

18th Annual
**Mid-Atlantic Regional Conference of
Undergraduate Scholarship**



MARCUS
2016

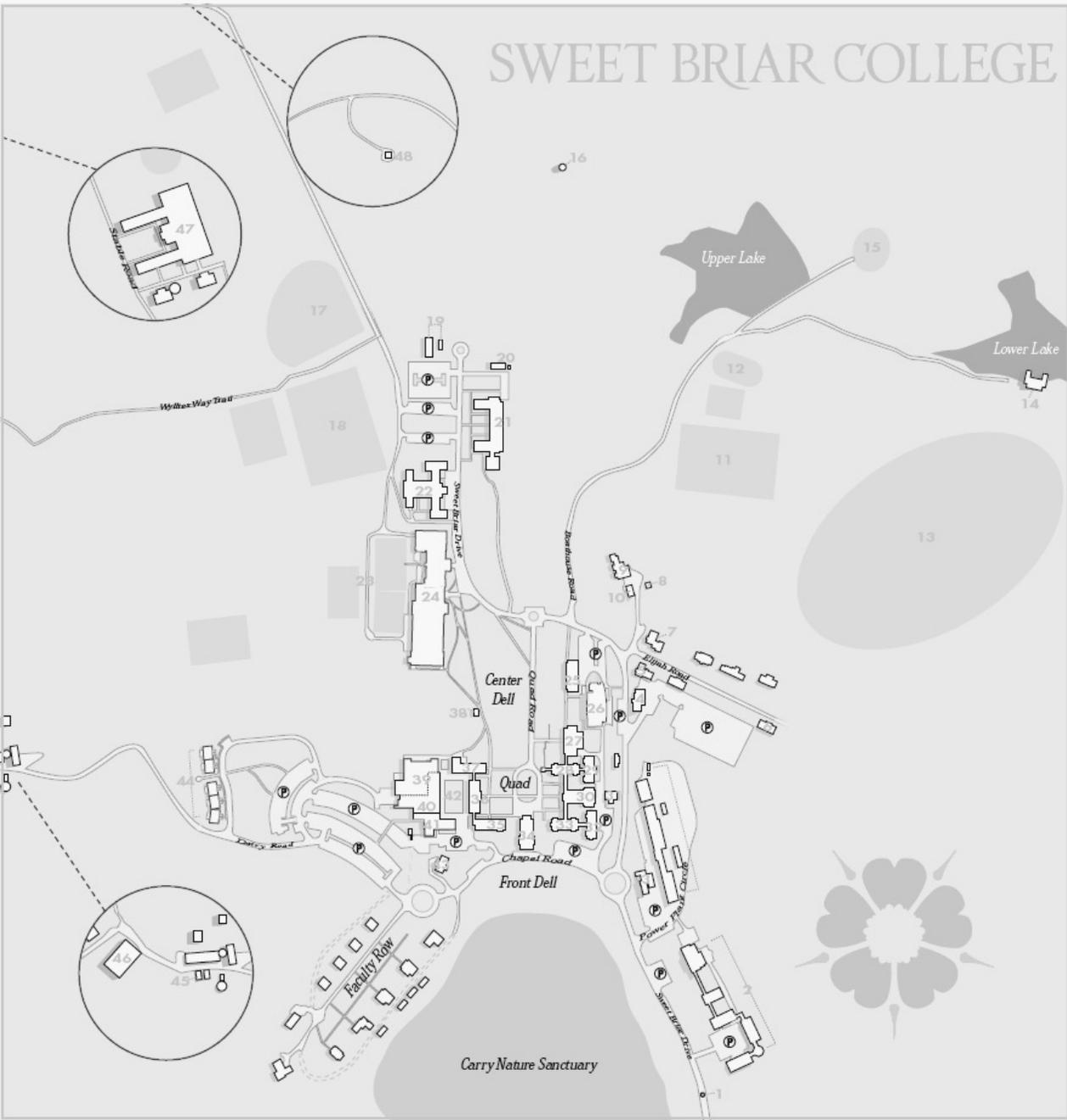
Saturday, October 15
Sweet Briar College

SCHEDULE AT A GLANCE

| | Room A | Room B | Room C | Room D |
|----------------|--|---------|----------|---------|
| 8:15-9:15 AM | Registration (lower level of conference center) | | | |
| 9:30-10:30 AM | Panel 1 | Panel 2 | Panel 3 | |
| 10:45-11:45 AM | Panel 4 | Panel 5 | Panel 6 | Panel 7 |
| 12:00-1:00 PM | Lunch (Wailes Lounge) | | | |
| 1:15-2:15 PM | Poster session (Boxwood Room) | | | |
| 2:30-3:30 PM | Panel 8 | Panel 9 | Panel 10 | |

Welcome to MARCUS! We are delighted that **YOU** are joining us for the conference's first year back at Sweet Briar. This year the entire conference, including lunch, will be in the conference center (#2 on the map below, just to the left of the flower), but we hope you will explore the rest of our beautiful campus!

You may see more families wandering around campus than you'd expect because this year MARCUS overlaps with Families Weekend. So there are many events on campus, including a performance of "The Trojan Women" at 7:30pm in Babcock (#22). Please join in for any of these events that catch your interest -- all the event details are at your fingertips online at <http://sbc.edu/families-weekend/>



POSTERS (BOXWOOD ROOM, 1:15-2:15PM)

#1

Colorism Among Female African-American College Students

Latisha Jones, Tiffany Reese, and Scottie Scott, Christopher Newport University

Originating in the United States from a history of slavery, colorism (skin-tone bias) was the favoring of light complexion over dark complexion. It was initially used to make individuals of African descent feel innately inferior to Whites (Hill, 2002). Conversations with students of color on many college campuses suggest that skin color has more of a bearing on the lives and relationships of these students than one might expect. A three-part questionnaire was designed to examine African-American college-aged students' understandings, perceptions, feelings, and experiences with colorism. The results indicated that African-American college women held positive feelings about their own skin color, had positive attitudes toward both dark and light-skinned people, and believed that colorism is still an issue in the black community. To strengthen the findings, future research is needed with a larger, more diverse sample of college students.

#2

Does Parenting Style Influence Children's Perception of Other Children's Neutral Facial Expressions?

Taylor O'Brien, Erin Bertero, and Isabelle Clough, Christopher Newport University

Research has shown children have a difficult time recognizing neutral faces which are often a part of everyday interactions. Additionally, less supportive parenting leads to low performance in recognizing emotions (Kujawa et al., 2014). Bertero et al. (2016) connected these two issues by exploring how parenting styles impact school-aged children's abilities to label neutral faces. They found that father, but not mother, autonomy support and involvement influenced school-aged children's ratings of neutral faces. The current study expands these findings by exploring when parental influence begins to affect neutral face recognition. Specifically, three- to five-year old children were asked to rate pleasantness and intensity of children's neutral faces and completed the Child's version of Perception of Parents (Grolnick, Deci, & Ryan, 1997). Results indicated parental autonomy support and involvement does not influence preschool-aged children's abilities to accurately recognize neutral faces, which has important implications for developmental influences on emotion recognition.

