacy of debriefing, but common themes were found. This poster integrates theory and practice implications based on the findings such that clients receive proper crisis intervention services. This poster will also provide empirical research, information for working

with diverse populations, and other pertinent information when working in a crisis situation.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Secondary Victimization: Attachment Relationship Between Non-Offending Caregivers and Child Victims of Sexual Abuse from a Humanistic Perspective***

**Heather Flassing**

Faculty Mentor: Diane Hodge School of Social Work  
 Alice King Ingham School of Social Work  
 Rana Duncan-Daston School of Social Work

Historically, researchers, educators, and clinicians have focused on the impact and treatment of child sexual abuse (CSA) for child victims. However, CSA also has a profound impact on non-offending caregivers. Assessment and treatment of non-offending caregivers must be considered when treating child victims because of their significant impact on child resiliency following CSA. This poster will examine the impact of CSA on non-offending caregivers and the resulting caregiver/child victim relationship. Strengths and deficits in current treatment practices of non-offending caregivers as prescribed through current policy and practice will be identified. Future practice and research effort involving concurrent assessment and treatment of non-offending caregivers and child victims will also be considered in order to answer the question of does effective treatment of child victims of CSA include simultaneous assessment and treatment of the non-offending caregiver?

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Childhood Sexual Abuse and Mental Illness in Adult Women: Identifying and Examining Themes Among the Literature.***

**Ebony Gammon**

Faculty Mentor: Diane Hodge School of Social Work  
 Deneen Evans School of Social Work  
 Susan Schoppelrey School of Social Work

Women who experience childhood sexual abuse are more likely to develop a mental health condition (Haller & Miles, 2004). Additional research suggests that there is a strong relationship between the emergence of psychiatric symptoms in adulthood and the occurrence of trauma or abuse in childhood (Bonugli, Brackley, Williams, & Lesser, 2010; Epstein, Saunders, & Kilpatrick, 1997; Feerick & Snow, 2005). This research seeks to examine the themes prevalent among women who have a history of childhood sexual abuse and a mental health diagnosis in adulthood. A critical literature review identified the themes of violence, comorbid disorders, and biology. The examination also revealed the underlying situations that contributed to the identified themes. Social work theory, practice and policy considerations were integrated to present a framework for understanding ethical and treatment implications.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Older Adults' Perspectives on Death and Dying***

**Michael Gartland**

Faculty Mentor: Diane Hodge School of Social Work  
 Susan Schoppelrey School of Social Work  
 Mashooq Salehin School of Social Work

Everyone will eventually die. For many people, the thought of their own death provokes a variety of thoughts, fears, hopes, and expectations. This is evidenced by the fact that for centuries people have turned to various religions and philosophies to deal with the "problem of death." (Feigenberg, 1980, p. 5) In addition, here in the United States, we live in a culture that is "oriented to youthfulness." (Roth, 1978, p. 552) As a result, many individuals can spend much of their lives denying or avoiding the reality of their own mortality by pushing "the problem of death into the distant future." (Bozo, Tunca & Šimšek, 2009, p. 378) For older adults, however, "death is always close at hand and seems to become almost palpable at times." (Roth, 1978, p. 559) / / The research contained in this poster suggests that older adults tend not to fear death; although, some fear the process of dying. In addition, the information in this poster demonstrates that future research is required to increase the level competency of professionals in order for them to make informed, competent, compassionate, ethical, and evidenced-based decisions regarding the care that older adults receive at the end of their lives. /

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Buprenorphine or Methadone: An Exploration of the Effective Opiate Replacement Treatments for Adults with Substance Abuse Histories***

**Ashley Goncalves**

Faculty Mentor: Diane Hodge School of Social Work  
 Susan Schoppelrey School of Social Work  
 Deneen Evans School of Social Work

Previous research that delves into the use and abuse of opiates reveals that it will soon be one of the top substance abuse problems in the United States (SAMHSA, 2011). A systematic literature review was conducted to assess the current opiate replacement treatment options with the intention of answering the question: "is buprenorphine or methadone a more effective opiate replacement treatment for adults with substance abuse histories?" The results of the analysis indicated both positive and negative attributes related to buprenorphine and methadone treatment and explained these factors based on the selected definition of effectiveness. Implications for social work theory, practice and policy are explored encouraging the promotion of social justice and an ethical approach to treatment.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Efficacy of Trauma-Focused Cognitive Behavioral Therapy for Treatment of Trauma Exposed Children: A Meta-Analysis***

**Kaili Irvin**

Faculty Mentor: Diane Hodge School of Social Work  
 Rana Duncan-Daston School of Social Work  
 Elise Fullmer School of Social Work

Up to 65% of children will be abused during their childhood, with as many as 25% of children experiencing two or more adverse events (Alisic et al., 2011; Black et al., 2012; Silverman et al., 2008; Little et al., 2011). Childhood trauma is a pervasive problem, which can result in both short- and long-term consequences. Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) has recently gained international attention as an effective, culturally competent treatment for resolving children's symptoms that develop as a result of their trauma experience. This poster provides a comprehensive overview of TF-CBT's main objectives, in addition to a systematic literature review of current research evaluating TF-CBT's efficacy. Social Learning Theory provides a lens through which we can understand human behavior, as effected by childhood trauma. A discussion of the implications for social work practice is provided, along with a summary of current policies associated with TF-CBT and suggestions for future research.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Deconcentration of Poverty through Federal Rental Assistance Policy and its Implications for Social Work Practice: A Conflict Theoretical Perspective***

**Kacie Martin**

Faculty Mentor: Dr. Diane Hodge School of Social Work

Dr. Ety Vandsburger School of Social Work  
 Dr. Kerry Vandergrift School of Social Work

In the United States, government funded rental assistance supports housing for over 4.5 million households (Lubell, 2011). The three main programs are public housing, the Housing Choice Voucher Program, and privately owned, federally- subsidized housing (U.S. Department of Housing and Urban Development, n.d.). Policy shifts from an emphasis on traditional public housing to a focus on the Housing Choice Voucher program and other policies aiming to deconcentrate poverty, as well as the research that those shifts have come from, have generated academic discussion regarding the implications of concentration poverty on both the communities and on the individuals within these communities. Through application of the conflict theoretical perspective, this discussion will be analyzed. In addition, its implications for social workers in practice will be explored, with an emphasis on issues regarding cultural sensitivity and social justice.

*Session:* MSW Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Wednesday 7:30-9:00pm  
*Location:* Heth 43

### ***Equine Assisted Therapies and Activities: Importance and Implications within the Social Work Profession***

**Ann Pearce**

Faculty Mentor: Diane Hodge School of Social Work

Debora Schneller School of Social Work

Elise Fullmer School of Social Work

Equine Assisted therapy has been shown to benefit persons with physical disabilities. While this practice is growing in the mental health field, lack of awareness and limited access to Equine Assisted Therapy due to its experiential nature are problematic for providers. Funding for these services is difficult for clients because of the lack of insurance or reimbursement plans. A lack of research demonstrating empirical support for this therapy creates barriers for practitioners who want to use or explore bringing the therapy into practice. Without research that promotes best practices and quantifies client outcomes, these services will continue to be excluded from insurance reimbursement or coverage. This poster will provide an overview of Equine Assisted Therapy in the Social Work setting, challenges imposed by the non-traditional therapeutic setting, and suggestions for new policies, best practices within the model and theory, and implications for social workers.

*Session: MSW Poster Session II*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 7:30-9:00pm*

*Location: Heth 43*

### ***School Bullying and the Effectiveness of Restorative Justice as an Intervention***

**Ronita Bundy**

Faculty Mentor: Diane Hodge School of Social Work

Deneen Evans School of Social Work

Mashooq Salehin School of Social Work

The reasons as to why students bully can be unique and vast. A critical literature review was conducted to assess the reasons why children bully in the school setting. Many of those reasons can be addressed through the intervention of restorative justice. The effectiveness of this intervention will be reviewed in contrast to other interventions. This paper will also present readers with concepts of practice, research, and theories to take into consideration when working with this vulnerable population.

*Session: MSW Poster Session II*

*Presentation Type: Poster presentation*

*Day & Time: Wednesday 7:30-9:00pm*

*Location: Heth 43*



## Forensic Anthropology Symposium

### ***Geochemical Analysis of Unfired and Fired Clay Collected from Virginia***

**Brandon Buck**

Faculty Mentor: Donna Boyd Anthropological Sciences

This pilot study is focused on the possibilities of sourcing clay from Virginia river drainages using a Niton XL3T600 series portable x-ray fluorescence device (pXRF). Clay samples collected from the four river drainages in Virginia will be geochemically tested to find any chemical variation. The first test was on unfired samples collected from these areas. The second test will be performed on fired samples. These samples will be fired using wood firing methods used by Native Americans in the Southeast. The final test will be conducted on ceramics recovered from Prehistoric Native American sites located adjacent to the clay sources. The three categories tested will be compared using quantitative methods. This comparison will show the possibilities of sourcing clay and using x-ray fluorescence to answer archaeological questions.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 09:00-9:30am

*Location:* Heth 14

### ***A Study of Ceramics from Prehistoric Native American Sites and Geochemical Composition***

**Daniel Riegel**

Faculty Mentor: Donna Boyd Anthropological Sciences

X-ray fluorescence will be used for measuring the geochemical composition of ceramics from multiple Woodland period sites in Virginia to determine if the geographic location is a predictor of geochemical composition. It is hypothesized that each site will create a distinct group in the discriminant analysis. If the discriminant analysis does indeed show distinct groupings based on sites then several hypotheses might be suggested. One possible hypothesis is that these groups optimized their resource gathering. To test this hypothesis a Niton XL3t 600 Series XRF Analyzer with the XL3 portable test stand will be used to obtain the geochemical composition of the sherds. These ceramics will be sorted by size and only sherds that are 2.54cm in length or larger will be used in this analysis, as their larger size makes their temper and surface treatment more easily discernable. Limitations and issues due to using portable XRF will also be addressed.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 09:00-9:30am

*Location:* Heth 14

### ***Evaluating Markers of Occupational Stress (MOS): A Historic Sample***

**Claire Percoco**

Faculty Mentor: Cassady Yoder Urista Anthropological Sciences

Anthropologists have long used Markers of Occupational Stress (MOS) to assess the differences in occupational roles within a population. Markers of Occupational Stress refer to skeletal manifestations of daily activities, exhibited by osteoarthritis, osteophytes, lipping, eburnation, and porosity of bone. These manifestations often occur in regions of the skeleton that are used most commonly throughout an individual's life. By determining which individuals possess which MOS, anthropologists should be able to discern which individuals participated in which activities. This project sets out to synthesize evidence of MOS on individuals from a 19th century slave population, the Robinson Cemetery Collection. Adults from this population were analyzed for location, degree, and severity of MOS to determine what types of activities individuals from this population were engaged in, and whether or not these activities were allocated differently by age or sex.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 09:30-9:45am

*Location:* Heth 14

### ***Identifying Glass Sharp Force Trauma***

**Curtis Rash**

Faculty Mentor: Donna Boyd Anthropological Sciences

The purpose of this project is to examine and identify sharp force trauma on pig ribs caused by glass. This is important due to the lack of research on glass and its effect on bone. The pig ribs will act as a replacement for and will be analogous to human ribs. Within this forensic context, this project can provide information on a previously unexamined form of sharp force trauma. To accomplish this, 4 glass bottles are broken on the circular end. This is standardized by using the same brand of glass bottle and breaking it across the same surface. The fleshed pig ribs are laid across a flat surface. The broken end of the glass bottle is then forced into the ribs 10 times. The ribs are then defleshed and the ribs are examined for possible sharp force trauma. The marks are examined macroscopically and the pattern of trauma is documented by writing down how the glass sharp force trauma may be identified. A blind test is conducted by having an individual that is not the researcher damage the pig ribs. This is conducted to determine if glass sharp force trauma can be differentiated from other forms of sharp force trauma, such as a regular kitchen knife and a serrated knife. 3 Pig ribs will be stabbed with the sharp end of the glass bottles, 3 pig ribs will be stabbed with a kitchen knife, and three pig ribs will be stabbed with a serrated knife. The researcher will attempt to differentiate the types of sharp force trauma. Results will be discussed.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 09:45-10:00am

*Location:* Heth 14

### ***Differentiating Subadult Rib Fractures and Patterns from Falling, Striking, and CPR Scenarios***

**Laken Campbell**

Faculty Mentor: Donna Boyd Anthropological Sciences

Trauma assessment has become a recent focus in Forensic Anthropology. Differentiating the mechanism behind the visible trauma has been a subject of much interest. Rib trauma is subject to many different methods of disturbance, making it difficult to always understand the mechanism behind this trauma. This is especially important when trying to understand child abuse case death investigations. The research to be presented in this Undergraduate Forum aims to explain possible patterns and trauma seen on subadult bone. Seven subadult pigs will be used: two to be used for falling scenarios; two to be used for CPR scenarios; two to be used for direct blow scenarios; and one to be used as a control for comparative anatomy. In order to create these scenarios, they will be replicated as follows: falling will be replicated by releasing the pigs from the top of a concrete, uncarpeted staircase (in order to present the worst case scenario); CPR will be conducted with a normal pressure used on CPR patients, administered to the pig on the torso; and direct blows to the torso will be replicated with a drop force mechanism in order to create equal weighted blows. The pigs will then be macerated, and the trauma will be examined to deduce possible patterns; this includes looking at the fractures and any other noted trauma under a digital microscope to see the fractures in great detail; better understanding of these trauma patterns may be able to explain if the child is facing accidental or non-accidental scenarios.

**Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences**

*Presentation Type: 15 minute oral presentation*

*Day & Time: Thursday 10:00-10:15am*

*Location: Heth 14*

### ***Time Efficiency and Damage Risk of Four Maceration Techniques on Bone***

**Jesse Lippard**

Faculty Mentor: Donna Boyd Anthropological Sciences  
Several techniques have been developed for the removal of soft tissue from bone. These techniques are applied by forensic anthropologists and medical examiners to medicolegal death investigations. This study will examine four maceration techniques with the goal of establishing how time-efficient they are. Another goal of this study will be to evaluate the risk each method has of causing damage that could be mistaken for trauma. Eight flesh covered pig bones will be macerated using four different methods. Each method will be tested in two trials. These methods will be tested individually, not simultaneously, and will be monitored closely. Method one will be immersing the body part in water and heating it to just under the boiling point. Method two will be immersing the body part in a solution of household bleach diluted with water at room temperature. Method three will be immersing the body part in a solution of hydrogen peroxide diluted with water at room temperature. Method four will be using a scalpel, scissors, and forceps to remove the tissue by hand. The length of time each method requires will be noted as well as any damage resulting from the method. Other considerations will include the pungency of odor and color of the bone. Each bone will be scored based on a system that evaluates the time efficiency, odor, and amount of damage documented. For each bone, these three scores will be added and used to establish the success of each method, with the more successful method being that with the highest score. A high score will indicate the method took less time, had less pungent odor, and had less damage. This research will ensure the evidence gathered as a result of these methods will be accepted in a court of law.

**Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences**

*Presentation Type: 15 minute oral presentation*

*Day & Time: Thursday 10:15-10:30am*

*Location: Heth 14*

### ***The Effects of Various Household Chemicals on Mammalian Bone in Comparison to Trauma in a Forensic Setting***

**Sophia Montenegro**

Faculty Mentor: Donna Boyd Anthropological Sciences

The research topic in question is how blunt force trauma and sharp force trauma can be affected by household materials in order to disguise the trauma to change the appearance of forensic evidence. One bone will be used as the blunt force trauma control and another will be used as the sharp force trauma control. This will be performed by using a hammer to strike one bone and a kitchen knife to strike the other. Five other bones will also have blunt force trauma and five other bones will have sharp force trauma. These bones will each be subjected to a different household item. These items include bleach, sandpaper, steel wool, Mountain Dew, and orange juice. These items are being used in order to simulate what a person would do had he or she committed a criminal act and tried to cover up the evidence of the crime. The purpose of this experiment is to determine what bones look like when they have been tampered with and which household item covers up evidence the most effectively.

**Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences**

*Presentation Type: 15 minute oral presentation*

*Day & Time: Thursday 10:30-10:45am*

*Location: Heth 14*

### ***Evaluating Markers of Occupational Stress (MOS): Relevancy in Modern Forensic Samples***

**Claire Percoco**

Faculty Mentor: Donna Boyd Anthropological Sciences

In historical samples anthropologists seek to assess MOS to determine the types, frequency, and degree of activities employed by members of those populations. MOS are bony manifestations that represent the daily workings of individuals, often appearing in regions of the skeleton most often utilized. MOS can vary by sex, age, ancestry, and class within a population; these variances help anthropologists to determine which individuals were engaged in which kind of work. Unfortunately, there are a lot of issues when evaluating MOS; these bony manifestations do not always appear, and can be representative of many different types of occupations. Historically, it is important to assess occupational stratification of populations to better understand their lifeways, however, are these insights into daily life as important today, and can their manifestations be used to identify unknown individuals? Using modern forensic samples, MOS will be assessed and used to determine the relevancy and accuracy of these methods in a modern world. Stratification of occupation is not nearly as discrete as it once was, and individuals are continually involved in a wide variety of activities on a daily basis. In sum, this project evaluates the application and accuracy of MOS to human identification in Forensic Anthropology.

**Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences**

*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Thursday 10:45-11:00am  
*Location:* Heth 14

### **Detection of gunshot residue using X-ray fluorescence spectrometry**

**Stephanie Stanley**

Faculty Mentor: Donna Boyd Anthropological Sciences  
The present research will use X-ray fluorescence (XRF) spectrometry to analyze pig crania for the detection of gunshot residue (GSR). XRF spectrometry is used to determine the elemental composition of materials. Brazeau and Wong (1997) used microXRF to analyze GSR and found the following elements: lead, antimony, barium, copper, zinc and iron. Presence of these elements in high concentrations on the pig crania analyzed in this research will indicate GSR. Four macerated pig crania will be used as the study sample. Two will be shot with a .22 caliber rifle—one at 5m away and the other at 10m away. The other two will be shot with a 12 gauge shotgun—one at 5m away and the other at 10m away also. The first hypothesis of this research is that as the shooting distance increases the concentrations of the elements found will decrease. The second hypothesis is that the two different guns will produce different elements and different concentrations of those elements. In forensic anthropology, XRF spectrometry can be used as a technique to analyze inorganic gunshot residues on human bone.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Thursday 11:00-11:15am  
*Location:* Heth 14

### **A Comparison of Metric and Nonmetric Trait Analyses of Hispanic Crania**

**Ben Thompson**

Faculty Mentor: Donna Boyd Anthropological Sciences  
Determination of a decedent's ancestry is one of the four main aspects of the biological profile that the forensic anthropologist aims to illuminate. The U.S. Census Bureau in 2010 noted that Hispanics/Latinos compose ~16% of the country's population, yet there are no widespread methodologies for the accurate identification of these individuals. This is primarily due to the fact that Hispanics display a genetically heterogeneous admixture of Caucasian, African, and Native American traits. Using a small sample of Hispanic crania from the William Bass Skeletal Collection at the University of Tennessee, this research aims to assess the validity of the small body of literature already published on Hispanic ancestry, as well as determine whether metric or nonmetric assessments perform better in the correct identification of Hispanic ancestry. This will be accomplished through FORDISC analysis of metric traits and a blind sample test using ordinal data scoring of nonmetric traits.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Thursday 11:15-11:30am  
*Location:* Heth 14

### **Validity of Information About Projectile Type from Resulting Trauma on Osteological Remains**

**Christopher Wingard**

Faculty Mentor: Donna Boyd Anthropological Sciences  
In forensic cases involving ballistic trauma, it is important to extract as much information as possible about the firearm that caused the trauma, including the type of firearm, the caliber and type of projectile, and distance from the firearm to the victim. A number of studies have examined characteristic wound shapes and fracture patterns formed by ballistic trauma; however, few studies have examined the reproducibility of wound patterns under controlled settings. The primary purpose of this experiment is to determine if the trauma caused by a single firearm using the same type of bullet at the same distance on nearly identical carcasses will be consistent. If the trauma is not consistent under controlled conditions, it indicates that there is too much variability to reliably infer information about projectile type in a real-world setting. This type of reproducibility is critical in presenting forensic evidence in court due to the Daubert requirements.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Thursday 11:30-11:45am  
*Location:* Heth 14

### **Time Is On Our Side: An Exploratory Analysis of "Cold Cases"**

**Robyn Kirby**

Faculty Mentor: Donna Boyd Anthropological Sciences  
The purpose of this study is to analyze the differences in current tactics and methods employed by law enforcement agencies and forensic anthropologists with respect to cold cases. The National Institute of Justice currently defines a cold case as, "any case whose probative investigative leads have been exhausted." Recent research on cold cases is not solely important to law enforcement, but also many other disciplines such as forensic anthropology. DNA analysis is one method that has allowed for the reopening of cases believed to have no more substantial evidence. While DNA analysis is incredibly useful, it doesn't provide all the answers. By applying anthropological analysis of human remains to cold cases, more knowledge can be provided, increasing the chances of closing cases believed to be unsolvable. This research will evaluate how various strategies affect cold case clearance rates. The objective of this study is to apply a multidisciplinary approach to a specific forensic case from the 1970's as an example of the challenges and difficulties in solving cold cases.