#3

Examining Exercise and Panic Disorders: Learning to Listen to Your Heart

Caitlyn McCormack, Christopher Newport University

This paper examines the relationship between increased heart rate awareness brought on by exercise and the management of panic disorders. Previous research shows that there is a positive correlation between a person's physical activity and the severity of their anxiety disorders. Specifically, research shows that exercise is a form of exposure therapy for people suffering from panic disorders. Generally, regular exercise allows people to become accustomed with the symptoms they typically face when experiencing a panic attack. In fact, data indicates exercise reduces or even prevents anxiety disorder symptoms. This reduction of symptoms can be attributed in part to the natural increase in serotonin levels in the brain during exercise. A major goal of this paper is to model the relationship of the frequency and severity of panic disorders and exercise.

#4

Tossing Yips Out of the Game: Examining Techniques for Reducing Mental Blocks in Baseball

Jaime Arbesfeld, Christopher Newport University

The purpose of this study is about baseball player performance. Specifically baseball players experiencing a well-known phenomenon called "Yips." Yips are defined as baseball player's inability to accurately throw a baseball. Research believes that yips are a debilitating neurological disorder that manifests as a sudden inability to perform. Presented in the paper is a protocol for sports practitioners to better deal with this performance-based sports disorder. A major goal of this paper is to identify different ways of reducing yips, such as: Emotional Freedom Techniques (EFT), Reinvestment theory, and therapy for Central Nervous System (CNS).

#5

The Influence of Self-Perceived Stress and Readiness Awareness on Athletic Performance: A Theoretical Model

Caitlin Haworth, Christopher Newport University

This paper approaches athlete performance from a self-perception and self-awareness perspective. Research shows student-athletes face various types of stress such as (a) time-management, (b) fatigue/injury, and (c) social pressures. Stress has the potential to negatively affect an athlete's performance. Alternatively, when approached from a self-awareness perspective, stress has the ability to alter an athlete's readiness. The readiness awareness allows athletes to determine the extent or level of physical activity prior to engaging in physical activity. This research analyzes the relation between self-perceived stress and readiness awareness as important psychological precursors to athletic performance. Finally, this paper proposes a theoretical model outlining the factors and relations discussed above.

#6

The Psychology of Nightmares: A Literature Review

Summer Bledsoe and Haley Wofford, Christopher Newport University

Nightmares are identified as frightening or unpleasant dreams that tend to occur during the REM stage of sleep (McNamara, Minsky, Pae, Harris, Pace-Schott, & Auerbach, 2015). Previous studies have shown that only an average of four percent of Americans have nightmares at least once a week (McNamara, Minsky, Pae, Harris, Pace-Schott, & Auerbach, 2015). The purpose of this literature review is to examine the psychological causes and effects of nightmares on adults. Recent studies have assessed the relationships between nightmare frequency and many factors including anxiety, depression, suicidality, stress, and physical aggression levels. Future research should consider studying the effects of nightmare reducing treatments on self-harmful thoughts and behaviors (Hochard, Heym, & Townsend, 2015). The effect of stress treatments on people who suffer from recurring nightmares should also be studied (Hochard, Heym, & Townsend, 2016).

#7

The Sanctification of Forgiveness Measure: A Literature Review

Benjamin Pearce and Anya Walker, Christopher Newport University

Forgiveness is the reduction of negative thoughts, emotions, and actions towards a specific person or group which has caused offense. Before the creation of the Sanctification of Forgiveness Scale, there were mixed statistics on the relationship between religion/spirituality and forgiveness. The measure is split into three sub-measures: Will of God ($\alpha=.89$), Hurt Relationship with God ($\alpha=.88$), and Spiritual Commitment ($\alpha=.92$) (Davis, Hook, Van Tongeren, & Worthington, 2012) Each of these work together to measure how much religious weight a religiously identifying person puts on forgiveness. This measure has shown that religious commitment does not necessarily indicate forgiveness, but when forgiveness is sanctified (made holy) by a person, then that person will be more likely to forgive a transgression (Davis, Hook, Van Tongeren, & Worthington, 2012). In the future, this scale should be used to develop a longitudinal study involving the relationship between time, religion, and forgiveness.

#8

Effects of an Early Postnatal Intoxication Event on Medium Spiny Neuron Morphology Throughout Mouse Development

Jamie Ingersoll and Erin Clabough, Hampden-Sydney College

Prenatal alcohol exposure can result in the emergence of a broad spectrum of anatomical or neurological abnormalities termed Fetal Alcohol Spectrum Disorders (FASD). We investigated the effects of a single postnatal intoxication event on neuronal development in mice. We characterized the immediate effects of the ethanol exposure on the branching of the neurons in the striatum, but also examined the long term effects throughout development. Animals were exposed to brief, high levels of ethanol during the early postnatal period (during the most robust period of synaptogenesis). Brains were removed and processed for Golgi-Cox staining in order to capture the cellular morphological response to the insult. These data find immediate alterations in the branching morphology of MSNs as a consequence of neonatal exposure to ethanol. The results enhance not just our understanding about the impact of toxins on neurons, but also highlights the dynamic nature of dendritic branching in the neuron.

#9

The Four Dark Personality Traits: Forensic Implications

Collin Quirk and Micaela Hopkins, Christopher Newport University

The Four “Dark Personality” Traits includes narcissism, Machiavellianism, psychopathy, and everyday sadists. Narcissism, which is high sense of entitlement, lack of empathy, need of admiration. Machiavellianism is a focus on self-serving interests, manipulation, and exploitation, Psychopathy includes high thresholds for disgust, lack of guilty and fear, low threshold for frustration and violent tendencies. The last one, sadists, include impulsiveness, manipulation, and take pleasure in the suffering of others. Similarly, Schadenfreude, which another attribute that is the delight in other’s misfortune may relate to the concept of sadism. Furthermore, research has shown that individuals possessing these personality traits have reduced rates of empathy, on biological level, could impact their oxytocin levels. Oxytocin is known as the “bonding hormone.” In this research study we are reviewing the literature to further understand the Four dark personality traits, oxytocin and Schadenfreude.

#10

Science and Math Links: Research-Based Teaching Institute

Danish Roshan, Gavin Cook, and Drucilla Williams, Randolph College

We continued our study on the influence of hands-on and inquiry instruction (as opposed to traditional lecture and direct instruction) on student achievement and teacher/student attitudes toward science, with the goal of increasing interest in studying science, increasing confidence in communicating science ideas, and increasing student achievement in science and mathematics. We continued creating resources including lesson plans, associated content, and video for hands-on and inquiry-based lessons in the K-8 classroom. The 2016 Science Institute for 65 local teachers was held June 20-24. This professional development opportunity was designed to help teachers implement problem based lessons in the science and mathematics classroom. The weeklong Institute is followed by a practical experience through the Jubilee Science Camp. This ongoing research project, started in 2000, includes a website resource The new Science Teacher (<http://tnst.randolphcollege.edu>) that we enhanced through the addition of resources for teachers.

#11

The Use of Oxytocin as a Biological Indicator of Violent Offenders with Prevalent Dark Triad Traits

Grace Tchouaffi and Rachel Helfgott, Christopher Newport University

The Dark Triad refers to three personality traits which include narcissism, Machiavellianism, and psychopathy. Narcissism is portrayed by an excessive need for admiration; Machiavellianism is characterized by the manipulation of others to gain power, and psychopathy depicts those with extreme impulsivity. Research has shown that these traits are linked by a deficit in empathy and reduce one’s ability to bond with others. Oxytocin is the peptide that relates to an individual’s ability to bond with others and is colloquially known as the “bonding hormone.” The purpose of this research is to review the literature on the Dark Triad and Oxytocin. We hypothesized that a link exists between individuals with prevalent traits embodied by the Dark Triad and low levels of oxytocin. We are designing future research to measure the Dark Triad and empathy via paper and pencil measures and correlate them to Oxytocin levels extracted from subjects via saliva samples.

#12

Cognitive Behavioral Therapy and its Effectiveness on Major Depression

James Kent and Jenna Knickerbocker, Christopher Newport University

Cognitive Behavior Therapy (CBT) is a time limited, problem focused psychotherapy that combines elements of behavioral and cognitive therapy (Thoma, Pilecki, & McKay, 2015). Depression is a mental disorder where common symptoms range from lack of energy, feelings of worthlessness, and suicidal thoughts (American Psychological Association, 2016). The goal of this literature review is to analyze the effectiveness of CBT on depression. CBT is known as a popular approach when used to treat depression because it focuses on both biased cognition and maladaptive behavioral patterns (Mor & Haran, 2009). Summaries of research on this topic have shown CBT is effective on decreasing depressive symptoms in adolescents, adults, and over long periods of time, as well as in a virtual and in an interpersonal setting (Selmi, Klein, Greist, Sorrell, & Erdman, 1990). Future research should focus on clarifying which aspects of CBT accounts for the changes in patients (Thoma et al., 2015).

#13

It Gets Better with Time: The Perception of Stigma in Older Adults who have Experienced a Co-occurring Mental Health Diagnosis

Angela Johnson, Mary Baldwin University, and Kyaiaen O. Connor

Older adults are a vulnerable population who are more susceptible to developing mental illnesses. The symptoms of their mental health conditions are often exacerbated by the co-occurrence of various physical health complications. Due to the stigmatization of mental illnesses, many older adults neglect to utilize proper mental health services and live with an untreated mental health condition. The present study utilized semi-structured interviews to investigate the unique perceptions of stigma among older adults with a co-occurring mental health diagnosis. Through an in-depth thematic analysis of the data, four overarching themes were identified: Community Engagement, Resilience from the Stigma of Mental Illness, Benefit of Social Support, and Cultural Barriers. The current study suggests that older adults who have previously experienced a mental illness and overcome its associated stigma, are more likely to seek professional help and engage in programs that help other older adults who are currently experiencing a mental illness.

#14

Different Spin on the Game: Physical Toughness vs. Mental Toughness for Ball Players' Preparation

Kyle Darmstead, Christopher Newport University

This research focuses on how "mental toughness" in baseball reduces performance errors, and increases resiliency and/or confidence. Mental toughness is psychologically significant because athletes show an increased ability to bounce back from poor performances and correct potentially detrimental mistakes. Mental toughness can be developed through psychological training that reduces emotional impact on personal failure, which typically causes performance to suffer. The goal for athletes is to be able to adapt to adversity, focus on present, forget setbacks, and remain confident throughout training and play. The complexities of mental-toughness construct will be diagrammed and discussed in a theoretical model called Theory of Peak Psychological Toughness.

#15

Synthesis and Characterization of Novel Schiff Base Ligands

Harrison McNabb, Hampden-Sydney College

This project focuses on the synthesis and characterization a family of unsymmetric Schiff base ligands with a NNOS coordination sphere which builds on work done previously by Asadi, M. et al., 2009 and Pereira, E. et al., 1998. These Schiff base ligands and their metal complexes are of great interest for medicinal chemistry as potential antibacterial and anticancer agents. Two ligands were synthesized and characterized, one using unsubstituted salicylaldehyde and the other using 5-chlorosalicylaldehyde. The ligands were synthesized following a six-step reaction scheme and were characterized using melting point analysis, gas chromatography mass spectroscopy, ¹³C NMR spectroscopy, and ¹H NMR spectroscopy after each step. The results of characterization indicate that the synthesis was successful, though the final compounds may contain some impurities. Next steps include synthesizing an additional member of the ligand family (namely using 3,5-dichlorosalicylaldehyde) and chelating the ligands with a transition metal via wet chemistry and hydrothermal methods.

#16

A 90 cm Survey of the Galactic Center

Alicia Wooten, Sweet Briar College

Nine epochs of the Galactic Center at the 90 cm wavelength were received from the Very Large Array (VLA), but monitoring will continue through 2017. There have been four radio transients (non-steady sources) discoveries ~2000 to 2010 in the Galactic Center at the 90 cm wavelength, but none have been found since. Since the VLA was upgraded around 2010, it was expected there would be more transient discoveries, but no transients were found. From combined observations made in 2014, 283 sources were measured and cataloged. There were 42 newly detected radio sources discovered and preliminary classifications of the sources were made based on spectrum.

#17

Environmental Surveillance of Zoonotic Pathogens

Anderson Woodson, Kimberly Worley, and Nishi Jindal, Meredith College

The objective of this research is to assess the prevalence of different zoonotic pathogens in Raleigh, NC. The specific parasites of interest to this project are the roundworms, *Baylisascaris procyonis*, *Toxocara canis* and *T. cati*, and the protozoan parasite *Trypanosoma cruzi*. If infective eggs of *Baylisascaris procyonis* or *Toxocara spp* are accidentally ingested via fecal contamination of the environment, the larval worms can cause significant damage to their human host. Soil and fecal samples were collected and processed for roundworm eggs using a method which allowed us to count the number of parasitic eggs present in each sample. As our research progressed, we began to see a number of unidentifiable free-living nematodes in each sample, which we hypothesize may be parasitic hookworms of the genus *Strongyloides*. In the future, we hope to expand our project to include molecular identification of these worms in addition to expanding our sample size.

#18

The Impact of the Dark Triad on Schadenfreude Regarding Various Familial Bonds

Maria Toch, Christopher Newport University

Schadenfreude, which is delight in the misfortune experienced by a target person, is a relatively new area under empirical investigation. The purpose of this study is to determine if the degree of Schadenfreude is lower if the target person is a relative as compared to a stranger. Additional personality measures such as the Dark Triad (Machiavellianism, Psychopathy, and Narcissism) will also be gathered to determine if high scores in the Dark Triad inversely impact participants' reactions to hypothetical scenarios generated to trigger schadenfreude for a long-lost twin, a long-lost sibling, a long-lost cousin, and a stranger respectively. These four scenarios are designed to elicit feelings of emotional, judicial, and physical Schadenfreude by participants for the target person. Analysis of the resulting data could prove beneficial in the study of those who exhibit any or all Dark Triad traits and provide valuable insight into the natures of the Schadenfreude types themselves.

#19

Production of Biodiesel From Food Waste

Leah Spinner and Ezerie Brant, Meredith College

The purpose of this study was to produce biodiesel from used frying oils (UFO) and various types of fats in order to prove that biofuels can be efficient and economical. Due to the high greenhouse gas emissions of commonly used fuels and the need for an economical, cheap fuel, a new energy source is needed. Biodiesel is created through a process called transesterification, which is transferring one ester group to another. Several different UFO and solid saturated fats were used to make biodiesel, which were compared to commercial diesel using Fourier Transform Infrared Spectroscopy (FTIR), an instrument that determines functional groups of structures. Heats of combustion were used to measure energy output of the fuels, and their density was also recorded. The results of this study have shown that the majority of biodiesel produced is more efficient than diesel based on the higher rates of heats of combustion.