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences  
*Presentation Type:* Other  
*Day & Time:* Thursday 11:45-12:00noon  
*Location:* Heth 14

### **The Effects of Household Chemicals on Bone**

**Brianne Dunnigan**

Faculty Mentor: Donna Boyd Anthropological Sciences  
This project focuses on the different effects that household chemical products have on bone. The destructive chemicals used consist of:

hydrochloric acid, sulfuric acid, and phosphoric acid. The study assesses the length of time for chemical deterioration of bone and which chemicals are best used to destroy evidence of identification. / The project begins with identification and examination of the 10 stillborn pigs (*Sus scrofa*). Examination includes taking measurements, such as the maximum length and the maximum width, as well as identifying any taphonomy or pathologies on the bone. Each chemical will be placed in a corrosion-resistant container, containing a sample of *Sus scrofa*, for a period of 48 hours. After the observation period, the bones will be removed and examined in order to report the physical changes due to the different chemicals. This project evaluates the efficacy of chemical destruction of human remains. /

*Session:* Forensic Anthropology, Forensic Science, and Anthropological Sciences

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 12:00-12:15pm

*Location:* Heth 14

## CORE 102

### Poster Session II

#### ***Undergraduate Effect on Gun Control***

**Nick Apostolico**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education in Business Finance might be useful in Informing the general public about the truth in gun control, and how it is necessary to have people informed on guns . Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 10:00-11:00am

*Location:* Heth 44-45

#### ***The Affect of An Undergraduate Degree on MADD***

**Joey House**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education in criminal justice might be useful in working to support MADD (Mother against Drunk Driving). Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 10:00-11:00am

*Location:* Heth 44-45

#### ***The Effect of an Undergraduate Degree in WWF***

**Kyle Marson**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education in business might be useful in working with the World Wildlife Fund organization. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 10:00-11:00am

*Location:* Heth 44-45

#### ***The Role of an Undergraduate Education in Social Work in Preventing Child Abuse***

**Madeline Milam**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education in Social Work might be useful in helping remove abused children from horrible situations. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 10:00-11:00am

*Location:* Heth 44-45

#### ***The Effect of an Undergraduate Nursing Education on the American Nursing Association, Disaster Relief***

**Rachel Pease**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education in Nursing might be useful in helping the American Nursing Association (ANA) with disaster relief. The research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 10:00-11:00am

*Location:* Heth 44-45

#### ***The Role of an Undergraduate Education in Eradicating Poverty***

**Apolonia Pollock**

Faculty Mentor: Thomas Gaffney English



Michele Ren English

Conditional Cash Transfers (CCT) is a program in Latin American designed to meet the basic financial needs of families in poverty. It was recently designed and focuses on helping households that are lacking the proper nutrition, health, and education. CCT is up and coming and going to be able to assist a lot of households in tragic need of financial assistance. CCT is considered to be a new strategy in providing social services by their three major parameters: targeting, conditionality, and evaluation design. In order to make these programs possible, social workers play a key role. Social workers are the primary foundation in CCT due to their educational background in this field. Social workers have the ability to evaluate and analyze the root of a person's problem and how it has impacted their lives. Poverty is a very popular theory in social work because social workers analyze what led a person or household to poverty. However, since CCT works with a foreign country, the social workers assigned to each country have to learn how to work with these households without breaking any ethical guidelines. These social workers have to rethink the concept of poverty that is the background for their practice. Also, social workers are looking past the usual concept of poverty: lack of income, food, and shelter, but looking at it with the perspective that these people are poor due to their lack of economic resources to satisfy their basic needs. However, the social workers have to keep in mind that poverty is a multi-dimensional concept that can prevent households from accessing both external and internal assets. External assets are considered to be land and credit while internal assets are health and education. Social workers are able to assist these households and CCT programs because of their educational degrees.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 10:00-11:00am  
*Location:* Heth 44-45

### ***The Effect of an Undergraduate Education on Greenpeace***

Kyle Sawyer

Faculty Mentor: Thomas Gaffney English  
Michelle Ren English

This research explores how an undergraduate education in Mass Communication might be useful in helping to improve communication for Greenpeace that would otherwise hinder its ability to expand. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 10:00-11:00am  
*Location:* Heth 44-45

### ***Surfrider Foundation***

Alex Saxon

Faculty Mentor: Thomas Gaffney English  
Michelle Ren English

This research explores how an undergraduate education might be useful in helping the Surfrider Foundation preserve the world's oceans and keep the beaches clean. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an

undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 10:00-11:00am  
*Location:* Heth 44-45

### ***The Effect of Nursing on the Homeless***

Jessica Skelding

Faculty Mentor: Thomas Gaffney English  
Michelle Ren English

This research explores how an undergraduate education in nursing might be useful in working to support the homeless. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 10:00-11:00am  
*Location:* Heth 44-45

### ***The Affect of an Undergraduate Education on Feeding America***

Monica Swann

Faculty Mentor: Thomas Gaffney English  
Michelle Ren English

This research explores how an undergraduate education in Philosophy and religious studies & Psychology might be useful in being involved with the organization Feeding America. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better. /

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 10:00-11:00am  
*Location:* Heth 44-45

### ***Climate Change***

Hiba Abu-El-Hawa

Faculty Mentor: Michele Ren English  
English

This research explores how an undergraduate education in geoscience might be useful in working to solve the growing issue of global warming. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 11:00-12:00noon  
*Location:* Heth 44-45

## ***How a University Education can Aid the Movement for a More Environmentally Conscious Planet***

**Haley Bechtel**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in environmental studies might be useful in working to solve the many environmental problems our planet faces from pollution, overpopulation, and general thoughtlessness, and how it can strengthen and support the "Green" movement. Research is based primarily on information found in McConnell library's online databases, mainly Academic Search complete and Education Search Complete. This presentation will inform the audience of the value of an undergraduate education in changing the destructive path humans have created on the Earth and forming a new one to help heal the damage and promote a better, cleaner world.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***How the Education of Dr. Martin Luther King Jr. Changed America***

**Rachael Bryan**

Faculty Mentor: Michele Ren English

This research explores how Dr. Martin Luther King, Jr.'s undergraduate education was useful in making him a leader in the Civil Rights Movement. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***Tackling Child Obesity***

**Matt Filipek**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in public relations and marketing might be useful in working to help end child obesity. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in public relations and marketing can change the cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***Aiding the Hearing and Speech Impaired Population***

**Magdalena Kurdi**

Faculty Mentor: Michele Ren English

This research explores how a university education might be useful in furthering support for our hearing and speech impaired population. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***Saving Children: Child Abuse stopped in its Tracks***

**Devon Massi**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Criminal Justice might be useful in working to support Prevent Child Abuse America, an organization that helps prevent child abuse before it even happens. Research is based primarily on information found in McConnell Library's online databases. This presentation will inform the audience of the value of a particular undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***Business Majors: Creating hope for victims of natural disasters***

**Jimmy Mayhugh**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in the area of business might be useful in working to support, further organize, and to get the word out for the Red Cross Organization's disaster relief programs. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

## ***Bad Genes***

**Christopher Ray**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Biology, Chemistry, Nutrition/Dietetics, and Health Sciences might be useful in educating the public about the negative health and environmental effects associated with the use of genetically modified organisms in our food supply. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

### ***G.R.E.A.T. is Great***

**Matthew Rector**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Criminal Justice might be useful in working to support adolescents who are at-risk for gang recruitment. G.R.E.A.T is the Gang Resistance Education and Training program. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

### ***Learning Through Pen Pals***

**Shifflett Molly**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in the field of Interdisciplinary Studies might be useful in assisting the Peace Corps in the World Wise School program that they have started. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 11:00-12:00noon

*Location:* Heth 44-45

### ***How a University Education Will Help an Individual Participate With the World Health Organization***

**Marie Ackah**

Faculty Mentor: Juliana Jones English

Michele Ren English

This research explores how an undergraduate education in Social Work might be useful in working with the World Health Organization (WHO). Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 12:00-1:00pm

*Location:* Heth 44-45

### ***How University Education aids Participation in Local Food Banks***

**Zachary Adorno**

Faculty Mentor: Julianna Jones English

Michele Ren English

This research explores how an undergraduate education might be useful in participating in local food banks. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 12:00-1:00pm

*Location:* Heth 44-45

### ***The Benefits of Physical Education***

**Riley Anderson**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Health and Physical Education might be useful in working to support keeping physical education classes within schools. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 12:00-1:00pm

*Location:* Heth 44-45

### ***Donation by Design: Web Designing for non-profit Organizations***

**Brian Byrne**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Web Development might be useful in be involved in donating web sites to non-profit organizations. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 12:00-1:00pm

*Location:* Heth 44-45

### ***English Educators Teach For America***

**Paige Illig**

Faculty Mentor: Michele Ren English

English

This research explores how an undergraduate education in English education can help students become involved in Teach for America, a program that brings newly graduated students to teach in the poorest areas in America. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 12:00-1:00pm

*Location:* Heth 44-45

### ***Not Just Doctors Saving Lives: An Undergraduate Education and Doctors Without Borders***

**Melissa Moody**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in nursing might be useful in being involved in the world's largest nonprofit medical relief agency Doctors Without Borders. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 12:00-1:00pm  
*Location:* Heth 44-45

### ***How Education Can Better My Tomorrow***

**Casey Nonemaker**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in criminal justice might be useful in different organizations to prevent crime and make sure that kids can stay away from trouble. One of these programs is known as 'Shop with a Cop'. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better. /

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 12:00-1:00pm  
*Location:* Heth 44-45

### ***Homes for Humanity***

**Marco Paulina**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Business Marketing might be useful in supporting Habitat for Humanity. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better. /

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 12:00-1:00pm  
*Location:* Heth 44-45

### ***Peace Study Programs Help Students Become Involved Around the World***

**Laura Peterson**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in a Peace Studies program at a university, can help students become involved in the United States Institute of Peace (USIP) organization. Research is based primarily on information found in McConnell library's online

databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 12:00-1:00pm  
*Location:* Heth 44-45

### ***Scared Straight***

**Tyler Rydel**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education in Criminal Justice might be useful in helping troubled kids go down the right path. A program known as "Scared Straight", offered at prisons, tries to make kids realize what they're doing wrong and will hopefully make them not want to return to the prison. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 12:00-1:00pm  
*Location:* Heth 44-45