#20

Attention Development: A Literature Review

Madison Packer and Natalie Stewart, Christopher Newport University

Selective attention is the ability to choose which stimulus to attend to (Amitay, Jones, Moore, 2015). Sustained attention is the ability to attend to a stimulus for a period of time (Fuentes, 2004 and Ruff, Rothbart, 1996 as cited in Calkins, Graziano, Keane, 2011). Both are important to aspects of life such as learning to read and sitting through classes. This literature review focuses on development of attention in children. Researchers have found selective attention is fully developed between ages nine and eleven. It tested children's ability to hear a tone through a noisy background (Amitay, Jones, Moore, 2015). Other research shows development of sustained attention is affected by responsiveness of the mother and emotional regulation of the child. If these are suffering, the ability to develop sustained attention suffers (Calkins, Graziano, Keane, 2011). Further research is needed on attention development to help prevent ADHD.

#21

Analysis of Cognitive Ability, Creativity, and Motivation in Men and Women using Structural Equation Modeling

Mandeesh Singh and Caraline Morrow, Christopher Newport University

Renzulli's (1997) Three Ring Model identifies gifted learners. This model includes cognitive ability, problem solving, and analytical skills; Motivation, which is the degree to which an individual identifies and strives towards their goals; and Creativity, which is the ability to generate a product that is both novel and useful. The purpose of this study is to establish statistical validity for Renzulli's three factor model. One hundred and seven gifted high school students enrolled in the Governor's School for the Gifted summer camp completed a series of measures. These three variables will be analyzed using Structural Equation Modeling (SEM) to determine overall model fit. Additional model comparison will determine if the model fit is dependent on gender. The results of this study have important implications as they lend support to established psychological theories of gifted education and can help in understanding and aiding in the education of gifted students.

#22

Mapping the Distribution and Density of *Hydrilla verticillata*

Katherine Ferguson, Sweet Briar College

Hydrilla verticillata is an invasive aquatic weed interfering with the recreational and industrial uses of numerous bodies of water throughout the world, including the Lower Lake at Sweet Briar College. I developed three methods to monitor the distribution of this plant and the density of its autumn mats: point intersect surveys, drone-assisted aerial photography, and a biomass sampler. The college is in the process of introducing sterile grass carp into the lake as a biological control to manage the hydrilla, and using these three methods season after season, the college will have quantitative data to evaluate carp effectiveness and plan for the next step in our hydrilla management plan.

#23

The Influence of Sports-Related Concussions on the Use of Alcohol and Narcotics: Concussion, Not Just a Movie

Jessica Schalow, Christopher Newport University

This paper explores sports related concussions from the fields of psychology and neuroscience. Specifically this research attempts to identify the relationship between concussions and the misuse of alcohol and narcotics. Studies show that the misdiagnosis and undiagnosed head trauma leads to an increased odds of narcotic abuse. Brain studies reveal that severe head injuries lead to axonal swelling that subsequently leads athletes to extra post-traumatic behavioral dysfunction (e.g., drug use). This brain trauma causes a cognitive behavioral deficit that is correlated to the abuse of alcohol/narcotics. Contemporary examples can be seen amongst concussed NFL football players resulting in a loss of careers, health, family, and moral image. Finally, this paper will present a theoretical model of possible ways to prevent and treat concussed athletes abusing alcohol/narcotics.

#24

Comparative Religious Ethics and the Question of Gender Identity

Caroline Garrett

While transgender and gender nonconforming individuals have enjoyed increased acceptance and media representation, they have also experienced resistance, often from religiously affiliated groups and organizations. Religious groups have a long history of identifying and upholding gender roles, as well as defining gender identity. How do such traditions influence religious followers' perceptions of transgender and gender nonconforming individuals today? What impact do these perceptions have on acceptance, inclusion, and affirmation of transgender individuals? This project seeks to answer these questions by creating a working definition of religion, researching the methodology of religious studies, and comparing the positions on the moral status of transgender persons of the major religious subgroups of Christianity, Judaism, Islam, Buddhism, and Hinduism.

#25

Step Up to Physical Science and Engineering at Randolph

Zhe Chen, Randolph College

SUPER stands for Step Up to Physical Science and Engineering at Randolph. This is a four-year program to assist students who are majoring in a STEM field to succeed with their goals. It is funded by a National Science Foundation grant for several years. There are seven steps to this program. The purpose of the program is to recruit, retain and train the nation's future scientists. My goal was to create research methods in order to determine which parts of the program are successful, and which aspects need to be retooled for success. To do this, I was tasked with creating a series of surveys that the Super students would take in order to analyse what was successful, and from there, figure out what needed to be adjusted.

#26

Construction and Optimization of a Gust Microcosm

Leanora Bratvold-Boyd and Zach Vernon, Randolph College

The Gust Microcosm is a scientific instrument used for environmental testing and functions by creating a uniform shear stress over a submerged sample to determine its properties. The cost of a commercial machine is close to \$20,000 from a specialized manufacturer while the components and materials can be bought for less than \$2,000. The goal of the project was to build a microcosm for Randolph College. During the Summer Research Program, we focused on the control systems for the electric motor and pump that are used to produce the uniform shear stress. Over the course of the program, a PID control system was determined to be the best option for precise control, the entire system was designed, and partially built. The system still needs to be completed and tested before optimization of the microcosm can begin.

#27

The Effects of Long-Term Treatment for Parkinson's Disease and How Those Effects can be Modulated

Conor Snyder, Virginia Military Institute

Currently, Parkinson's disease (PD) has no cure and over a million people are suffering with this disease today. Without a cure, treatment is the best option. The only treatment currently is the use of levodopa (L-DOPA) combined with monoamine oxidase inhibitor (MAO-I). Over long-term use, the effects of L-DOPA may cause negative effects of hypertension and spasms labeled as "hyperkinetic dyskinesia". Furthermore, continual dosage of L-DOPA and MAO-I causes Nitric oxide levels to rise causing oxidative stress leading to PD. Using a co-treatment of L-DOPA and MAO-I, the animal model casper zebrafish were induced to express hyperkinetic-like phenotype and then were treated with a post treatment of nNOS1 3 days after treatment. Results have shown that zebrafish may be rescued from hyperkinesia with the use of nNOS1, suggesting a new post-treatment for treating the effects of long-term co-treatment to hopefully alleviate PD's negative effects that patients endure.

#28

Actions Speak Louder than Words: Women Who Defied Traditional Roles

Daniela Ramirez, Sweet Briar College

This research endeavor sought to demonstrate that in certain scenarios women, became active participants in various acts of violence and spheres that were traditionally masculine. This was accomplished through a comparative analysis of women's roles in medieval/early modern Japan and Italy.

#29

Fading Affect Bias with Events Involving Social Media and Non-Social Media

Rhianan Banks, Spencer Dunlap, Kype Horowitz, Crystal Singleton, Taylor Thomas, Hannah Nierle, Hannah Brown, Kalli Wilson, Taryn Lewis, and Jeffrey Gibbons, Christopher Newport University

Research (Walker et al., 1997) shows Fading Affect Bias (FAB), meaning unpleasant emotions fade quicker than pleasant emotions. Participants include students at Christopher Newport University. Participants were asked to complete a series of questionnaires and self-report hours spent online. Participants were then asked to list 2 pleasant and unpleasant events associated with social media as well as 2 pleasant and unpleasant events that did not involve social media and provide brief descriptions, dates, and ratings of initial and current affect for each event (-3 to 3). Participants reported when they felt an initial change in affect and when it stabilized. The participants who self-reported high social media show larger FAB for social media events. Fading affect (FA) was larger for unpleasant events than for pleasant events, $p < .001$. FA was larger for non-social media events than for social media events, $p < .001$. The Initial Event Affect x Event Type interaction was statistically significant, $p < .001$, such that the FAB was larger for non-social media events than for social media events.

#30

Presidential Election and Fading Affect Bias for Election and Non-Election Events

Taylor Thomas, Rhianan Banks, Hannah Brown, and Thomas Adesso, Christopher Newport University

Past research (Walker, Vogl, & Thompson, 1997) has demonstrated that emotions associated with unpleasant events fade to a greater degree than emotions associated with pleasant events. This phenomenon is known as Fading Affect Bias (FAB). Recently, a proposal was created to study the relation between FAB and presidential elections. Participants will be asked to answer questions about the outcome of the election, whether positive or negative, and a matching negative event (if the election outcome is positive) or a matching positive event (if the election outcome is negative); participants will also be asked to answer questions about recent positive and negative non-political events. Political involvement and news media coverage will also be measured. We hypothesize that FAB will be greater for negative political events than positive negative events. We also hypothesize that FAB for political events will be greater for politically involved participants than non-politically involved participants.

#31

Video Game Addiction and Fading Affect Bias for Video Game and Non-Video-Game Events

Briana Bouldin, Hannah Nierle, Taylor Thomas, Sarah Davis, Cassidy Dyce, Rhianan Banks, Spencer Dunlap, Hannah Brown, Crystal Singleton, Kyle Horowitz, and Jeffrey Gibbons, Christopher Newport University

Past research (Walker et al., 1997) has shown that emotions associated with unpleasant events fade to a greater extent than emotions associated with pleasant events. This phenomenon is called the Fading Affect Bias (FAB). Past research has also demonstrated a relation between problematic video game play (PVP) and emotional regulation (Oggins and Sammis, 2012). However, research has not investigated the relation between PVP and FAB for video game related events and non-video game related events. Relating PVP to FAB could contribute to classifying problematic video game play as a pathological addiction. The current study will examine the relation between FAB and video game play. We hypothesize that FAB will be higher for video game players than non-video game players for video game events and that FAB will be higher for non-video game players than video game players for non-video game events.

PANEL 1 (ROOM A, 9:30-10:30AM)

Beyond Eternity: Borgesian Models of Time

Kiley Jolicoeur, Sweet Briar College

I began this project by examining the different models of time Argentine writer Jorge Luis Borges puts forth in his work. I isolated six separate models: linear time, forking time, cyclical time, time as restricted to the present moment, time as a "puddle" of simultaneity, and time as the concept of eternity. From these models, of course, arises the question of how one man can present so many conflicting views, each of which seems to be a philosophical system in its own right. Surely he must have settled on one? Perhaps it was simply the case that his preference for each view changed throughout the course of his life? I suggest neither; instead, I argue that Borges' refusal to choose one model as his archetype suggests that they are somehow reconcilable, and that we are looking instead at a unique brand of temporal monism.

Orphan Trains: The First Successful Child Welfare Program in the United States

Kaitlyn Kissane, James Madison University

The Gilded Age brought a new flood of social welfare programs. In an age focused on family ideals and a push towards Christian morals, the first successful social program to focus on the well-being of children, called orphan trains, emerged and flourished. Orphan trains can be defined as the movement of underprivileged children to better lives through the mass transportation system of trains. The research conducted on orphan trains reveals many flaws in the system and unveils the struggle many children underwent, even after being placed in new families. However, the underlying thrust of the research proves that the orphan trains provided new opportunities for hundreds of children every time a train pulled away from the metropolitan stations. Every train carried children who suffered from a difficult, strenuous, and unfortunate past and physically carried them into a brighter future.

Iron Age Ceramics of Tuzusai

Claire Zak, Sweet Briar College

Often referred to as the "plastic of the prehistoric period" in archaeological circles, pottery assists in the dating of a site, aids in the seriation of artifacts, and gives insight into the daily activities of the people before the advent of written history. Vessels were used for eating, serving, carrying and storing liquids and food, and cooking as well as for decorative and ritual purposes. At the Iron Age settlement site of Tuzusai in southeastern Kazakhstan, pottery-making was a local production, where techniques of molding, temper inclusion, use of colored slips, and riveting were employed. By creating functional typologies from the excavated diagnostic sherds, observations of potential shape, size, firing, and usage can reconstruct the crafts and activities of everyday life and the social organization of these agro-pastoralists belonging to nomadic confederacies.

PANEL 2 (ROOM B, 9:30-10:30AM)

Reagan's Framing of the Iran-Contra Affair

Blake Bergstrom, James Madison University

The Iran-Contra Affair and the political scandals that followed it were widely considered to be one of the worst political scandals of Ronald Reagan's presidency. However, the president escaped a majority of the blame. This paper explores the ways in which the Reagan administration used framing of the Iran-Contra scandal through the media. The paper argues that through the use of scapegoats and persuasive speeches delivered by President Reagan, he was able to frame public opinion in his favor and escape blame for the scandal as a whole. By analyzing speeches made by Reagan, the National Security Council's compilation of documents on the Congressional hearings, and letters Reagan wrote during his presidency, this paper questions the outcomes of the Iran-Contra Affair as well as if, and how much, President Reagan knew about the scandal.

Narrative Identity, Authenticity, and Religions in *Game of Thrones*

Rachel Crawford, Meredith College

Philosophical explorations of identity use authenticity as a way of explaining the relation of the self to itself and to society. However, what counts as "authentic" has shifted due to changes in subjectivity formation and identity performance. Ultimately, authenticity is a search for truth, but it is more than an epistemological concern: it involves questions of self-worth and one's place in the world. In traditional narrative theory, authenticity is a social concern, impressed upon individuals as they are part of a cultural story that transcends them; authentic individuals navigate their life-stories in ways that are conducive to the traditional story. In contemporary understandings of subjectivity, narrative oppresses individuals by constructing them as falsely unified subjective wholes for hetero-reproductive and/or capitalist purposes. In HBO's TV show *Game of Thrones*, this theoretical distinction is evident between the traditional, normative Faith of the Seven and the postmodern, nihilistic religion of the Faceless Men.

Making the Martyr: Understanding the Conception and Reception of the Image of the Martyr in Early Christianity

Will Andress, Randolph College

One persistent image and model within Christianity is that of the martyr. How are martyrs understood by not only the martyrs themselves but also the theologians and preachers who taught and wrote about them? How did the image of the martyr manifest itself in the lives of common Christians who were not able to enact the martyr ethic? This project looks at various genres of literature to answer these questions with a particular focus on Carthage during the second century CE.

Winston Churchill's Effect on the Morale of the British People During World War II

Erin Carpenter, James Madison University

Sir Winston Churchill walked with destiny as one of Britain's most famous Prime Ministers. He inspired a nation and influenced the world through the use of his "pen and his tongue." In this paper, I examine the way in which both the British people and contemporaries perceived Churchill and his speeches during World War II in 1940 and determine the extent his rhetoric boosted the morale of the British Nation.