### ***How a University Education Will give you the Experience to Work along Side TOMS Shoes***

**Katelyn Adkins**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education might be useful in working to support TOMS Shoes. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 1:00-2:00pm  
*Location:* Heth 44-45

### ***Why Space Exploration Rocks***

**Jordan Eagle**

Faculty Mentor: Julianna Jones English  
Michele Ren English

My research explores how an undergraduate education in Physics can be valuable in NASA's space exploration programs. Research will be primarily found from McConnell library's online databases. My presentation will focus on how an undergraduate education can contribute to scientific discoveries that can bring mankind to where we've never gone before.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 1:00-2:00pm  
*Location:* Heth 44-45



### ***How a University Education Can Help an Individual Support the NFL Play 60 Initiative***

**Brittany Moffett**

Faculty Mentor: Julianna Jones English

Michele Ren English

This research explores how an undergraduate education might be useful in working with NFL Play 60. The organization helps to restore the wellness lifestyle, and activity levels in children. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***PETA: saving animals, changing lives***

**Kaitlin Redden**

Faculty Mentor: Julianna Jones English

Michele Ren English

This research explores how an undergraduate education might be useful in working to support the animal rights movement, and to help enforce the well-being of animals everywhere. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audiences by helping them get a better understanding of why animal abuse should be prevented.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***Using a Radford Nursing Degree to Participate in Doctors Without Borders.***

**Kyle Stanley**

Faculty Mentor: Julianna Jones English

Michele Ren English

This research explores how an undergraduate education in nursing might be useful in working to support and be involved in Doctors Without Borders organization. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the health of the world for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***How The National Science Foundation Help You Find Higher Education***

**David Wetmore**

Faculty Mentor: Julianne Jones English

Michele Ren English

This research explores how an undergraduate education (in Engineering and/or Mathematics) might be useful in (working to support, be involved in, solve, further) The National Science Foundation (cause, movement, organization). Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***Teach for America: Education beyond the Chalkboard***

**Brenda Mosser**

Faculty Mentor: Michele Ren English

This research explores how an undergraduate education might be useful in the organization Teach for America, in which the time and effort put in by the teachers results in strengthening schools that are in extreme need. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***The American Academy of Child and Adolescent Psychiatry's Involvement in LGBT Youth Involvement in LGBT Youth***

**Grace Ellinghaus**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

In this presentation, I intend on showcasing how the AACAP's (American Academy of Child and Adolescent Psychology) first practice parameter can benefit LGBT youth. I hope to use the information I've obtained on the AACAP's practice to identify certain mental illnesses that affect LGBT adolescents, due to the stress of being bullied or rejected, and how they can hopefully be treated.

*Session:* CORE 102 Poster Session II

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 1:00-2:00pm

*Location:* Heth 44-45

### ***The Effect of an Undergraduate Education on the ASCPA***

**Jacqueline Klancher**

Faculty Mentor: Thomas Gaffney English

Michele Ren English

This research explores how an undergraduate education might be useful in working to support ASPCA by helping to end the inhumane treatment of animals. Research is based primarily on information found in McConnell library's online databases. This presentation will

inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better. /

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 1:00-2:00pm  
*Location:* Heth 44-45

### ***Invisible Children***

**Shardaye Lee**

Faculty Mentor: Thomas Gaffney English  
 Michele Ren English

Shardaye Lee / March 29, 2013 / CORE 102 / Abstract / / Many people believe that the Invisible Children Organization is just a scam. The Invisible Children Organization has made some very positive outcomes for the people in Uganda. People all around the world can help the Invisible Children Foundation so that the situation with Joseph Kony, in Uganda, will never happen again in our world that we live in. Invisible Children has been monumental in expanding my view on the world and the people in it. We can walk through life in two ways; continuously pacing back and forth inside a room with no windows, naive of others and the world; or we can step outside of that, and experience the joy, pain, failures and triumphs alongside others, just as we were created for. The purpose of my research is to get people to pay more attention to other issues in the world. Invisible Children has brought a meaning into my life incomparable to anything else I have ever encountered. It opened my eyes to the international community and gave me a new global perspective. I have had numerous opportunities to put words into actions for peace. Invisible Children has reshaped how I look at the world around me. It has given me a voice and shown me how powerful a single individual can be. I stand up for what I believe in, which is that all humans are equal and we all deserve the right to live.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 1:00-2:00pm  
*Location:* Heth 44-45

### ***The Effect of an Undergraduate Education on USFWS***

**Rachel Swan**

Faculty Mentor: Thomas Gaffney English  
 Michele Ren English

This research explores how an undergraduate education in Environmental Sciences would be useful in working to protect endangered species with the U.S Fish and Wildlife Service. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 1:00-2:00pm  
*Location:* Heth 44-45

### ***How a University Education Can Help an Individual Support Medicaid***

**Megan Dodson**

Faculty Mentor: Julianna Jones English  
 Michele Ren English

This research explores how an undergraduate education in the medical field might be useful in working to support, answer, and advance healthcare for the poor through Medicaid. The research in this demonstration is based primarily on information found in McConnell library's online databases. This presentation will inform the viewers of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***Not For Sale: The fight to end human trafficking***

**Kathy Boomer**

Faculty Mentor: Julianna Jones English  
 Michele Ren English

This research explores how an undergraduate education might be useful in working to support the Not for Sale organization. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How a University Education may Help Individuals Contribute to the World Wildlife Fund (WWF)***

**Alyssa Carlson**

Faculty Mentor: Julianna Jones English  
 Michele Ren English

This research explores how an undergraduate education in biology might be useful in working to support the World Wildlife Fund (WWF). Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How a University Education Can Help an Individual Support Relay for Life***

**Zachary Hamlett**

Faculty Mentor: Julianna Jones English  
 Michele Ren English

This research explores how an undergraduate education in communication might be useful in speaking in front of large group event, like Relay for Life. Research is based primarily on information

found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***Helping Big Brothers Big Sisters of America***

**Catina Harper**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education in Child Development or Psychology might be useful in working to support the Big Brothers Big Sisters of America organization. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***Title: How a College Degree Could Help You Support Red Cross***

**Charles Henley**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education in Accounting might be useful in the contribution to the Red Cross. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How an Education in Criminal Justice can Help an Individual Support the Justice Policy Institute***

**Rachel Jones**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education in Criminal Justice might be useful in helping accomplish the goals of the Justice Policy Institute. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation

*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How a University Education Can Help Preserve Life***

**Brian McGuigan**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education might be useful in being involved with the National Right to Life Committee. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How University Education Will Help me Get Involved in the Rights of Disabled Citizens***

**Marianna Parker**

Faculty Mentor: Julianna Jones English  
Michele Ren English

This research explores how an undergraduate education might be useful in getting involved in The Disability Rights Movement. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

### ***How a university education can benefit Feeding America***

**Logan Wooldridge**

Faculty Mentor: Julianne Jones English  
Michele Ren English

This research explores how an undergraduate education in Nutrition and Dietetics might be useful in solving hunger issues for the Feeding America organization. Research is based primarily on information found in McConnell library's online databases. This presentation will inform the audience of the value of an undergraduate education in changing the social and/or cultural landscape for the better.

*Session:* CORE 102 Poster Session II  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 2:00-3:00pm  
*Location:* Heth 44-45

## **Communications Special Session**

## ***First Amendment and Higher Education***

Adrienne Keith  
Ben Brightman  
Rebekah Willits  
Devin Moeller  
Lydia Jones

Faculty Mentor: Bill Kovarik School of Communication  
Radford University has several areas where free speech is restricted, and in this four – part presentation by communication students, we discuss these legal problems through a variety of media. The presentation begins with an overview and a five minute video illustrating free speech issues. This will be followed by a short presentation on the history and legal aspects of academic freedom in general and also as the issues apply to RU. Questions about the constitutionality of prior restraint regulations over student expression will be addressed through legal tests such as the “Strict Scrutiny” test and the “Central Hudson” test. A "moot" legal brief for a lawsuit to overturn these policies will be distributed during a short discussion. Finally we will share a presentation about using new media to communicate about free speech issues, including the software for a pro-and-con debate. The presentation overall is 15 minutes and has been organized by the First Amendment and Higher Education class (COMS 460). Handouts, a web site and a pdf e-book will be available as class projects during the presentations and afterwards on the web site.

*Session: Communications Special Session*  
*Presentation Type: 15 minute oral presentation*  
*Day & Time: Thursday 12:00-12:15pm*  
*Location: Heth 18*

## **CORE 202 – Social Media Ethics**

### ***Behind-the-Screens: Writing for New & Social Media (short documentary)***

Aaron Sorenson

Faculty Mentor: Leigh Kelley School of Communication  
This short educational documentary discusses the importance of practicing good writing and communication to be successful in the ever-evolving field of communications.

*Session: CORE 202 – Social Media Ethics*  
*Presentation Type: Video*  
*Day & Time: Thursday 12:30-1:45pm*  
*Location: Heth 19*

### ***Catfishing and the Dangers of Online Dating***

Imani Catlett

McKenzie Kirschnick  
Michael Hutcheon  
Tyler Ramey

Faculty Mentor: Leigh Kelley School of Communication  
Catfishing has been brought to the spotlight recently after MTV has created an eye opening show about creating fake identities, and attempting to date real people online. We want to bring this even further into the light, and also give ways to protect yourself from figuring out if someone is "fake" or not.

*Session: CORE 202 – Social Media Ethics*  
*Presentation Type: Video*  
*Day & Time: Thursday 12:30-1:45pm*  
*Location: Heth 19*

### ***Hooked on Technology***

Chris Best  
Lauren Miller  
Christine Kelly  
Dylan Gilbert  
Sarah Belling

Faculty Mentor: Leigh Anne Kelley School of Communication

In our project we will address the ethical issues surrounding college students and addiction to technology. With the growth of technology, college students are becoming more dependant on all forms of technology. This leads to many ethical problems in our society. Although technology has many advantages, this growing addiction deteriorates social interaction.

*Session: CORE 202 – Social Media Ethics*  
*Presentation Type: Video*  
*Day & Time: Thursday 12:30-1:45pm*  
*Location: Heth 19*

### ***No Reply***

Trevor Mays  
Luke Cohart  
Maria Nguyen

Faculty Mentor: Leigh Kelley School of Communication  
This documentary will portray the potential risks and consequences of using your phone or any type of social media while operating a vehicle. This issue has become increasingly important in our society because everyone uses a cellular device and the facts should be shown through this video. Through the use of interviews and experts insight, we will unveil the reality of its common occurrence.