Hydrologic Restoration in the Great Dismal Swamp

Steven Bendele, Autumn Tilghman, and Rob Atkinson, Christopher Newport University

Peatlands including the Great Dismal Swamp (GDS) have been drained and plant communities have shifted to favor less hydrophytic species. The purpose of this study is to determine the effect of restoration strategies on peatland water tables in GDS. Shallow groundwater monitoring wells with continuous recording data loggers were installed at eight sites (six of which were still functioning at the end of the study in 2015). Following hydrologic restoration in 2013 water tables rose approximately 10 cm. The results of these hydrological analyses will be compared to concurrent plant community analyses to determine the overall effect of hydrologic restoration in GDS.

Discovering Downy and Powdery Mildew Resistance in *Humulus lupulus* in the American Southeast

John Nichols, Hampden-Sydney College

Downy and powdery mildew are relatively recent problems to the agricultural community, but they are rapidly spreading ones. It was not until 1997 that powdery mildew was even discovered in the Pacific Northwest, but within a year the extremely prolific airborne virus had spread to hop yards in Oregon and Idaho. In 1999 and 2000, powdery mildew is estimated to have cost hop growers 15% of total crop revenue. Although a largely commercial crop, there is not much research on the resistance factors of hops. The objectives of this study were: 1) To find the best way to propagate hops plants in Virginia 2) To evaluate hops for resistance to downy and powdery mildew 3) To identify resistance genes within hops strains 4) To establish a method to grow downy and powdery mildew in a controlled environment 5) To establish a hops repository for future research at Hampden-Sydney College.

An Analytical study of Atlantic White Cedar (*Chamaecyparisthyoides*) Growth in Relation to Varying Hydrological Conditions in the Great Dismal Swamp and Alligator River

Jordan Neri, Abigail H. Weaver, and Robert B. Atkinson, Christopher Newport University

Atlantic White Cedar (AWC) swamps provide a variety of ecological benefits, including habitat provision and carbon sequestration. The Great Dismal Swamp represents one of few dense AWC habitat regions that remain in North America and since 2003 a hurricane and two fires destroyed most of the stands there. The purpose of this study was to use tree rings to provide historic hydrologic data in support of AWC restoration. In this study, two sites for which extensive hydrologic information and tree ring data were available were used to characterize hydrologic conditions sites for which only tree ring data was available. We used Basal Area Increment in combination with climate signals to characterize potential restoration stands as drained or undrained. These results should aid managers in making decisions regarding the hydrologic restoration of the Great Dismal Swamp.

PANEL 4 (ROOM A, 10:45-11:45AM)

Lorenzo de' Medici: A Patron of the Arts

Camille Weber, James Madison University

Lorenzo de' Medici, the Magnificent, was a patron of the arts and letters who wanted Florence to continue to be the heart of the Renaissance that it was during the early fifteenth century. He worked to do this through his emphasis on saved antiquities and newly created pieces of art by painters, sculptors, and muralists who created works that were innovative and raised the world of art to a new level. Through a study of Lorenzo's poetry, collection, and correspondences with artists, this paper explains how his success as a patron of the arts was in the name of keeping the Renaissance a strong part of society's culture rather than using it for his own personal political gain.

"I Could Play the Woman with Mine Eyes": Gendered Performance in Shakespearean Drama

Erin Keating, Roanoke College

The persistence of cross-gender casting on the early modern London stage was because the male embodiment of female roles simultaneously aggravated and relieved social fears in a male-dominated society, acting as a vent that allowed for strong female characters without threatening the patriarchy. Having a female character's body occupied by a young man showed the fluidity of gender and the ease with which a man could be emasculated. At the same time, it acted as a safeguard against a female character ever becoming too threatening because ultimately a man was controlling the character. However, men and women watched the performances on different mimetic levels with men watching the embodiment of the male actors and the women watching the character of the woman herself. Shakespeare's *Antony and Cleopatra*, *Macbeth*, and *Twelfth Night* particularly exemplify the male social anxiety induced by powerful women at this time.

How Wrong It Is to Cite the Romans: A Study of Guicciardini's 'Ricordi'

Josh Leach, James Madison University

Of the greater works produced by Francesco Guicciardini, one of the most influential to modern day scholars is 'Ricordi civili e politici,' or 'Political and Civil Maxims.' The 'Ricordi' offer insight into the mind of Guicciardini as he recognized and interpreted the daily affairs of his eighteen-year-long political career. In an attempt to synthesize a less fragmented argument formed throughout the maxims, three trends can be identified in the work: Guicciardini's attack on the act of imitation of Antiquity so fondly embraced by his contemporaries, his skepticism when involved in matters of abstract philosophies, and his view of a self-interested human nature. Careful examination of the 'Ricordi,' as well as Guicciardini's other writings such as 'The History of Italy' and 'Considerations on the *Discourses* of Machiavelli,' are used to situate these trends in the framework of Guicciardini's political mindset.

Education Reform in South Korea: The Transition from Dictatorship to a Liberal Democratic System

Christopher Hyser, Bridgewater College

This presentation examines the education reforms in South Korea from 1945 to 1948. This was when Korea became a new nation and was under the protection of the United States. The United States planned to rebuild Korea by performing the same duties as the Japanese during their occupation; that is, to implement a national system of education. The main problem that the United States faced in Korea was the lack of knowledge of the country before trying to rebuild it. This lack of knowledge about Korea was apparent from the moment the United States arrived. The research paper focuses on how the United States pushed education reform on Koreans to make Korea more democratic.

Is the Economic Interdependence between the U.S. and China Sustainable?

Kathleen Springer, Bridgewater College

The sustainability of the trade relationship between China and the United States is sometimes questioned in news media. This project looks at the history of this trade relationship and considers the factors that promote it in order to analyze whether it is indeed sustainable. One of the major concerns against this trade relationship is that it poses a security threat to the United States if China benefits from the relationship so much that it becomes more powerful and possibly replaces the United States as the new hegemon. This argument is analyzed and it is seen that the risk to the United States is minimal. Finally, this project considers whether the next U.S. President will support this trade relationship and concludes that this relationship is sustainable.

Russian Women Soldiers in World War I (1914-1917): Propaganda or Protectors?

Jessie Schuster, Sweet Briar College

This past summer I investigated the role of female combatants in the Russian military during World War I. In 1917, the Russian Government enlisted women to improve soldiers' morale, but many of the women ended up fighting on the front lines. I investigated personal memoirs (ex. *Yashka, My Life as Peasant, Officer and Exile*) and political documents which revealed Russian women's roles within the war. Through this study I documented the extent of the presence of women combatants and the impact of their contributions to the Russian military efforts. My paper explores the views of the Russian public towards the women on the front by juxtaposing Russian women's political writings versus memoirs, as well as looking at the reflection of Russian papers abroad on how the population as a whole was officially supportive of the women helping secure a victory, but unsupportive of the idea of women fighters.

Korean Comfort Women: The Unrelenting Oppression During and After World War II

Alexandrea Riddell, James Madison University

This paper explores the oppression of Korean comfort women during and after World War II. 200,000 comfort women were forced sex slaves for the Japanese army. While the physical torture of the women ended after the war, the conflict between the Japanese and the Koreans continues to be heated on both sides with little end in sight. The beginning of the paper chronicles the relationship between Korea and Japan before the war and then discusses the torture of the women and why they were silenced. Lastly, it reveals the present day struggles of these women for recognition and compensation. Through testimonies and artwork, the thoughts and plight of the women are conveyed. Additionally, many new primary sources such as news articles continue to be published on the current conflict. The plight of the comfort women will continue until the governments can come to an agreement on behalf of the women.

Korean Propaganda War: North Korea's Use of Propaganda to Support its Regime

Marshall Grimard, James Madison University

As North Korea is once again flexing its military muscle and flaunting its growing nuclear capabilities, the world looks to better understand the nation which has been an ongoing challenge for the East Asian political scene. They have maintained control over a population of roughly 25 million throughout famines, floods, poor living conditions, and a political ideology that allows for no questioning, leading many to wonder how they have done so. With the help of documentaries, academic works, eye-witness accounts, and other sources we can see how the Democratic People's Republic of Korea follows a hybrid of traditional communist propaganda techniques and its own evolution of these methods to control the population. The ever present propaganda within North Korea is as much a testament to the skill of the DPRK's Propaganda Ministry as it is vital to support the continuation of the state's own existence.

Variations of the Elliptic Curve Diffie-Hellman Problem

Mengjin Sun and Nhut Dang, Randolph College

The Elliptic Curve Diffie-Hellman Problem (ECDH) provides theoretic evidence to the security of ECDH. It asks that, providing a point P on a given elliptic curve over a finite field and integers a and b , on input (P, aP, bP) , how to compute the point abP . The purpose of this research is to provide an alternative approach to internet protocol using variations of ECDH. Our findings show the equivalent between ECDH and its variations, including a possible fundamental model for one of the variations.

Pre-Restoration Analysis of Vegetation at Cavalier Wildlife Management Area

Matthew Hutchins, Jordan Neri, Autumn Tilghman, and Rob Atkinson, Christopher Newport University

Historic ditching has converted many forested wetlands into drier and sometimes non-wetland habitats, including portions of Cavalier Wildlife Management Area (CWMA) in Chesapeake, VA. Hydrologic restoration is planned for 1500 hectares and the purpose of this study was to characterize the plant community in order to provide for future responses to restoration efforts. Two vegetation sample plots were established adjacent to each of nine shallow groundwater monitoring wells. Standard dominance measures were assessed and the dominant tree species were Sweetgum (*Liquidambar styraciflua* L.) and Red Maple (*Acer rubrum* L.), which are classified as facultative hydrophytes. Similar efforts in the nearby Great Dismal Swamp have not yielded changes in forest composition and tree persistence at CWMA may depend on the extent of inundation and saturation after restoration.

Correlation Between Historic Climate Conditions on Dry Versus Wet Atlantic White Cedar Stands

Lexi Balzer, Abby Weaver, and Rob Atkinson, Christopher Newport University

Atlantic white cedar (AWC) swamps are an endangered wetland type that occurs in saturated peatlands. Peatland drainage has favored drier plant communities and restoration efforts usually lack historic hydrologic descriptions. The purpose of this study was to determine the relationship between climate conditions and AWC ring width in a wet stand (in the Alligator River in North Carolina National Wildlife Refuge) and a dry stand (in Great Dismal Swamp National Wildlife Refuge). Palmer Drought Severity Index (PDSI) was used as the predictive climatic variable. AWC trees responded to climate conditions differently depending on site specific hydrologic conditions such that PDSI was positively correlated with ring width for most months in dry sites; however negative monthly correlations were common in the wet site. These divergent results can help reconstruct earlier drainage conditions and help guide peatland restoration efforts.

***In Vitro* and *In Vivo* Evaluation of the Over-the-Counter Treatments for Equine Streptothricosis**

Di Bei, Jessica Sidebottom, Jacqueline Parman, and Callan Frye, Randolph College

Streptothricosis, also known as “rain rot” or dermatophilosis, is a common, self-resolving skin infection of horses, sheep, and cattle. It is characterized by raised tufts of hair over coalescing, pustular scabs. The condition normally has no long-term health effects, but severe cases are associated with significant morbidity and mortality. Streptothricosis is caused by the actinobacterium *Dermatophilus congolensis*. Certain over-the-counter products are used as on- or off-label treatments for this condition but few studies have confirmed their effectiveness *in vivo*. This work will involve sampling and identification of *D. congolensis* infection from local equines. We will employ minimum inhibitory concentration and disk diffusion assays to assess the antimicrobial effectiveness of over-the-counter treatments against *D. congolensis*. Finally, we will confirm the efficacy of the treatments through an *in vivo* analysis against an active equine *D. congolensis* infection.

PANEL 7 (ROOM D, 10:45-11:45AM)

Correctional Food Deserts: Defining the Problem and Designing Interventions

Alexandra Wieczorek, Anne Cornell, and J. Nikol Beckham, Randolph College

The term “food desert” has been used to characterize geographic areas with relatively poor access to healthy, affordable food. Urban food deserts are of particular concern, as their residents are more likely to experience “deprivation amplification” -- a process whereby other conditions of low-and limited- access and disadvantage are complicated and exacerbated by the challenges posed by problematic food systems. There has been no research to date on the degree to which the residents of urban food deserts experience deprivation amplification in relation to the dynamics of mass incarceration. The goals of this project are 1) to define and document the connections between urban food systems and correctional food systems and 2) to design an intervention aimed at ameliorating the combined effects of living in urban and correctional food systems for the women incarcerated at the Fluvanna Correctional Center for Women.

Breeding Imperialists: British Hubris and Racism in School Textbooks

Caroline Mason, James Madison University

British schoolbooks that were published prior to World War One generalized indigenous people of the Empire’s colonies in a negative way and, simultaneously, boasted western culture and ideology. The overstated stereotypes of foreigners imposed a Eurocentric perspective of the world onto British pupils. Likewise, textbooks painted Britain as an innately superior nation that was not only destined for imperialism, but also morally required. These characterizations justified colonization and imposed imperialistic ideology into the youth’s consciousness.

General Sherman and the Southern Belles: 1864 and the Attempt to Break the South

Rebecca Hoffman, James Madison University

A look at the 1864 military maneuver of the Federal Army known as “Sherman’s March to the Sea.” General Sherman knew that the key to success was breaking the will of the Southern women. So this research specifically looks at how the women of Georgia’s lives were altered by their interactions with the Army. While examining primary sources from federal soldiers and southern women, an understanding was reached for as to why Sherman was so successful. Sherman’s march introduced many women to “hard” war, which caused fears for their safety and their homes, and also caused an upset in gender roles. Sherman’s name would never be forgotten in Georgia, and is still cursed to this day, because of what happened in 1864. What the women felt, what they saw, what they experienced, and what they endured; these are the questions that are answered within this research.

Suffering Sapphire! Suffering Sappho! Analysis of the Renderings of Black and White Superheroine Bodies in Mainstream Superhero Comics from the 1940's to the Present Day

Kimberly Colbert, Sweet Briar College

My research explored how the bodies of African and Caucasian female superheroes are represented in mainstream superhero comics. This was accomplished by examining comic books related to Nubia, Storm and Wonder Woman from the following comic book ages: the Golden Age, 1938-1950; the Silver Age, 1956-1970; the Bronze Age, 1970-85; and Modern, 1985-Present. Doing so allows one to see the evolution of the iconic female superhero, Wonder Woman, and compare her progression to that of two female superheroes of color, Nubia and Storm.