*Session: CORE 202 – Social Media Ethics*  
*Presentation Type: Video*  
*Day & Time: Thursday 12:30-1:45pm*  
*Location: Heth 19*

### ***Do Online Reviews Throw Consumers Under the Bus?***

Dylan Tolley  
Frank Griffey  
Jake Molthen  
Kyle Johnson



Faculty Mentor: Leigh Kelley School of Communication  
Our video will inform others on how reviews on online websites affect those who are consumers of the product. We will touch over several points and gather many diverse opinions on the subject matter. We will look to raise peoples awareness on what they believe about reviews online.

*Session:* CORE 202 - Social Media Ethics  
*Presentation Type:* Video  
*Day & Time:* Thursday 12:30-1:45pm  
*Location:* Heth 19

### ***Student Athletics and Social Media: Where to Draw the Line ?***

**Mike Warth  
Austin Fielder  
Jake Neff  
Travis Hudson**

Faculty Mentor: Leigh Kelley School of Communication  
Student athletes get in sticky situations because of social media every day. The actions they portray online can portray the whole team, and the university, in a negative light if they are not careful what they post. Coaches and officials monitor students athletes' social media to ensure that they are not posting anything inappropriate. References to drinking, drugs and other cavalier activities that are all things that these coaches and officials are looking for in order to protect the team's, and the individual's, image. If coaches and officials find that student athletes are shedding a negative light on the team due to social media, severe consequences can ensue for the athletes. However on the opposite side of the spectrum some people feel that coaches and officials monitoring student athletes social media is a violation of first amendment rights. Both sides of this argument are serious issues in the world of college athletes.

*Session:* CORE 202 - Social Media Ethics  
*Presentation Type:* Video  
*Day & Time:* Thursday 12:30-1:45pm  
*Location:* Heth 19

### ***Cyberbullying, RU safe?***

**Mason Whitehurst  
Neda Akhondi  
Megan Salvador  
Devin Fakner**

Faculty Mentor: Leigh Kelley School of Communication  
People think cyberbullying stops after middle school, but that isn't the case. Computer screens and keyboards have turned into a shield and sword for young adults when it comes to social media. Cyberbullying is still prominent in the college environment, even here at Radford.

*Session:* CORE 202 - Social Media Ethics  
*Presentation Type:* Video  
*Day & Time:* Thursday 12:30-1:45pm  
*Location:* Heth 19

## **Leadership and Communication Poster Session**

### ***Three Qualities that made HJ Heniz a Phenomenal Leader***

**Morgan Barksdale**

Faculty Mentor: Sandy French School of Communication

H.J. Heinz possessed many great qualities. However, he held three qualities that made him an amazing leader. First, he had a strong desire for knowledge and to learn everything he possibly could. Second, he worked among his men, not above them. Lastly, he believed in always doing the right thing and being honest with a passion. Heinz was a very good man but his leadership abilities were quite remarkable. Not many leaders possess these qualities that Heinz upheld with such ease. His workers adored him and wanted to do the best job that they could for him. Heinz was very successful as a leader which is why his company has become the empire that it is today.

*Session:* Leadership and Communication Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 3:30-4:30pm  
*Location:* Heth 19

### ***Thomas Jefferson, Visionary Leader***

**Laura Francis**

Faculty Mentor: Sandra French School of Communication

Thomas Jefferson was a visionary leader who helped to shape the foundation of our nation. His vision for the United States was to provide an example to all the world of a democratic, free society based on the voice of the people, and his vision for Virginia was to lead the way in establishing this democracy. He hated politics, yet time and again, he answered the call to serve – as a revolutionary, a legislator, an ambassador, a governor, the Secretary of State, and Vice President and President of the United States. Not a strong orator or outgoing personality, Jefferson relied on his outstanding writing skills and clever strategies to lead from behind the scenes. This poster presentation highlights the major contributions of Thomas Jefferson, his greatest strengths and weaknesses as a leader, and some leadership lessons that can be learned from his example.

*Session:* Leadership and Communication Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 3:30-4:30pm  
*Location:* Heth 45

### ***Harvey Milk***

**Sarah Gaunt**

Faculty Mentor: Sandra French School of Communication

I am presenting a leadership poster on Harvey Milk. He was the first openly gay man appointed a position on the City of Supervisors. I am presenting a poster on how he influenced many people and made

more people activists in the Sacramento area. I believe he was the first to start the movement to equal rights. He is an authentic leader in that he grew up knowing he was gay and is fought for the minorities.

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 45*

## **Leadership Analysis of Bella Abzug**

### **Morgan Greenfield**

Faculty Mentor: Sandra French School of Communication

In today's generation women are closer to being viewed as equal to men than ever before. The inspirational women leaders whom came before us are often forgotten. The purpose of this assignment is to better understand and assess the leadership characteristics embodied by Bella Abzug in a time when women were not viewed as parallels. The life events encountered by Bella Abzug as explained in the biography, Bella Abzug, will be related to three leadership theories from Northouse's Leadership: Theory and Practice novel. This assignment will directly relate the correlation between Bella Abzug's historical success with the trait approach, skill approach, and style approach. By analyzing and comparing her leadership styles to her characteristics, the reader will gain an understanding as to why Bella Abzug is such an inspirational past time leader.

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 45*

## **Hillary's 112**

### **Olivia Hilton**

Faculty Mentor: Sandra French School of Communication

Hillary Clinton is the most talked about and most travelled Secretary of State in our nation's history. 112 countries were visited by Madame Secretary and 401 days were spent on the road. She travelled enough to circle the globe 38 times. In such a digital age Secretary Clinton believes it is even more crucial to meet people face to face. Within communications and leadership we continue to see social media and all things digital becoming more prevalent. How can we save face to face interaction and how was Secretary Clinton able to do it? Are there certain traits a leader has to thrive face to face as opposed to behind the screen? / / Within this presentation we will look at the experience Hilary Clinton had before during and after her time as Secretary. We will see the steps she took that no one else was willing to and how it paid off for the administration. Women in leadership are often unappreciated and underutilized. However, Secretary Clinton has laid a solid foundation for all those succeeding her reign as Secretary of State, as well as up and coming female leaders in Washington. / /

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 46*

## **Katie Couric: Renowned Woman Leader in Media**

### **Rebecca Knicely**

Faculty Mentor: Sandra French School of Communication

Katie Couric is a renowned television talent that started at the bottom and worked her way to the top of the media ladder. Beginning as a video editor about to be fired from her job, she now is a daytime television host of her own show Katie. Katie is a memorable host of The Today Show, anchor for the CBS Evening News and reporter for 60 Minutes. All of these jobs took determination and drive to accomplish, but more importantly, it took skills as a leader. Not only did Katie possess leadership skills throughout her career but she also was a leader in her personal life where harsh reality struck her every chance it could. Katie dealt with the tragic loss of her husband to colon cancer and her sister to pancreatic cancer in which both instances she turned the situation around to benefit the public. In honor of her husband, Katie did an on air colonoscopy which made the public more aware of the risks of colon cancer and how simple it can be prevented. In honor of her sister, Katie collaborated with the University of Virginia Hospital and opened the Emily Couric Clinical Cancer Center which provides a patient-friendly facility with advanced treatment options. Katie has exhibited a style approach to leadership throughout her life with relationship behaviors, which is a relation created between herself as a leader and her television followers. Katie also possesses a psychodynamic approach to leadership which is seen through her personality on television as a host, anchor, and reporter.

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 45*

## **Coach K**

### **Jordan Kocen**

Faculty Mentor: Sandra French School of Communication

I will be presenting the theories on leadership on how coach K is a leader

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 45*

## **Starbucks Leader**

### **Margaret McLain**

Faculty Mentor: Sandra French School of Communication

For this forum I will be researching the founder and creator of Starbucks. I will be determining and discussing Howard Schultz leadership style as well as different aspects that brought him to be the leader he is today.

*Session: Leadership and Communication Poster Session*  
*Presentation Type: Poster presentation*  
*Day & Time: Thursday 3:30-4:30pm*  
*Location: Heth 18*

## **Alexander the Great**

Rachael Miller

Faculty Mentor: Sandra French School of Communication

There have been many great leaders that have come into power in history, but Alexander the Great accomplished more during his short life than probably any other leader ever before. By utilizing his resources, Alexander created an empire that no one before or after has ever been able to replicate. By reviewing the different aspects of Alexander the Great as a leader, one can learn how to be a more effective leader in general.

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 45**

### **Leadership: Bear Bryant**

Reba Miller

Faculty Mentor: Sandra French School of Communication

This poster presentation is on leadership. The leader that will be presented on is Paul "Bear" Bryant. The references used for this presentation are Peter G. Northouse's textbook *Leadership Theory and Practice*, using the trait approach, skills approach, and path-goal theory, in comparison to Bear Bryant from the biography by Pat Williams with Tommy Ford, *Bear Bryant on Leadership: Life Lessons from a Six-Time National Championship Coach*.

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 19**

### **The Apostle Paul Leading Christ Mission!**

Kevin O'Reilly

Faculty Mentor: Sandra French School of Communication

Paul is a not just a great teacher and leader, but a learner. Neil Cole writes about Paul's missionary methods and how he leads an everlasting influence of Christ in this world. The book focuses on four journeys. The first journey Paul go to the Galatian region, where he steps out of his mentor shadow and learns to pass knowledge on to others. The second journey occurred when he went to Macedonia and Achaia, where he teaches and leads even through conflict, loneliness, and fear. The respect of Paul leadership is established on his second journey. His third journey lasted three years in Ephesus where his ministry multiples, and he leads by teaching how to apply evangelism, and how to mentor other brothers and sisters. He boasts in his leadership skills through God and not himself. The fourth journey is Paul seeking all Gentile in the World. Even in jail Paul mission would not stop his greatest as a leader. All the four journeys in this publication occur in the books of Acts. Paul demonstrates how to be a leader and not a manager. Paul applies all major leadership traits in the trait approach. The apostle Paul lives out the technical, human, and conceptual skills found in the skill approach. Peter Northouse leadership ideas and skills can be found in Paul throughout Neil Cole book *Journeys to Significance*. "My prayer is that you should love him in Spirit of Jesus Christ and all be like Him." ---Paul

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 19**

### **Margaret Thatcher: "The Iron Lady"**

Hollyn Page

Faculty Mentor: Sandra French School of Communication

In my poster presentation on Margaret Thatcher, the first female Prime Minister of Great Britain, I will be focusing specifically on three leadership theories. The first is the Skills Approach theory and I will be relating how Margaret Thatcher's leadership shows her technical, human, and conceptual skills and how those particular skills influenced the way she chose to lead a country and its people. The second theory I will be looking at is the Style Approach and the different types of leadership styles Margaret Thatcher chose to implement during her time as Prime Minister. The third and final theory that I will be relating to her leadership methods is the Situational Approach. Margaret Thatcher was forced to execute different types of leadership due to different situations that occurred during her time of leadership. All of these theories come together to show Margaret Thatcher's leadership and how she was a successful leader to an entire country and is still looked at today as one of the greatest female leaders in history.