Gilded Age Music: Sounds of a Country in Transition

Emmy Freedman, James Madison University

During the rebuilding period after the Civil War, a different kind of civil war broke out in the United States: a war between the high culture imported from Europe by the country's newly rich industrialists and the decidedly low-brow culture that pilfered from and celebrated the country's unique black and native American musical heritage. Many disruptive changes were prevalent during this period, such as a rise in immigration from Western Europe and new waves of immigrants from Eastern Europe and China. There was also a rise in innovations that increased efficiency in both the home and business. Plus, post-Civil War racial tensions began to accelerate. Music in the Gilded Age was no different. Thomas Edison's phonograph changed the way people listened to music and immigrants influenced the way music sounded and was consumed. In short, as America began to take on a unique identity, so did its music.

Camouflage (screening and commentary)

Vanessa Finnegan, Sweet Briar College

Inspired by the modernist ideal, held by some early modern dancers and modernist writers like William Butler Yeats, that true art comes from the outpouring of a spontaneous expulsion of emotion, I have created a ten-minute text and movement film entitled "Camouflage." Through my research I have explored the similarities and differences in the ways in which meaning is expressed in dance and in writing. The film, as a result, explores the complex relationship between artists and their art, its finished form and its first conception.

Lizzie Borden: Murder, Trial, and Social Effects

Tiffany Nelson, James Madison University

In the summer of 1892, the gruesome murder of Andrew and Abby Borden in Fall River, MA, shocked many Americans. Following the violent attack in their own home, the couple's youngest daughter, Lizzie Borden, was accused of the crime after evidence was found and compiled against her. The presentation describes specific details of both the crime and the subsequent events. Drawing upon newspaper and trial sources, topics that are specifically addressed include possible motivating factors, the individual details of the murders, the trial, and some lasting social effects. Despite Lizzie Borden's acquittal for the crimes, many historians still suspect that Lizzie Borden was indeed responsible for the murder of her father and step-mother.

PANEL 9 (ROOM B, 2:30-3:30PM)

The Land of Steady Habits: Anti-Abolition and the Preservation of Slavery in Connecticut

Griffin Watson, James Madison University

This presentation explores the history of slavery in Connecticut from its inception during the Pequot War in the 1630s to its abolishment in 1848. The research pays particular attention to the reasons for the persistence of slavery as a formal institution in Connecticut while so many other Northern states had abolished it. What was uncovered is that slavery was not supported as much in Connecticut as abolition was opposed. The people of Connecticut saw immediate abolition as a threat to the preexisting social order, despite their view of slavery as immoral. Slavery persisted as a means of preventing social upheaval.

Imperialism and Rebellious Ritualization: Female Genital Cutting among the Jola of Casamance, Southern Senegal

Michelle Gaspari, George Mason University

Through analysis of existing ethnographic and historic data this presentation explores Jola female genital cutting (FGC) as a ritual process. The process is conceptualized as a series of rebellious acts or "ritualized rebellion" derived from conditions of imperialism and patriarchy specific to the Casamance region of Southern Senegal. Ultimately, it problematizes generalized FGC intervention efforts and scholarship as extensions of imperialist Western feminism discourse and introduces harm reduction approaches to cultures practicing FGC.

Bomb-Dropping Bombshells: Examining the Motivations of the Female 46th Taman Guards Bomber Aviation Regiment

Yasmine Vaughan, James Madison University

During the Second World War, the Soviet Union employed thousands of women in combat roles, including the creation of three female aviation regiments. This presentation will focus on the 588th Night Bomber Aviation Regiment, also known as the 46th Taman Guards Bomber Regiment. Examining the limited but reliable sources, it is possible to understand how these regiments came to be formed, and how the motivations of this female regiment in particular made it possible for them to accomplish their goals with great success, despite the many obstacles that stood in their way. Driven by patriotism to join the fight against Fascist invaders, female pilots from across Moscow enlisted in the Soviet Air Force. Their motivation to take care of one another and to outdo the male regiments made them one of the most successful aviation units in the Soviet Air Force.

Stalingrad: A Comparative Account of Ideology and Tactics

David Sybers, James Madison University

The Battle of Stalingrad (August 1942 – February 1943) was one of the bloodiest battles in human history, and it was a major turning point of World War Two on the European Eastern Front. Emerging as the victor was a grueling task for the Soviet Red Army, but they had many advantages over the Nazis. Advantages included the use of urban warfare tactics in the streets of Stalingrad, the overwhelming amount of Soviet people committed to the war effort, the effects of the Russian winter on German soldiers, and the strong leadership of the Soviet generals. Primary sources include newspaper articles and British newsreels. Contrasting ideologies of Stalin and Soviet General Chuikov vs. Hitler and German General Paulus combined with the advantages that the Soviets had as they fought to preserve their homeland will show why the Russians were able to deal a crippling blow to the Nazi military conquest.

PANEL 10 (ROOM C, 2:30-3:30PM)

Refugiadas: A Situational and Psychological Examination of Women Fleeing the NTCA

Holly Rueger, Sweet Briar College

As the media focuses on the refugee crisis in the Middle East, there is another one looming at our southern border. Violence is forcing women to flee from the Northern Triangle of Central America, a region made up by Guatemala, El Salvador, and Honduras. Women escaping gang and domestic violence must cross through equally dangerous Mexico. Those who make it to the United States are not safe from the suffering caused by the legal system and detention centers. This paper examines the journeys of these women and the accompanying mental health challenges they may face.

Reading Literary Fiction Increases Empathy

Rachel Kroner, Virginia Military Institute

Purpose: The study examined the effects of reading literary fiction on empathy and psychological test interpretation.

Method: After completing self-report empathy measures, 89 participants, aged 18-23, were randomly assigned to read a non-fiction or literary fiction account involving female suicide (i.e., psychiatry textbook vs. railway scene from Tolstoy's *Anna Karenina*). Following the reading participants completed a performance-based empathy measure (Reading the Mind in the Eyes; MIE). Participants then completed a psychological test interpretation task – making clinical interpretations based on a patient's Thematic Apperception Test (TAT) responses.

Results: Baseline empathy scores did not predict performance on the psychological test interpretation task. The literary fiction group outperformed the non-fiction group on the MIE test (25.39 v. 23.44; $p < .05$).

Discussion: These findings are consistent with those of Kidd and Castano (2013), but expand on those studies by specifically introducing a theme relevant to clinical psychology, suicide.

The Effect of Environmental Information Habits on Environmental Attitudes across Age Groups

Harrison Pippin, Randolph College

The purpose of this study is to investigate the effects of different environmental information sources on environmental attitudes. The main interest of this study is internet use, since the internet allows users to seek information that may confirm their beliefs and provides access to a very wide range of sources. I hypothesize that internet use will positively affect pro-environmental attitudes and that age will be an intervening variable; this effect will be more apparent for younger people. A survey is used to measure environmental attitudes and environmental information habits with a convenience sample of 260 respondents in the Lynchburg area. While internet use is associated with pro-environmental attitudes, older ages are also associated with pro-environmental attitudes. Social media use shows no significant relationship with environmental attitude. The results partially support my hypothesis; net use is linked with pro-environmentalism although younger people tend to be less pro-environmental.