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 46**

### **Buck Brannaman And The Leadership Theories He Demonstrates**

Vanessa Quesenberry

Faculty Mentor: Sandy French School of Communication

Buck Brannaman is a gifted horse trainer who is extremely well known in the entire horse world. He has been a leader in the development and rise in popularity in natural horse training techniques. The way he leads his clinics, directs his students, and works with the horses are three aspects in which he is a leader. His actions demonstrate the following leadership theories defined in this poster.

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 19**

### **The Captain Derek Jeter**

Eric Rabung

Faculty Mentor: Sandy French School of Communication

i will be doing my leader project on Derek Jeter. I plan on making a poster visually explaining his different accomplishments which makes him a leader. i will be focusing a good portion of this poster on emotionally intelligent leadership and how Jeter shows this on and off the baseball field.

**Session: Leadership and Communication Poster Session**  
**Presentation Type: Poster presentation**  
**Day & Time: Thursday 3:30-4:30pm**  
**Location: Heth 18**

## Leadership Poster

Amelia Serban

Faculty Mentor: Sandra French School of Communication

I will be researching how Steve Jobs was a great leader, his leadership style, his life, and how he was so successful through out his career. I haven't decided how I will construct my poster and the type of information I'll have on it. As of right now I'm toying with the idea of having a timeline of important dates and events or having a brief biography, facts, and the type of leader Steve Jobs was. I also am interested in possibly adding some insight that he had or advice that he gave. He was an inspirational, brilliant man, with many thoughts and perspectives on a lot of different things.

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 46

## Mighty Be Our Powers: How Sisterhood, Prayer, and Sex Changed a Nation at War

Amanda Smith

Faculty Mentor: Sandra French School of Communication

Leymah Gbowee, a Liberian peace and women's rights activist, is recognized for leading a women's peace movement during a civil war. Leymah led this movement successfully by having many leadership skills and traits. Specifically, she possessed individual attributes such as crystallized cognitive ability, motivation, and personality, as well as, social judgment skills like perspective taking, social perceptiveness, and social performance. In addition, Leymah Gbowee had several leadership traits including self-confidence, determination, integrity and sociability. All of these skills and traits were demonstrated as she took on the role of Executive director of the Women Peace and Security Network (WIPSEN-Africa). Overall, her strong beliefs on sisterhood, prayer and sex brought women together during the civil war.

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 46

## Bill Bernbach

Kirsten Thieman

Faculty Mentor: Sandra French School of Communication

William (Bill) Bernbach is considered one of the greatest American advertising creative directors. In my analysis, I'm going to show how his leadership changed the face of advertising and Madison Avenue forever. The skills approach, the style approach, and path-goal theory are going to be critical in my analysis. I will show how Bernbach's leadership style was fitting for the situation at hand, and the motivation behind his actions.

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 46

## Legacy of John F. Kennedy Defined through his Leadership and Communication

Hunter Thompson

Faculty Mentor: Sandra French School of Communication

This presentation examines the leadership and political accomplishments of President John F. Kennedy. President Kennedy possessed traits and a particular set of skills which helped him rise to power. His leadership qualities and his ability to communicate effectively his vision motivated Americans to support his goals for success. This research examines the specific language and words used and its effect on his audience and followers. The intent of this study is to examine the leadership characteristics of John F. Kennedy and to use his characteristics as a concept for an alternative leadership model. Through analysis of various existing theories of communication and theories of leadership, this presentation will identify Kennedy's role as a leader, his effectiveness in motivating followers, and his practices that characterized his successes and setbacks. It will also take a look at the culture and unique situations during the 1950's-1963 that defined Kennedy as one of the great leaders in the United States. / Keywords: leadership theory, John F. Kennedy, communication theory

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 46

## Theodore Roosevelt

Brielle Warner

Faculty Mentor: Sandy French School of Communication

For my presentation, I will be focusing mostly on Theodore's accomplishments and his admirers that helped him succeed through out his life time. He has had a lot of influence through Presidents in the past, his family (especially his father), peers through school etc. I will be showing his biggest accomplishments, what his duties were involving politics, his views on certain issues and how he tried to solve them, and what leadership approaches he has naturally as a politician and which ones he used during his achievements.

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 19

## Michael Jordan & The World He Made

Rebekah Willetts

Faculty Mentor: Sandra French School of Communication

For my presentation, I will be providing a poster outlining how Michael Jordan is a leader. I will use leadership communication theories to prove why I believe he is a leader.

*Session:* Leadership and Communication Poster Session

*Presentation Type:* Poster presentation

*Day & Time:* Thursday 3:30-4:30pm

*Location:* Heth 46



## ***Mother Jones Leads Labor Unionists Through American Capitalism***

**Kelli Billips**

Faculty Mentor: Sandy French School of Communication

Mother Jones lead union activists through America's most intense labor struggles. She fought capitalism and injustice fearlessly. With grace and a delicate nature she inspired thousands of immigrants and other laborers to make the government of early twentieth century confront the dishonest labor practices and unfair wages. Authentic leadership characteristics, as well as elements of other leadership theories, that influence Mother Jones's approach to leadership will be included in the discussion.

*Session:* Leadership and Communication Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 3:30-4:30pm  
*Location:* Heth 18

## ***Leadership Traits of Princess Diana***

**Rebecca Hodgson**

Faculty Mentor: Sandra French School of Communication

Her death was an unexpected tragedy that impacted millions and showed how much this woman meant to all. In 1997, Princess Diana of Wales was killed in a tragic car accident. It has been almost 16 years since the life of the "peoples princess" was taken, but to this day she is still viewed as an exemplary leader. She didn't focus on her title; she focused the most on the people she served. Princess Diana had a very strong relationship with her followers and loved to spread knowledge about social issues. She was able to change millions of people's views on concerning and overlooked issues due to her very active involvement in several organizations. / People follow leaders because they believe that person has a clear sense of purpose. When defining what makes a successful leader any individual would have a different definition and those definitions usually portray what that individual believes is the most important traits, skills, and behaviors a leader they would follow should have. Using Andrew Morton's bibliography called "Her True Story Diana" wonderfully describes how truly amazing Princess Diana was as an influential leader. This study takes Andrew Morton's bibliography and analyses Princess Diana as a leader by using some of Peter Nothhouse's different leadership theories. I will express several leadership traits, behaviors, and skills Princess Diana demonstrated while she was alive. Then I will explain why and how those are important traits, behaviors, and skills in order to gain the respect of your followers and to be a successful leader.

*Session:* Leadership and Communication Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 3:30-4:30pm  
*Location:* Heth 18

## ***Sir Winston Churchill's Leadership Through Communication***

**Dylan Kowal**

Faculty Mentor: Dr. Sandra French School of Communication

I plan to discuss how Winston Churchill used his communication skills to attain, and maintain leadership of Great Britain as Prime Minister.

To give structure to my discussion about Churchill's leadership style I plan to incorporate different communication theories such as the Trait Theory, discussing the different personal qualities Churchill had were developed due to his life experiences. I also plan to discuss how the general notion of how we perceive leadership has changed over the years away from the leader themselves, it to a broader aspect. With this progression in mind I also plan to talk about Churchill's leadership style in relation to the Contingency Theory of communication.

*Session:* Leadership and Communication Poster Session  
*Presentation Type:* Poster presentation  
*Day & Time:* Thursday 3:30-4:30pm  
*Location:* Heth 19

## **Political Science and History Symposium**

### ***The Land Mine Dilemma: Not a One-Size-Fits-All Solution***

**Kevin Staniforth**

Faculty Mentor: James Radford Political Science

This work examines the realities of humanitarian landmine clearance over the last 20 years, and how the field has evolved. It looks at three levels of action and development: 1) diplomatic, 2) technological advancements, and 3) practical application in the field. This all-encompassing effort attempts to look at what is working in the field, what is not working, and what can be done to increase efficiency in this area of humanitarian assistance. By doing a comprehensive literature review and identifying common themes, it is the goal of this work to observe patterns in mine clearance efforts around the world. The common theme discovered during this investigation was the fact that no two situations involving landmine clearance are the same; especially in reference to the practical applications within the field. The reasons for success in one country simultaneous to the unmitigated failure of another country is due to overlooked dilemmas involving local availability of resources, security concerns, sociological influences, and a host of other causes. Additionally we will revisit the ICBL and landmark Ottawa Convention of 1997 and see how the anti-landmine movement has fared in its implementation more than 15 years later. This work points out the discrepancy between idealistic goals for landmine clearance, and the reality of the situation. Finally, it serves to highlight the potential dangers of hasty or inept landmine policy implementation, ultimately reaching the conclusion that a broad array of factors must be considered before throwing money at mine clearance efforts that often yield less than optimal results.

*Session:* Political Science and History Symposium  
*Presentation Type:* 15 minute oral presentation  
*Day & Time:* Thursday 5:00-5:15pm  
*Location:* Heth 19

### ***Sources of Genocide and the Failure to Intervene***

**Mary Casale**

Faculty Mentor: James Radford Political Science

People of the world have always separated themselves into groups for one reason or another. Being a part of a group or community gives humans a feeling of belonging and acceptance that they yearn for. While this sense of community is beneficial, it can also go very wrong when the group starts to identify those outside of the group as the "other." For centuries this phenomenon has caused countless squabbles and wars, some worse than others. The vilest product of this phenomenon is genocide. This paper will look into the specific and overarching reasons genocides have occurred throughout history and the why they still occur today. The modern age, while capable of averting such tragedies, has failed repeatedly to stop genocides for a multitude of reasons. The realization and outlawing of genocide as well as the struggle to ratify international law in some countries can be seen as a precursor to the inaction of countries today. The paper will explore the reasons powerful international entities such as the U.S., the EU, and China continue to let genocide go unnoticed and even support regimes that inflict such crimes. Most of these reasons stem from politics and international policy. Sovereignty, another obstacle to preventing and stopping genocide will be discussed within the context of international law. There are political goals that, throughout centuries, continue to plague the international community's ability to protect human beings from their own government. These goals and policies will be exposed and explored in a way that compares their positives and negatives.

*Session:* Political Science and History Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 5:15-5:30pm

*Location:* Heth 19

### ***Illicit drug trade in West Africa: then and now***

**Holly Snow**

Faculty Mentor: James Radford Political Science

Despite West Africa's historical roots in a continually blossoming drug trade, the area is now gaining more attention than ever as it branches out into numerous countries worldwide. African drug trade is especially in the limelight when tracing the routes and product back to the source. Many leaders in these countries are capitalizing on what they see as a simple business venture with people of similar interests. Since West Africa's involvement can be traced back to the early days of Latin American trade, leaders have numerous invaluable contacts in a plethora of different countries. The issue in fighting this lies in West Africa's uncanny ability to both manufacture and sell illicit drugs while still maintaining a flexible, horizontal integration business strategy. The illicit drug trade industry has been split for decades with many fighting against it and many fighting for it. Various countries from around the world have stepped in with strategies to eliminate the illegal business but all attempts were futile. Shedding light on the notorious success of the industry (from past to present) will help to understand and rationalize the issue at hand, hopefully raising global awareness.

*Session:* Political Science and History Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 5:30-5:45pm

*Location:* Heth 19

### ***Mixing Cultures: White Captives in Colonial America***

**Elizabeth Rizzuto**

Faculty Mentor: Mary Ferrari History

In the sixteenth and seventeenth centuries, Indians captured hundreds of whites throughout the English colonies. Whites feared Native Americans would brutally take them away in the night. However, even though there were violent encounters, in most situations the Natives captured whites to replace family members that died, either by natural forces or conflict. Eventually the captives would integrate into Native society, but that was not always common. Most would bide their time until they could return home, either by escaping or being bought by their families. Women and children were captured more often than men but there were still great numbers of men captured. Children were also more likely to stay with their adopted families than return home. In one instance, out of fifty-two prisoners, thirty-four were children and fourteen were women, most of whom were mothers to the children. While some wished to return home, others viewed their new life as a safe haven and a new beginning. Women in particular experienced more freedom in the Indian way of life than in their old lives, although because of societal norms, most rejected their new way of life. This research will examine captive narratives through numerous women, namely Mary Rowlandson, a Puritan woman, Elizabeth Hanson, a Quaker woman, Mary Jemison, one of the most famous accounts of a woman who stayed with the natives, along with Eunice Williams, another woman who stayed, and Susannah Johnson, captive sold to the French.

*Session:* Political Science and History Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 5:45-6:00pm

*Location:* Heth 19

### ***Challenging the Myths of Leadership: Brave, Tangled, and Moulin***

**Victoria Paz**

Faculty Mentor: Margaret Hrezo Political Science

As the political philosopher Eric Voegelin argued, it is not a question of whether or not we live a myth. The questions, rather, are: (1) what myths do we live? and (2) are the myths we choose better or worse ones? For better or worse, myth is a part of the fabric of society. Social space is a human creation that evokes some order out of the community's understandings of what it means to be human, how human beings relate to one another, how they relate to the gods, and what their place is in the universe. Social conceptions of leadership arise out of the myths of some time and place and out of its sense of order or disorder. This paper will use three films, political philosophy, and literature on leadership theory to explore understandings of leadership and to apply those understandings to some recent film depictions of women as leaders.

*Session:* Political Science and History Symposium

*Presentation Type:* 15 minute oral presentation

*Day & Time:* Thursday 6:00-6:15pm

*Location:* Heth 19

## Nursing Special Session

### ***Thrombophilia in Pregnancy: Review of Current Practices for Thrombosis Prevention***

**Ayla Combs**

Faculty Mentor: Kathleen Brennan School of Nursing

In pregnancy, venous thrombosis is a leading cause of maternal death in the United States (Davis & Branch, 2010). The risk of thrombosis is only further complicated for women with inherited and acquired clotting disorders, known as thrombophilias (Bates, Greer, Middeldorp, Veenstra, Marie-Prabulos, & Vandvik, 2012). Currently, evidence based guidelines for thrombosis prevention in these women is limited. Therefore, current practice encompasses the knowledge of medical experts with a limited number of observational studies (Bates et al., 2012). This presentation highlights the current best practice for screening and thromboprophylaxis for women with thrombophilia in pregnancy.

*Session:* Nursing Special Session

*Presentation Type:* 30 minute oral presentation

*Day & Time:* Thursday 5:00-5:30pm

*Location:* Heth 19

- Abu-El-Hawa, Hiba**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Ackah, Marie**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Adams, Amanda**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Adkins, Katelyn**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Adorno, Zachary**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Agee, Shannon**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Akers, Annie**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Aldrich, MaryKathryn**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 1:00-1:15pm  
Location: Heth 22
- Allaire, Troy**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Allen, Brianna**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Anderson, Riley**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Apostolico, Nick**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Arzubigiaga, Sergio**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Ashley, Charles**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Backof, Sarah**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Baker, Zach**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Baker, William**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Barksdale, Morgan**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Battle, Tracie**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Beamer, Mary Lee**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Bechtel, Haley**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Berkeley, Alan**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Best, Chris**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Billips, Kelli**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 18
- Billips, Kelli**  
Session: Humanities Symposium  
Day & time: Wednesday 4:30-4:45pm  
Location: Heth 19
- Blanchetti, Natalie**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Blevins, Ashlee**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Bohannon, Morgan**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Bond, Ryan**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Boomer, Kathy**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Booth, Chandler**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Borling, Krista**  
Session: Psychology Symposium  
Day & time: Wednesday 5:00-5:15pm  
Location: Heth 46
- Bouchet, Olivia**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Bowen, Elizabeth**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Bradbury, Elizabeth**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Bradshaw, Lydia**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Brightman, Benjamin**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 1:15-1:30pm  
Location: Heth 22
- Brightman, Benjamin**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Brown, Erin**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Brown, Devin**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Bryan, Rachael**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Bryant, Jessy**  
Session: Education Symposium  
Day & time: Wednesday 4:00-4:15pm  
Location: Heth 18
- Buck, Brandon**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 09:00-9:30am  
Location: Heth 14
- Bundy, Ronita**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Bundy, Ronita**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Burchett, Gina**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Burge, Caroline**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Byrne, Brian**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Cale, Kristan**  
Session: Biology Symposium II  
Day & time: Wednesday 6:30-7:00pm  
Location: Heth 14
- Campbell, Laken**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 10:00-10:15am  
Location: Heth 14
- Campbell, Kasey**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 1:30-1:45pm  
Location: Heth 22
- Carbo, Chelsea**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Carlson, Alyssa**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45



- Carneal, Marion**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Carr, Rebecca**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- Carter, Campbell**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Carter, Stephanie**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Carter, Kenley**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Carter, Alexandra**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Casale, Mary**  
Session: Political Science and History Symposium  
Day & time: Thursday 5:15-5:30pm  
Location: Heth 19
- Casazza, Stephen**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Castaneda, Elizabeth**  
Session: Biology Symposium II  
Day & time: Wednesday 7:35-7:50pm  
Location: Heth 14
- Catlett, Imani**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Chambers, Nina**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Cicerchia, Carrie**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Coker, Ryan**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 1:45-2:00pm  
Location: Heth 22
- Coles, Felecia**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Collins, Kristin**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Combs, Ayla**  
Session: Nursing Special Session  
Day & time: Thursday 5:00-5:30pm  
Location: Heth 18
- Cooper, Laken**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Cooper, Laken**  
Session: Biology Symposium II  
Day & time: Wednesday 6:00-6:30pm  
Location: Heth 14
- Cope, Catheryn**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Costello, Miles**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Cox, Amory**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Cruz, Amalia**  
Session: Social Science Symposium II  
Day & time: Wednesday 2:45-3:00pm  
Location: Heth 18
- Curry, Michael**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Daniel, Kristina**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- Davis, Emily**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Dearing, Carly**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Denham, Darla**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Dickerson, Mary**  
Session: Special Session - Place Based Education  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 18
- Diniz, Lucas**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- Dobos, Layla**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Dodson, Abby**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Dodson, Megan**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Donlay, Patrick**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Dorfman, Alyssa**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Dougherty, Nick**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Dr. Davis,**  
Session: Biology Symposium II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 14
- Dunnigan, Brianne**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 09:00-9:30am  
Location: Heth 14
- Eagle, Jordan**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Eckerle, Alexis**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Edwards, Kristi**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Ellinghaus, Grace**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- English, Catherine**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Farran, Mariah**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Fenner, Ashley**  
Session: Education Symposium  
Day & time: Wednesday 4:45-5:00pm  
Location: Heth 18
- Filcek, Kimberly**  
Session: Biology Symposium I  
Day & time: Tuesday 6:50-7:05pm  
Location: Heth 14
- Filipek, Matt**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Flassing, Heather**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Foley, Caitlyn**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Foust, Schniece**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Fowler, Laura**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Francis, Laura**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Frantz, Seth**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43

- Freeman, James**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Gaffney, Tom**  
Session: English Panel Discussion  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 22
- Gaines, Emily**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Gaiteri, Devon**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Gammon, Ebony**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Gartland, Michael**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Gaunt, Sarah**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Geary, Kelsey**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Gerding, Emily**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Goncalves, Ashley**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Greenfield, Morgan**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Gregor, Dana**  
Session: Biology Symposium I  
Day & time: Tuesday 6:30-6:45pm  
Location: Heth 14
- Gunn, Whitney**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 3:45-4:00pm  
Location: Heth 22
- Gusler, Stephanie**  
Session: Psychology Symposium  
Day & time: Wednesday 5:15-5:30pm  
Location: Heth 46
- Hall, Jesse**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 2:00-2:15pm  
Location: Heth 22
- Hami, Nima**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Hamlett, Zachary**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Hardwick, Amanda**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Harper, Catina**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Hartless, Christopher**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Hawkins, Amanda**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Hengeli, Suzanne**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Henley, Charles**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Herndon, Christa**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Hickling, Skye**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Hicks, Hilary**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Hilton, Olivia**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Hite, Jordan**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Hodgson, Rebecca**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 18
- Holford, Rori**  
Session: Social Science Symposium II  
Day & time: Wednesday 2:30-2:45pm  
Location: Heth 18
- Holland, Nikki**  
Session: Biology Symposium II  
Day & time: Wednesday 8:15-8:30pm  
Location: Heth 14
- Hope, David**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Horvath, Michaela**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Hottle, Kristen**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 2:15-2:30pm  
Location: Heth 22
- House, Joey**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Humphreys, Abbey**  
Session: Biology Symposium II  
Day & time: Wednesday 7:55-8:10pm  
Location: Heth 14
- Huth, John**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Huth, John**  
Session: Biology Symposium I  
Day & time: Tuesday 7:10-7:25pm  
Location: Heth 14
- Illig, Paige**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Ingram, Brian**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Irvin, Kaili**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Jackson, Justine**  
Session: Humanities Symposium  
Day & time: Wednesday 4:00-4:30pm  
Location: Heth 19
- Jackson, Jasmine**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Jamerson, Afton**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Jenkins, Denise**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Johnson, Erica**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Johnson, Brandon**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Johnson, Charnele**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Jones, Charlotte**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Jones, Rachel**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Kean, Kendahl**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Keith, Adrienne**  
Session: Communications Special Session  
Day & time: Thursday 12:00-12:15pm  
Location: Heth 18
- Kelly, Selina**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Kemp, Brandon**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43

- Kirby, Robyn**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 11:45-12:00noon  
Location: Heth 14
- Klancher, Jacqueline**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Knicely, Rebecca**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Kocen, Jordan**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Kowal, Dylan**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Kurdi, Magdalena**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Landgren, Dorothy**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Lavender, Dante**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Lee, Sharday**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Leonard, Erin**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Lessard, Amanda**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Lippard, Jesse**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 10:15-10:30am  
Location: Heth 14
- Liske, Sydney**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Logan, Darius**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Long, Kayleigh**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Mark-Okai, Bianca**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 11:00-12:00noon  
Location: Heth 43
- Marshall, Jasmine**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- Marson, Kyle**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Martin, Kacie**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Martinez-Carranza, Caroline**  
Session: Humanities Symposium  
Day & time: Wednesday 4:45-5:00pm  
Location: Heth 19
- Mason, Christian**  
Session: Social Science Symposium I  
Day & time: Tuesday 4:30-4:45pm  
Location: Heth 19
- Massi, Devon**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Mawdsley, Jessica**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Mayhugh, Jimmy**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Mays, Trevor**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- McElroy, Nicholas**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- McGrath, Shannon**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 2:30-2:45pm  
Location: Heth 22
- McGuigan, Brian**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- McGuinness, Nicholas**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- McKnight, Dylan**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- McKnight, Dylan**  
Session: Biology Symposium II  
Day & time: Wednesday 7:15-7:30pm  
Location: Heth 14
- McLain, Margaret**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 18
- Melendez, Dominique**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Milam, Madeline**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Miller, Rachael**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 45
- Miller, Reba**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Miller, Hilary**  
Session: Biology Symposium I  
Day & time: Tuesday 8:20-8:35pm  
Location: Heth 14
- Mills, Samantha**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Moble, Jeremy**  
Session: Social Science Symposium II  
Day & time: Wednesday 3:00-3:30pm  
Location: Heth 18
- Moffett, Brittany**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Molly, Shifflett**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Molthen, Chloe**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Montenegro, Sophia**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 10:30-10:45am  
Location: Heth 14
- Moody, Melissa**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Morris, Jessica**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Mosser, Brenda**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Musumarra, Caroline**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 2:45-3:00pm  
Location: Heth 22
- Newsome, Heather**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Ngure, Martina**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Nonemaker, Casey**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45

- Nuckols, Christopher**  
Session: Biology Symposium I  
Day & time: Tuesday 7:30-7:45pm  
Location: Heth 14
- Ogle, Jacob**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- O'Reilly, Kevin**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Page, Hollyn**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Parker, Marianna**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Patterson, Katherine**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Paulina, Marco**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Paz, Victoria**  
Session: Political Science and History Symposium  
Day & time: Thursday 6:00-6:15pm  
Location: Heth 19
- Pearce, Ann**  
Session: MSW Poster Session II  
Day & time: Wednesday 7:30-9:00pm  
Location: Heth 43
- Pease, Rachel**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Pennington, Josh**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Percoco, Claire**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 09:30-9:45am  
Location: Heth 14
- Percoco, Claire**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 10:45-11:00am  
Location: Heth 14
- Peterson, Laura**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Pistinanzi, Gina**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Poe, Brianne**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 3:00-3:15pm  
Location: Heth 22
- Pollock, Apolonia**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Popsuy, Natalie**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Pregot, Chris**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Price, Heather**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Puerto, Anita**  
Session: Education Symposium  
Day & time: Wednesday 4:30-4:45pm  
Location: Heth 18
- Quesenberry, Vanessa**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Rabung, Eric**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 18
- Rash, Curtis**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 09:45-10:00am  
Location: Heth 14
- Ray, Christopher**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Raymond, Mary**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 3:15-3:30pm  
Location: Heth 22
- Rector, Matthew**  
Session: CORE 102 Poster Session  
Day & time: Thursday 11:00-12:00noon  
Location: Heth 44-45
- Redd, Emily**  
Session: Humanities Symposium  
Day & time: Wednesday 3:30-4:00pm  
Location: Heth 19
- Redden, Kaitlin**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Renz, Jonathan**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Riegel, Daniel**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 09:00-9:30am  
Location: Heth 14
- Rizzuto, Elizabeth**  
Session: Political Science and History Symposium  
Day & time: Thursday 5:45-6:00pm  
Location: Heth 19
- Rydel, Tyler**  
Session: CORE 102 Poster Session  
Day & time: Thursday 12:00-1:00pm  
Location: Heth 44-45
- Samples, Evan**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Sandstrom, Emil**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Sapp, Eric**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Sawyer, Kyle**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Saxon, Alex**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Scott, Sherri**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Scott Patxot, Damaris**  
Session: Social Science Symposium I  
Day & time: Tuesday 4:00-4:15pm  
Location: Heth 19
- Serban, Amelia**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Serone, Michael**  
Session: Communications Research Methods Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 16-17
- Shafferman, Nathaniel**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Shornak, Austin**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Silva, Devon**  
Session: Biology Symposium I  
Day & time: Tuesday 7:50-8:15pm  
Location: Heth 14
- Skelding, Jessica**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Smith, Jake**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Smith, Amanda**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Smith, Charlene**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Smith, Stephanie**  
Session: Psychology Symposium  
Day & time: Wednesday 5:45-6:00pm  
Location: Heth 46
- Snow, Holly**  
Session: Political Science and History Symposium  
Day & time: Thursday 5:30-5:45pm  
Location: Heth 19



- Sorenson, Aaron**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Sowder, Amanda**  
Session: Education Symposium  
Day & time: Wednesday 4:15-4:30pm  
Location: Heth 18
- Stallard, Jenna**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 10:00-11:00am  
Location: Heth 43
- Staniforth, Kevin**  
Session: Political Science and History Symposium  
Day & time: Thursday 5:00-5:15pm  
Location: Heth 19
- Stanley, Stephanie**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 11:00-11:15am  
Location: Heth 14
- Stanley, Kyle**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Stowers, Hannah**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Strangand, Jessica**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Sublett, David**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Sullivan, Brittany**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 1:00-2:00pm  
Location: Heth 43
- Sureshkumar, Joan**  
Session: Information Technology Special Session  
Day & time: Wednesday 2:30-3:00pm  
Location: Heth 19
- Surette, Fionna**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Surette, Fionna**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Swan, Rachel**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Swann, Monica**  
Session: CORE 102 Poster Session  
Day & time: Thursday 10:00-11:00am  
Location: Heth 44-45
- Swope, Nicole**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Thibodeaux, Christina**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Thieman, Kirsten**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Thompson, Ben**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 11:15-11:30am  
Location: Heth 14
- Thompson, Hunter**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Tolley, Dylan**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Townsend, Kelsey**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Tuttle, Brittani**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Varga, Joshua**  
Session: Chemistry Poster Session  
Day & time: Tuesday 5:00-7:00pm  
Location: Heth 43
- Vass, Hannah**  
Session: Psychology Poster Session I  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 43
- Vaughn, Katelyn**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Veith, Holly**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Waddell, Paige**  
Session: Psychology Poster Session II  
Day & time: Wednesday 5:00-6:00pm  
Location: Heth 43
- Waide, Ryan**  
Session: Social Science Symposium I  
Day & time: Tuesday 4:45-5:00pm  
Location: Heth 19
- Warner, Brielle**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 19
- Warth, Mike**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Watts, Christine**  
Session: Multidisciplinary Poster Session  
Day & time: Tuesday 4:00-5:00pm  
Location: Heth 43
- Weikel, Alex**  
Session: Psychology Symposium  
Day & time: Wednesday 5:30-5:45pm  
Location: Heth 46
- Wells, Billy**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 12:00-1:00pm  
Location: Heth 43
- Wenger, Cynthia**  
Session: CORE 201 Poster Session (coordinated by Carolyn Quinn)  
Day & time: Wednesday 3:00-4:00pm  
Location: Heth 43
- Wetmore, David**  
Session: CORE 102 Poster Session  
Day & time: Thursday 1:00-2:00pm  
Location: Heth 44-45
- Whistleman, Melissa**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- Whistleman, Melissa**  
Session: Geology, Geospatial Science, and Physics Poster Session  
Day & time: Wednesday 4:00-5:00pm  
Location: Heth 16-17
- White, Emily**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43
- Whitehurst, Mason**  
Session: CORE 202 - Social Media Ethics  
Day & time: Thursday 12:30-1:45  
Location: Heth 19
- Wickham, Katey**  
Session: Biology Poster Session  
Day & time: Tuesday 5:00-6:15pm  
Location: Heth 14
- Willetts, Rebekah**  
Session: Leadership and Communication Poster Session  
Day & time: Thursday 3:30-4:30pm  
Location: Heth 46
- Williams, Julie**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Wingard, Christopher**  
Session: Forensic Anthropology, Forensic Science, and Anthropological Sciences  
Day & time: Thursday 11:30-11:45am  
Location: Heth 14
- Wooldridge, Logan**  
Session: CORE 102 Poster Session  
Day & time: Thursday 2:00-3:00pm  
Location: Heth 44-45
- Wray, Brittany**  
Session: Nursing Poster Session  
Day & time: Tuesday 1:00-3:00pm  
Location: Heth 14
- Wright, Heather**  
Session: Sociology Research Methods Symposium  
Day & time: Wednesday 3:30-3:45pm  
Location: Heth 22
- Wright, Heather**  
Session: Social Science Symposium I  
Day & time: Tuesday 4:15-4:30pm  
Location: Heth 19
- Yontz, Staci**  
Session: MSW Poster Session I  
Day & time: Wednesday 6:00-7:30pm  
Location: Heth 43
- Young, Leela**  
Session: CORE 102 Poster Session  
Day & time: Wednesday 09:00-10:00am  
Location: Heth 43